SIERRA CLUB

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Committee: **Environment and Transportation**
Testimony on: **HB 1089 – "Maryland Beverage Container Recycling Refund and Litter Reduction Program"**
Position: **Support**
Hearing Date: **March 9, 2023**

The Maryland Chapter of the Sierra Club strongly supports HB1089. This bill would create a beverage container deposit program in Maryland with a 10- or 15-cent refundable deposit on aluminum, glass, and plastic beverage containers. The deposit would be refunded to the customer when the beverage container is returned for recycling. With convenient redemption opportunities for customers, the program would achieve a statewide redemption rate for beverage containers of 90%. The program would be implemented by producers of filled beverage containers, with substantial oversight by the Maryland Department of the Environment (MDE). An Advisory Council would advise MDE on approval of producers' Stewardship Plans and annual reports and on program implementation and performance. The program, including the cost of MDE oversight, would be funded from unclaimed deposits, and registration fees and penalties paid by producers. Ten percent of unclaimed deposits would fund a Recycling Refund Grant program to increase the reuse and recycling of beverage containers.

About 5.2 billion beverage containers are sold in Maryland every year, but only about a quarter (1.2 billion) are recycled.[1] Four billion containers annually are wasted – left in landfills, on roadsides, in waterways, or incinerated. Plastic beverage bottles are the third most frequently littered plastic in beach cleanups.[2] Beverage containers account for half of the trash by volume in trash traps on the Anacostia River watershed.[3] The failure to capture three-quarters of used beverage containers is a huge waste of resources, a major source of litter and plastic pollution, and harmful to wildlife and the environment. It limits the availability of recycled materials, which would displace virgin materials in new containers, reducing greenhouse gas emissions, and conserving energy. Global corporations have committed to increase the recycled content of plastic packaging to 25%-50% by 2025,[4] yet recycled content in plastic bottles reached only 11.5% in 2020.[5]

Beverage container deposit programs are a proven, highly effective policy for recovering used beverage containers and reducing litter. Ten states in the U.S., covering about 90 million people, have longstanding, successful beverage container deposit programs.[6] Recycling rates for beverage containers in these ten states in 2019 averaged 75%, ranging from 59% to 91%, compared with an estimated 23% in Maryland, with no deposit (Exhibit 1). The ten deposit states represent 17% of the U.S. population but contribute 48% of U.S. beverage container recycling.[7]

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[1] Container Recycling Institute (CRI). "2022 Beverage Market Data Analysis (BMDA)" for Maryland, based on 2019 data.
[2] 5 Gyres Institute. 2017. "Better Alternatives Now, B.A.N. List 2.0." https://static1.squarespace.com/static/5522e85be4b0b65a7c78ac96/t/5acbd346562fa79982b268fc/1523307375028/5Gyres_BANlist2.pdf
[3] Anacostia Watershed Society.
[4] Ellen MacArthur Foundation Global Commitment Progress Report 2022 (https://gc-22.emf.org/ppu/).
[5] CRI, calculated based on data from National Association for PET Container Resources (NAPCOR)/Association of Plastics Recyclers (APR). www.container-recycling.org.
[6] California, Connecticut, Hawaii, Iowa, Massachusetts, Maine, Michigan, New York, Oregon, Vermont.
[7] CRI. "2022 Beverage Market Data Analysis (BMDA)" for Maryland, based on 2019 data. *Op.Cit.*

The recycling refund program established through HB 1089 would increase Maryland's beverage container recycling rate fourfold, removing more than three billion containers annually from landfills, incinerators, and litter. Beverage containers comprise 6% of landfilled municipal solid waste in Prince George's County[8] and 8% or more in Wicomico County,[9] by weight. Experience in Michigan and Oregon shows that a 90% recycling rate in Maryland for beverage containers is feasible with a 10-cent deposit.

Further, beverage container recycling refund programs provide high-quality, food-grade materials for new containers, making possible a circular, bottle-to-bottle economy that maximizes the reduction in waste. Capturing more plastic beverage containers in deposit systems is particularly important for expanding availability of food-grade recycled content for new food and beverage containers. In mixed materials recycling, glass is a major contaminant and often has a negative value. Removing glass beverage containers from the curbside recycling stream would reduce contamination of other recycled materials in a single-stream system, raising their value. Glass in deposit programs is cleaner, sorted by color, with a higher value, and more likely to be recycled.[10]

The program would reduce Maryland's beverage container litter by more than two-thirds.[11] Increased interest in beverage container deposit programs over the past decade has been fueled by public concern about plastic pollution (Exhibit 3).[12] A study of coastal litter in debris surveys in Australian and U.S. states with and without container deposit legislation found that the share of containers in states with container deposit legislation was 40% lower than in states without the laws.[13] A 2011 analysis of the impact of a beverage container deposit system in Maryland concluded that "… there is little evidence that any other program, in and of itself, is nearly as effective as deposit programs at reducing litter rates."[14]

The program would produce substantial cost savings for taxpayers and local governments by diverting container waste from landfills and incinerators, reducing the number of beverage containers to be processed from curbside collection, and reducing costs for litter collection.[15] A review of more than 30 studies of the impact of beverage container deposit programs on costs to local governments worldwide found that in the context of the overall waste management system, *local governments saved costs from adoption of the deposit program.*[16] In states with beverage container deposit programs, deposits coexist

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[8] SCS Engineers. Waste Characterization Study, 2014/2015. Waste Management Division, Prince George's County, Maryland.

[9] EA Engineering, Science, and Technology, Inc. 2014. "Waste Composition Study: Newland Park Landfill, Wicomico County, Maryland." July, Table 3.

[10] According to the Glass Packaging Institute, in single-stream recycling streams, only about 40% of glass is suitable to be recycled into new containers, while in deposit systems where the consumer returns glass to a redemption facility and collects a refund, 98% of glass is suitable to be recycled into new containers. https://www.gpi.org/recycling-streams-infographic

[11] Reloop and CRI. 2021. *Fact Sheet: Deposit Return Systems Reduce Litter.* https://www.reloopplatform.org/wp-content/uploads/2021/06/DRS-Litter-Fact-Sheet-Summary-14June2021.pdf

[12] Collins, Susan. 2020. "International Embrace," *Plastics Recycling Update*, Winter. Pp. 38-43. There are currently 72 container deposit programs worldwide in 61 countries, serving more than 700 million people.

[13] Schuyler, Qamar, *et al*. 2018. "Economic incentives reduce plastic inputs to the ocean," *Marine Policy* 96: 250-255. October.

[14] University of Maryland, Environmental Finance Center (EFC). 2011. "2011 Impact Analysis of a Beverage Container Deposit Program in Maryland." December 15, p. 4.

[15] CRI. 2015. "Theoretical maximum recycling rate in Michigan from curbside recycling programs only," Memo, January. The calculations assume that 37% of consumption is away from home, with 14% loss of material in sorting and 21% loss of material to processing.

[16] Reloop. 2021. *Fact Sheet: Deposit Return Systems Generate Cost Savings for Municipalities*. https://www.reloopplatform.org/wp-content/uploads/2021/05/Fact-Sheet-Economic-Savings-for-Munis-8FEB2021.pdf

with curbside collection to maximize recycling by capturing containers for beverages consumed away from home. Even under ideal conditions (assuming that all households have access to curbside recycling collection and all of them use it all the time), curbside collection would capture at most only 38% of used beverage container materials.

Beyond these benefits, the recycling refund program supported by HB 1089 would provide:

- More opportunities to recycle, especially for people away from home or who live in areas where curbside recycling is not available;
- Financial incentives for recycling and collection of source-separated, high-quality recyclable materials, with minimum contamination;
- Greenhouse gas reduction with expanded use of recycled scrap materials in new products. Prevention of litter, reduction of waste, and reduced environmental impact of beverage containers on land, in our waterways, the Chesapeake Bay, and the ocean; and
- Creation of new green jobs in Maryland.

The first proposals for a Maryland beverage container deposit program were launched decades ago, in the previous century. Maryland's 2014 Zero Waste Plan recommended adoption of a deposit program to reduce waste and increase recycling. We need to act now. Every year we wait, another 4 billion containers are left in the environment. We respectfully request a favorable report on HB 1089.

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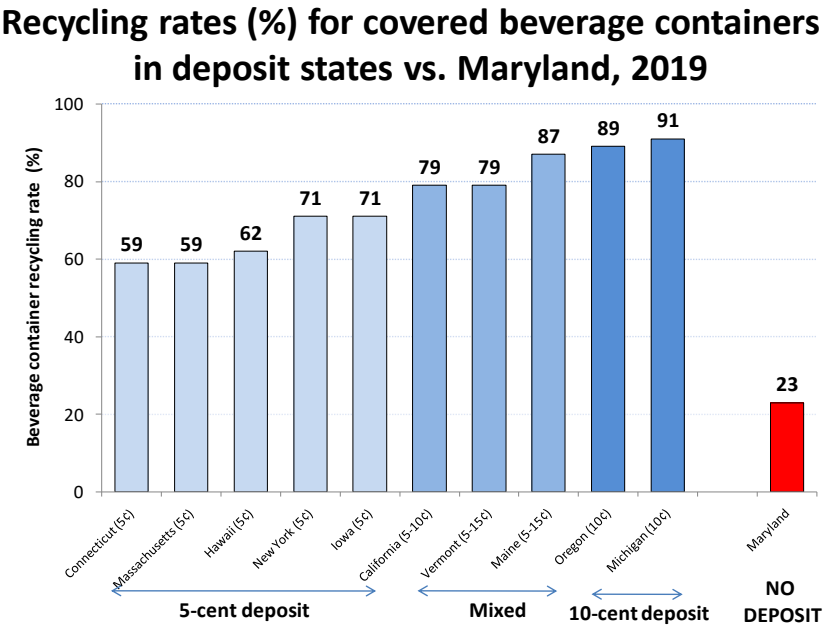
Attachments:
Exhibit 1 - Recycling rates in deposit states are several times higher than in Maryland and highest in states with at least a 10-cent deposit
Exhibit 2 - Recycling rates by material type in deposit and non-deposit states
Exhibit 3 – Global Growth in Container Deposit Laws, 2017-2021

Exhibit 1. Recycling rates in deposit states are several times higher than in Maryland and highest in states with at least a 10-cent deposit



Source: Container Recycling Institute, 2022 Beverage Market Data Analysis

Note: The statistic for Maryland is the estimated recycling rate for all beverage cans and bottles sold in the state in 2019.

Exhibit 2: Recycling rates by material type in deposit and non-deposit states

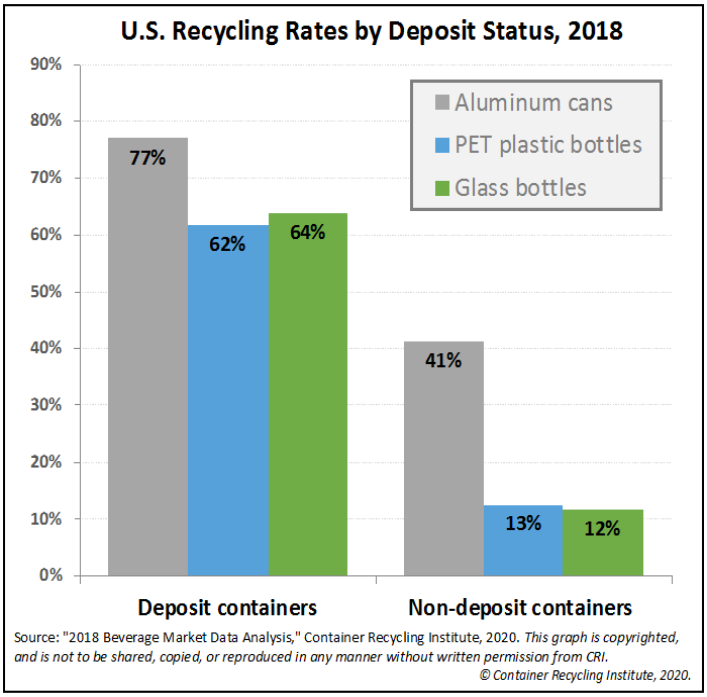
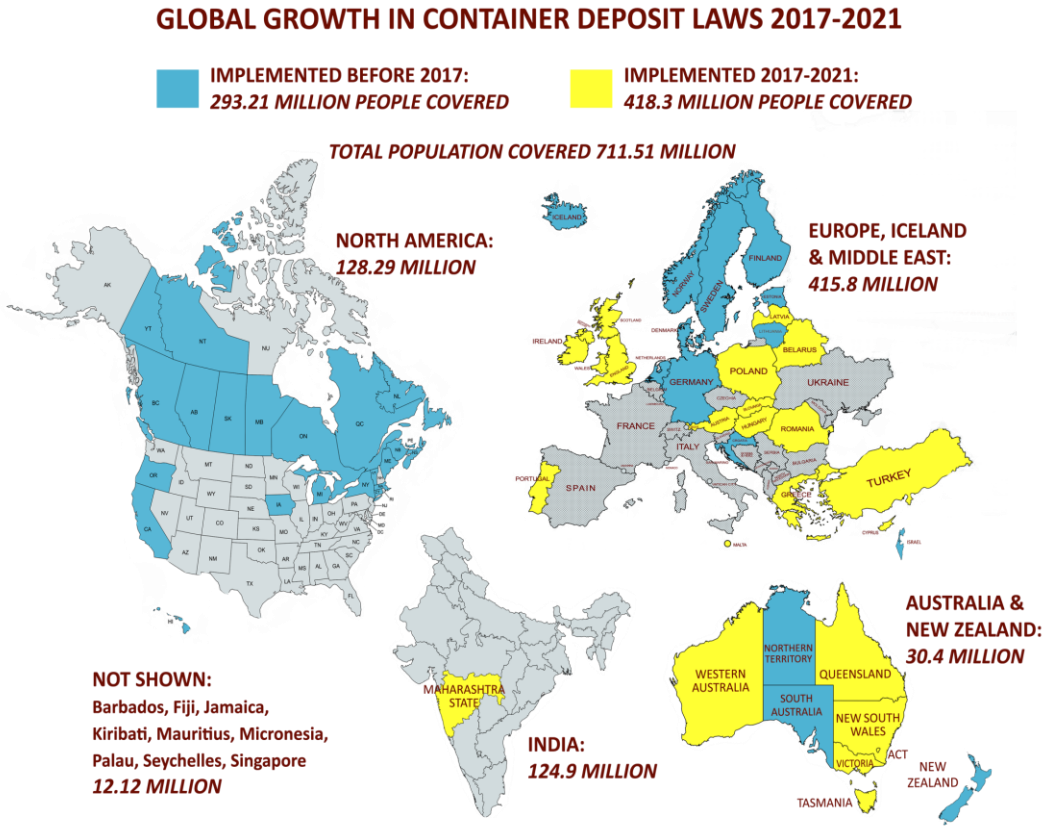


Exhibit 3:



Source: Container Recycling Institute, 2022.