



March 5, 2024

Chair Feldman
Education, Energy, and Environment Committee
Maryland State Senate
Miller Senate Office Building
Annapolis, Maryland 21401

RE: Testimony in Support of SB 642 – Maryland Beverage Container Recycling Refund and Litter Reduction Program.

Dear Chair Feldman, Vice Chair Kagen, and Members of the Maryland Education, Energy, and the Environment Committee:

Thank you for the opportunity to provide testimony on SB 642. **Just Zero strongly supports this bill.**

Just Zero is a national environmental non-profit advocacy organization that works alongside communities, policy makers, scientists, educators, organizers, and others to implement just and equitable solutions to climate-damaging and toxic production, consumption, and waste disposal practices. We believe that all people deserve Zero Waste solutions with zero climate-damaging emissions and zero toxic exposures.

SB 642 would establish a beverage container recycling refund program – more commonly known as a “Bottle Bill – in Maryland. Just Zero is extremely supportive of Bottle Bills because they reduce litter, increase recycling rates, create jobs, and develop both the consumer culture and infrastructure necessary for reusable beverage systems. If enacted this bill will significantly benefit Maryland’s environment and economy.

While we understand Maryland is currently in the process of developing a Needs Assessment to evaluate packaging waste and to provide recommendations for the development of an Extended Producer Responsibility (“EPR”) for Packaging Program, we strongly urge the committee to prioritize SB 642 this session. Nothing in the needs assessment will impact whether Maryland should establish a Bottle Bill program. Moreover, including beverage containers in a EPR for Packaging program will result in a loss of significant benefits associated with bottle bills such as litter reduction, increased recycling of beverage containers, and the development of reusable beverage container systems.

I. Bottle Bill Programs Are Incredibly Popular and Prevalent Across the World.

Bottle Bill programs have been implemented in dozens of jurisdictions around the world, with new programs developing each year. The first Bottle Bill was established in 1970, in British Columbia, Canada.¹ Since then, over 50 additional jurisdictions have adopted programs, including ten U.S.

¹ Reloop, [Global Deposit Book – 2022: An Overview of Deposit Return Systems for Single-Use Beverage Containers](#), p. 10 (Nov. 2022)



states, almost all Canadian provinces, and a large portion of the European Union.² Right now, over 290 million people live in communities with a Bottle Bill.³ This number is expected to grow to 911 million people by 2027, because new programs are currently being finalized and implemented.⁴ Internationally, Austria, England, France, Ireland, New Zealand, Northern Ireland, Poland, Spain, and Wales are all either considering or actively developing Bottle Bill programs.⁵ This legislative session, Illinois⁶, Minnesota⁷, New Hampshire⁸, Rhode Island⁹, and Washington¹⁰ are all considering proposals to implement new Bottle Bill programs. These states see these programs as necessary to meet waste reduction, recycling, and climate goals.

II. Bottle Bills Provide Significant Environmental and Economic Benefits

The reason Bottle Bill programs are so popular and prevalent throughout the world is because they're incredibly effective at reducing litter, increasing recycling, and creating jobs. Moreover, these programs also create the consumer culture and infrastructure that is necessary to shift away from single-use disposal beverage containers to reusable and refillable beverage systems. Importantly, as a form of producer responsibility, Bottle Bill programs provide these benefits while also helping save consumers and governments money.

A. Litter Reduction

Placing a refundable deposit on every single-use beverage container sold in Maryland will incentivize consumers to hold on to their empty containers and bring them back for recycling. Essentially, the refundable deposit creates an understanding that while you are buying the beverage, you're renting the container. This incentive is extremely important because most single-use beverages are consumed on-the-go and outside of the home. This is why you see plastic soda bottles littering, parks, streets, and streams, but not plastic peanut butter jars.

After Hawaii enacted a Bottle Bill program in 2005, the number of beverage containers collected during Hawaii's Coastal Cleanup fell from 23,471 in 2004, to 10,905 in 2007 – a 53% drop in just three years.¹¹ Litter reduction has occurred in all ten states with Bottle Bills. A 2020 study by Keep America Beautiful found that states without Bottle Bills have double the amount of beverage container litter than their Bottle Bill counterparts.¹² The report also found that states with Bottle Bills had less overall litter than the states that don't have Bottle Bills.¹³ Less litter doesn't just mean

² *Id.* at p. 166 -172.

³ *Id.* at p. 10

⁴ *Id.*

⁵ *Id.* at p. 158 -165.

⁶ See, [Senate Bill 85](#) and [House Bill 4205](#).

⁷ See, [HF 3200](#) and [SF 3260](#)

⁸ See, [House Bill 1636](#)

⁹ [Rhode Island Special Joint Legislative Commission to Study and Provide Recommendations to Protect Our Environment and Natural Resources from Plastic Bottle Waste.](#)

¹⁰ See, [House Bill 2144](#)

¹¹ Haw. Dep't of Health, Report to the Twenty-Fifth Legislature 9 (2009).

¹² Keep America Beautiful, [2020 National Litter Study](#). Page. 3. May 2021.

¹³ *Id.*



cleaner, more vibrant communities, it also means less spending on clean-up efforts. Estimates show that the United States spends more than \$11 billion on litter clean up every year.¹⁴

B. Increased Recycling of Beverage Containers

Litter reduction is not the only benefit these programs provide. States with Bottle Bill programs also have significantly higher recycling rates than their non-Bottle Bill counterparts. On average, states with Bottle Bills have double the recycling rates than those that rely solely on curbside recycling programs.¹⁵ In terms of plastic and glass bottles, Bottle Bill programs produce recycling rates that are often three times higher than single-stream recycling systems.¹⁶

The higher recycling rates are attributed to more containers being returned for recycling as a result of the refundable deposit. However, Bottle Bills don't simply increase the number of containers that are returned for recycling. They also create a higher quality of recycled material which significantly increases the likelihood that the containers will actually be recycled to manufacture new products.

The convenience of single stream recycling comes with a cost -- contamination. Single-stream recycling depends first and foremost on educated consumers making the right choice about what can and cannot go into the blue bin. From there, the burden is on Material Recovery Facilities ("MRFs") to remove any unrecyclable materials that made their way into the recycling stream while also processing and sorting the commingled recyclables into distinct separate streams. These sorting processes are imperfect. According to the National Waste and Recycling Association, roughly 25% of what is placed into the single-stream recycling system is too contaminated to go anywhere other than a landfill.¹⁷

Additionally, the materials that are properly sorted are unlikely to be recycled as effectively as possible. The overall quality of the recycled material is the leading factor that determines what that material is ultimately used for. This difference in quality is often the difference between recycling and downcycling. Downcycling refers to using recycled material for projects and purposes that fail to capture the full environmental and economic benefits associated with recycling a product. In the case of beverage containers, the highest and best uses is bottle-to-bottle recycling, where containers are recycled directly into new beverage containers. Common examples of downcycling with beverage containers includes turning plastic beverage containers into carpet and textiles, as well as using crushed glass for road improvement projects or landfill cover. While these uses are preferential to disposing of the material, it still means the materials can only be used once as opposed to being recycled repeatedly.

Creating a standalone program to collect and recycle beverage containers ensures that the materials are uncontaminated and able to be readily recycled. In fact, while the ten Bottle Bill states only represent 27% of the U.S. population, they account for over 50% of all beverage containers recycled

¹⁴ Andrew Lisa, [It Costs Over \\$11 Billion Per Year to Clean Up Litter – How the Pandemic's Effect on Trash Output May Make It Worse](#), Yahoo. (April 22, 2021).

¹⁵ Container Recycling Institute, [U.S. Nominal Recycling Rates by Deposit Status](#) (2019).

¹⁶ *Id.*

¹⁷ Maggie Koerth, [The Era of Easy Recycling May be Coming to an End](#), FiveThirtyEight (Jan. 10, 2019)



annually.¹⁸ Moreover, the Bottle Bill states also have higher overall recycling rates as their municipal and curbside recycling systems can better focus their efforts on capturing and recycling other common recyclables.¹⁹

C. Job Creation

In addition to reducing litter and increasing recycling rates, Bottle Bills also create good, local jobs. In fact, reports show that Bottle Bills can create between 11 and 38 times more jobs than curbside recycling.²⁰ These jobs include technicians to service reverse vending machines, bag drop systems, and other forms of beverage container collection, storage, and sorting systems. The programs also create jobs associated with hauling beverage containers from redemption locations to centralized storage areas. There are also other indirect jobs associated with increased recycling and manufacturing of products from recycled materials. A recent analysis of New York's Bottle Bill found that the program supports 5,700 jobs statewide.²¹

D. Creating a Pathway to Reusable and Refillable Beverage Systems

An additional underrepresented benefit of Bottle Bills is the development of both the infrastructure and consumer culture necessary for the development of reusable and refillable beverage systems. In fact, before the introduction of one-way disposable containers, beverage companies relied on consumers to return bottles to be refilled. Glass bottles were expensive to manufacture and refilling them saved costs. To incentivize refilling, beverage companies utilized a deposit-return program to ensure glass containers were brought back and refilled.

Just Zero strongly supports the requirement in SB 642 that requires at least 10% of all beverage containers sold in Maryland to be returned and refilled by December 31, 2034. This is a necessary and achievable program goal. In Germany, 82% of all beer is sold in reusable bottles, and 99% are returned for reuse.²² Overall, 54% of beverages sold in Germany are in reusables.²³ In Ontario, Canada, 85% of beer is sold in reusable bottles, with 97% returned and reused an average of 15 times.²⁴ Both jurisdictions have high functioning Bottle Bill programs that have enabled this reuse.

Domestically, in 2018, Oregon begun utilizing its existing deposit return infrastructure to launch a statewide refillable bottle system.²⁵ This system utilized approximately 245,000 refillable beer bottles.²⁶ The bottles can be refilled up to 40 times and were made primarily from recycled glass.²⁷ The bottles are designed to be easily separated from the rest of glass collected through the deposit

¹⁸ Marissa Heffernan, [Report: Bottle Bills States Recycle More, Provide Models](#), Resource Recycling. (Jan 2, 2024).

¹⁹ Eunomia, [The 50 States of Recycling: a State-by-State Assessment of US Packaging Recycling Rates](#). (Dec. 2023).

²⁰ Reloop, [Factsheet: Deposit Return Systems Create More Jobs](#) (2022).

²¹ Sarah Edwards, Eunomia Research and Consulting, Inc., [Employment and Economic Impact of Container Deposits](#), table E1 (Jan. 2019).

²² Upstream, [Beverage Refill and the New Reuse Economy](#). (July 1, 2023).

²³ *Id.*

²⁴ *Id.*

²⁵ Jared Pablen, [Oregon Group to Launch Refillable Bottle Program](#), Resource Recycling. (Feb. 7, 2017).

²⁶ *Id.*

²⁷ Cassandra Profita, [Oregon Launches First Statewide Refillable Bottle System in U.S.](#), NPR, (Sept. 17, 2018).



return system.²⁸ Once separated, the bottles are not processed for recycling but sent to a cleaning facility and then eventually sent back to participating breweries where they are refilled. For consumers, nothing has changed. Since launching in 2018, 410,155 bottles have been diverted from recycling for reuse.²⁹

Unfortunately, Oregon's program stalled because the program was entirely voluntary. SB 642 shows that Maryland has learned from Oregon's mistake by including a mandate for reusables which will ensure that the program consistently grows to foster reuse, not just recycling.

E. Bottles Bills Provide All These Benefits While Also Saving Residents and the State Money.

As a form of producer responsibility, Bottle Bill programs provide these benefits at no cost to consumers or government. At a time where recycling systems are struggling and plastic production and waste is increasing, the idea at the center of Bottle Bill programs remains that the companies that manufacture and distribute single-use beverage containers should ultimately be responsible for the end-of-life management of them. If a Bottle Bill program is developed in Maryland, cities, towns, and residents will no longer be stuck paying to collect, sort, and recycle all these containers. Instead, the large companies that manufacture them will.

Moreover, the reduction in litter will also save the state and local governments money. The Maryland Highway Administration has spent \$39 million over the past five years to clean up trash along state roads.³⁰ Unfortunately, this is only a fraction of the money spent addressing litter and doesn't address the beverage containers littered across local roads, parks, rivers, or beaches.

III. **Maryland Should Adopt a Bottle Bill Independent of Efforts to Establish an Extended Producer for Packaging Program.**

In 2023, Maryland enacted the Statewide Recycling Needs Assessment and Producer Responsibility for Packaging Materials Act.³¹ The law requires the completion of a comprehensive needs assessment and tasks the Advisory Council with developing recommendations for establishing an EPR for Packaging program to the Governor by December 1, 2024.³²

Just Zero is very supportive of this process. However, it should not be used as a reason to delay the development of a Bottle Bill. That needs to happen now. The information in the Needs Assessment – while important for the design and implementation of an EPR for Packaging Program – will not have any significant bearing on whether Maryland should develop a Bottle Bill program. Including beverage containers in an EPR for Packaging Program will also result in a loss of the important benefits associated with Bottle Bills such as litter reduction, increased recycling of beverage containers, and the development of reusable beverage container systems.

²⁸ *Id.*

²⁹ Oregon Redemption Center, [Bottle Drop](#).

³⁰ Bryna Zumer, [Stop Littering! Trash on State Roads Cost Maryland Taxpayers \\$39M in 5 Years](#), Fox News. (Dec. 3, 2021).

³¹ [Maryland Statewide Recycling Needs Assessment and Producer Responsibility for Packaging Materials Act](#). (2022).

³² *Id.* at Section 2, Subsection c.



A. The Information in the Needs Assessment Will Not Have an Impact on the Decision of Whether Maryland Should Develop a Bottle Bill Program.

The Needs Assessment requires an independent consultant to evaluate numerous metrics and details about the amount and disposition of packaging waste in Maryland, as well as how Maryland’s waste and recycling systems currently operate. Understanding this information is important to provide a clear picture of Maryland’s waste management system in order to design a tailored EPR for Packaging program. However, this information is not necessary to understanding whether the state should pursue a Bottle Bill.

Beverage containers are highly recyclable. The issue is that Maryland’s existing recycling system is not capturing enough of the containers and the containers that are captured are not recycled because they are highly contaminated. As a result, a significant amount of beverage containers is littered across the state or disposed of in landfills and incinerators. The clear solution to this problem is to enact a Bottle Bill program. This will create an independent, producer-funded recycling program for these containers. All the jurisdictions which currently have Bottle Bill programs have done so without performing a needs assessment.

The time to act is now. Maryland cannot afford to continue to wait to take action to address the littering and under recycling of beverage containers. The deadline for completing the needs assessment has already been pushed back from the initial deadline of July 2024. It is likely the deadline will be extended further. Developing a needs assessment and an EPR for Packaging program is time intensive. Maine enacted the first EPR for Packaging law in the nation in 2021. The Maine Department of Environmental Protection is only finalizing the rules to implement the program now. The program is not expected to be operational until 2027, six years after the legislature enacted the law. The three other states with EPR for Packaging laws – California, Colorado, and Oregon – are operating under similar timeframes.

B. Including Beverage Containers in an EPR for Packaging Program Will Reduce the Benefits to the State.

A Bottle Bill should not be abandoned for the development of an EPR for Packaging program that covers beverage containers. Instead, Maryland must develop both systems. Doing so will maximize the benefits associated with both programs.

Including beverage containers in an EPR for Packaging program minimizes the effectiveness of the program while sacrificing the benefits associated with a Bottle Bill. Including beverage containers in an EPR for Packaging program keeps the beverage containers in the curbside recycling system, rather than having them separated and managed through their own dedicated program as is the case with a Bottle Bill. As a result, the beverage containers continue to be heavily contaminated which limits their marketability for the use in manufacturing new containers. Removing these containers will allow them to be recycled at significantly higher rates. Moreover, it will also enable a future EPR for Packaging Program to focus on setting up collection and recycling systems for harder to recycle



materials. In fact, every state with a Bottle Bill program has higher overall recycling rates because their curbside recycling systems can be tailored to maximize recycling of other commodities.³³

Additionally, without a standalone Bottle Bill Maryland won't see significant litter reductions. A central part of Bottle Bill programs is that every container sold has a refundable deposit placed on it to incentivize consumers to bring the empty container back for recycling. This incentive is what reduces litter because the containers now have an economic value. When beverage containers are included in an EPR for Packaging program they don't have a deposit and therefore continue to be littered.

IV. Conclusion

The time to act is now. SB 642 will improve recycling, create green jobs, and reduce litter which will protect Maryland's land, rivers, lakes, and oceans. With SB 642, Maryland can create a robust and effective Bottle Bill program that will protect the environment and the economy. For these reasons, Just Zero urges you to support this bill. Thank you for your time and consideration of this testimony.

Respectfully submitted,

Peter Blair, Esq.
Policy and Advocacy Director
Just Zero

³³ Supra, note 18.