



March 9, 2023

Chair Kumar P. Brave
Environment and Transportation Committee
Maryland House of Delegates
6 Bladen St.
Annapolis, MD 21401

RE: HB 1089 – An Act Concerning Maryland Beverage Container Recycling Refund and Litter Reduction Program

Dear Chair Brave and Members of the Environment and Transportation Committee:

Thank you for the opportunity to provide testimony on House Bill 1089, *An Act Concerning Maryland Beverage Container Recycling Refund and Litter Reduction Program*. **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.

HB 1089 would create a container deposit return system – more commonly known as a “Bottle Bill” – in Maryland. Bottle Bill programs have been implemented in dozens of jurisdictions across the world, and for good reasons. These programs have been shown to consistently increase recycling rates, reduce litter, create jobs, and develop the infrastructure and consumer culture necessary to develop reusable beverage systems. Adopting HB 1089 will assist Maryland in meeting its waste diversion and recycling goals.

I. How the Program Works

Through this program, customers would pay a 10 or 15 cent deposit, depending on the size of the container, on every single-use beverage container they purchase. Customers would get the deposit back when they return the container to a point of redemption such as a retailer or redemption center. Those retailers and redemption centers turn over the collected containers to a beverage distributor (or “deposit initiator”). The distributor reimburses the retailer or redemption center for the deposits, and pays them a fee on a per container basis – called a handling fee - that is designed to cover the costs of collecting, sorting, and managing all the empty containers. The distributors then sell the source-separate containers to recyclers where they are recycled and used to manufacture new consumer products like beverage containers.



As a form of producer responsibility, HB 1089 requires the beverage distributors to pay for the costs of the program. At a time where recycling systems are struggling and plastic production and waste is increasing, the idea at the core of all Bottle Bill programs is that the companies that manufacture and distribute these single-use containers should ultimately be responsible for the end-of-life management of them. HB 1089 would also require the newly created Stewardship Organization to cover the Maryland Department of Environmental Protection's costs associated with planning, implementing, administering, monitoring, and enforcing the program. This ensures that the entire costs of the program will be covered by regulated beverage companies and not Maryland residents.

II. Understanding the Benefits of Bottle Bills

Decades of evidence all points in the same direction. Bottle Bills are extremely effective at increasing recycling rates and reducing litter. The success of these programs is well documented both nationally and internationally. In fact, the success of these programs is spurring a renewed interest in passing new Bottle Bills. In 1970, British Columbia became the first jurisdiction in the world to implement a Bottle Bill program. Now, over 45 jurisdictions have adopted these programs including most parts of Canada, Australia, and the European Union.¹ As a result, over 290 million people worldwide now have access to these programs.² This number is expected to grow as more countries continue to adopt new programs. For instance, Scotland recently passed a Bottle Bill which is expected to take effect on August 16, 2023.³ England, Northern Ireland, Wales, Jamaica, New Zealand, and Portugal are also considering programs.⁴ This session Illinois, Minnesota, Rhode Island, and Washington are considering adopting Bottle Bills.⁵

A. Bottle Bills Incentivize Participation in Recycling Efforts and Reduce Litter

Placing a refundable deposit on every single-use beverage container sold in the state incentivizes consumers to recycle. The refundable deposit creates an understanding that while you are buying the beverage, you are renting the container. On average, states with Bottle Bills have double the recycling rates than those that rely solely on single-stream recycling.⁶ In terms of plastic beverage containers and glass bottles, Bottle Bill programs produce recycling rates three times higher than single-stream recycling.⁷

¹ Samantha Millette and Jason Wilcox, [Deposit Data](#), Resource Recycling (Feb. 22, 2021).

² *Id.*

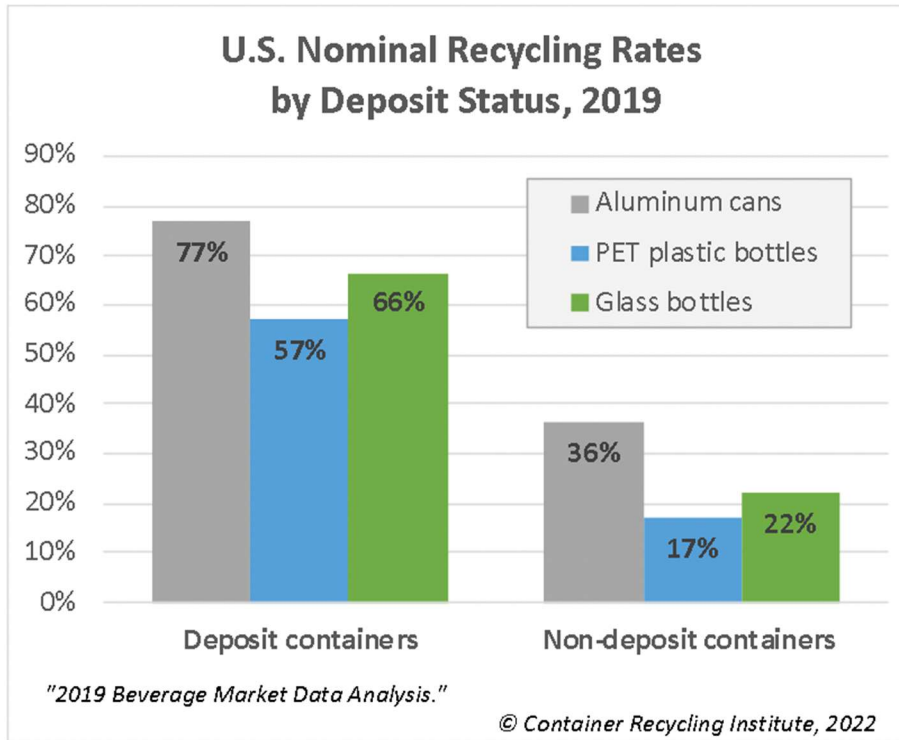
³ Zero Waste Scotland, [Deposit Return Scheme](#) (2023).

⁴ Samantha Millette and Jason Wilcox, [Deposit Data](#), Resource Recycling (Feb. 22, 2021).

⁵ See, [Illinois Senate Bill 85](#), [Rhode Island House Bill 5502](#), and [Washington Senate Bill 5154](#)

⁶ Container Recycling Institute, [U.S. Nominal Recycling Rates by Deposit Status](#) (2019).

⁷ *Id.*



The incentive the deposit creates is extremely important because single-use beverages are frequently consumer on-the-go and outside of the home. Given that most businesses do not offer recycling services and public spaces often lack adequate recycling receptacles many beverage containers end up in the trash or improperly discarded as litter.

In fact, reducing litter is one of the core benefits associated with Bottle Bill programs. After Hawaii implemented a Bottle Bill program in 2005, the number of beverage containers collected during Hawaii’s Coastal Cleanup fell from in 2004 to 10,905 in 2007 – a 53.5% drop over just three years.⁸ Moreover, in 2020, Keep America Beautiful compared litter in states with and without Bottle Bills. Unsurprisingly, non-Bottle Bill states suffered from significantly more beverage container litter than Bottle Bill states.⁹ The study found that non-Bottle Bill states had double the amount of beverage container litter compared to Bottle Bill states.¹⁰ What’s more, the study found that non-Bottle Bill states also had more non-container litter as well.¹¹

⁸ Haw. Department of Health, Report to the Twenty-Fifth Legislature, p. 9, (2009).

⁹ Keep America Beautiful, [2020 National Litter Study](#), p. 3. May 2021.

¹⁰ *Id.*

¹¹ *Id.*



B. Bottles Bills Create a Steady Stream of High-Quality Recycled Material

Bottle Bills don't just 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 container is actually used to manufacture a new product.

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 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.¹²

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. While this is preferential to directly landfilling the material, it still means the materials can only be used once as opposed to being recycled repeatedly.

III. **HB 1089 Will Create a Modern and Effective Bottle Bill Program That Will Benefit Maryland Now and For Years to Come.**

HB 1089 contains several essential requirements necessary for a truly effective Bottle Bill program, including setting clear and enforceable performance standards, in-statute measures to adjust the deposit value as needed to optimize program performance, robust return to retail requirements, transparent oversight of the Stewardship Organization, and mechanisms to establish refillable and reusable beverage container systems.

A. Strong Performance Standards That Are Enforced by the Department

HB 1089 sets minimum redemption and recycling rates which the beverage-industry run Stewardship Organization is required to achieve. The minimum redemption rate starts at 70% before increasing to 90%. Similarly, the minimum recycling rate starts 65% and

¹² Maggie Koerth, [The Era of Easy Recycling May be Coming to an End](#), FiveThirtyEight (Jan. 10, 2019)



increases to 85%. These rates are both realistic and achievable. High-performing Bottle Bill programs can and have achieved redemption rates of 90% and above. A report from Eunomia on Bottle Bill programs in Europe found that the redemption rates vary between 84% and 96%, with a median rate of 91%.¹³

Moreover, the bill authorizes the Department to take enforcement actions against the Stewardship Organization for failure to meet the minimum rates for two consecutive years. Each subsequent year where the minimum rates are not met constitutes an independent violation. This will ensure that the Stewardship Organization is incentivized to operate the program effectively.

Additionally, HB 1089 requires the Department to increase the deposit value by five cents if the minimum redemption rate is not achieved for two consecutive years. This provides an in-statute fail safe that would automatically increase the deposit value if the system is underperforming. Declining redemption rates mean that either there are not enough points of redemption or that the value of the deposit is not high enough to incentivize participation.

Oregon adopted this approach and it proved to be extremely successful. In 2011, the Oregon legislature adopted language that would require the deposit value to increase from five cents to ten cents if the redemption rate fell below 80% for two consecutive years.¹⁴ The redemption rate dropped to 64.5% in 2014, and 68.3% in 2015.¹⁵ In response, the deposit value increased, and the redemption rate skyrocketed to 90% in 2018.¹⁶ The inclusion of this requirement in HB 1089 will provide a necessary check on the system that can automatically address falling redemption rates without the need for new legislation.

B. Strong Return to Retail Requirements to Maintain Equitable and Convenient Access to Redemption Services.

Just Zero strongly supports HB 1089's focus on requiring retailers to provide redemption services. Retail oriented approaches to redemption consistently achieve redemption rates of 90%. This approach is intuitive and convenient for consumers who can return their empty containers at the same types of stores they typically purchase beverages from in the first place. This also reduces the need for additional trips or stops for redemption. Additionally, many retail stores, especially larger stores and grocery stores, are located along public transit routes which makes redemption convenient and equitable for residents without cars and in urban areas.

¹³ Eunomia, [PET Market in Europe State of Play: Production, Collection, and Recycling Data](#), pg. 14. (2020)

¹⁴ Talia Richman, [Oregon Bottle Deposit Will Go From Nickle to Dime Next Year](#), Oregon Live. (Jan 9, 2017).

¹⁵ *Id.*

¹⁶ *Id.*



C. Transparent Oversight of the Stewardship Organization

Just Zero also strongly supports the balance HB 1089 has created between the Stewardship Organization and the Department. Stewardship Organizations are a common feature in most producer responsibility systems across the world, including Bottle Bills. In addition to funding the program, these organizations provide technical and compliance services to regulated beverage companies while also facilitating streamlined oversight and enforcement by the Department.

HB 1089 correctly balances the need to give the Stewardship Organization the flexibility to determine how it will meet the requirements of the law while reserving the role of determining core program requirements for the Department. This ensures the Department is responsible for changing the deposit value, setting the rate of compensation redemption service providers, and determining convenience standards for points of redemption.

D. Mechanisms to Establish Reusable and Refillable Beverage Systems

The increased recycling rates associated with a Bottle Bill program are extremely important. An additional underrepresented benefit is that these programs create 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.

Bottle Bill programs can, and must, return to this approach. Oregon is currently exploring this. In 2018, Oregon began utilizing its existing deposit return infrastructure to launch a statewide refillable bottle system.¹⁷ This system utilized approximately 245,000 refillable beer bottles.¹⁸ The bottles can be refilled up to 40 times and were made primarily from recycled glass.¹⁹ The bottles are designed to be easily separated from the rest of glass collected through the deposit return system.²⁰ 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.²¹

¹⁷ Jared Pablen, [Oregon Group to Launch Refillable Bottle Program](#), Resource Recycling. (Feb. 7, 2017).

¹⁸ *Id.*

¹⁹ Cassandra Profita, [Oregon Launches First Statewide Refillable Bottle System in U.S.](#), NPR, (Sept. 17, 2018).

²⁰ *Id.*

²¹ Oregon Redemption Center, [Bottle Drop](#).



Unfortunately, Oregon's program stalled because the program was entirely voluntary. HB 1089 shows that it has learned from Oregon's mistakes by requiring that at least 10% of all beverage containers sold by a beverage company must be in returnable and refillable bottles beginning in 2033. This is an important mechanism that will ensure Maryland's program works to develop and incorporate reuse and refill components. Additionally, the minimum refillable requirement is aligned with commitments made by several of the largest beverage companies. Pepsi has pledged that 20% of its total beverage sales will be covered by reusable programs by 2030. Coca-Cola has pledged to reach 25% in the same timeframe.

IV. Maryland Should Keep Extended Producer Responsibility for Packaging and Bottle Bill Programs Separate

Finally, we understand that this session the Maryland Legislature is also considering SB 0222/ HB0284, which would create an Extended Producer Responsibility ("EPR") for Packaging program. This proposal would include beverage containers under the EPR for Packaging Program. Just Zero strongly supports EPR for Packaging proposals. EPR for Packaging is a commonsense policy tool that will help fund improvements in recycling infrastructure while requiring companies to redesign their products and packaging to be more environmentally friendly. However, it is important that the Maryland Legislature keep these important – but distinct – policies separate.

Including beverage containers in Packaging Reduction and Recycling laws gets messy. And that's because it keeps beverage containers in curbside recycling bins rather than separating them out and managing them through their own dedicated system. Remember, beverage containers are highly recyclable when kept clean and free of contamination. In the curbside system, they just won't be recycled as effectively as through an independent program.

When beverage containers are included in Packaging Reduction and Recycling laws you also lose the litter reduction benefits that come with Bottle Bills. A central part of Bottle Bill programs is that every container sold has a refundable deposit placed on it. Consumers pay that deposit when they purchase the beverage. And they get that money back when they bring the empty container back for recycling. This creates an incentive for consumers to participate in the program, which reduces the likelihood that these containers become litter. Why? Because they now have an economic value. That isn't the case with Packaging Reduction and Recycling laws.

V. Conclusion

The time to act is now. HB 1089 would improve recycling, create green jobs, and reduce litter which will protect Maryland's land, rivers, lakes, and oceans. It will also help Maryland address the growing plastic pollution crisis. In 2017, less than 6% of the 5.9



billion pounds of PET bottles sold in the U.S. were recycled.²² The failure to meaningfully recycle plastic bottles contributes to the exponential growth in worldwide plastic production, which is projected to rise from 837 billion pounds produced in 2015 to almost 4 trillion in 2050.²³

With HB 1089, 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.
State Policy Director
Just Zero

²² NAPCOR, [Report on Postconsumer PET Container Recycling Activity](#), pg. 4 (2018).

²³ David Azouly, [Plastic & Health: The Hidden Costs of a Plastic Planet](#), pg. 6 (2019).



Attachment A:

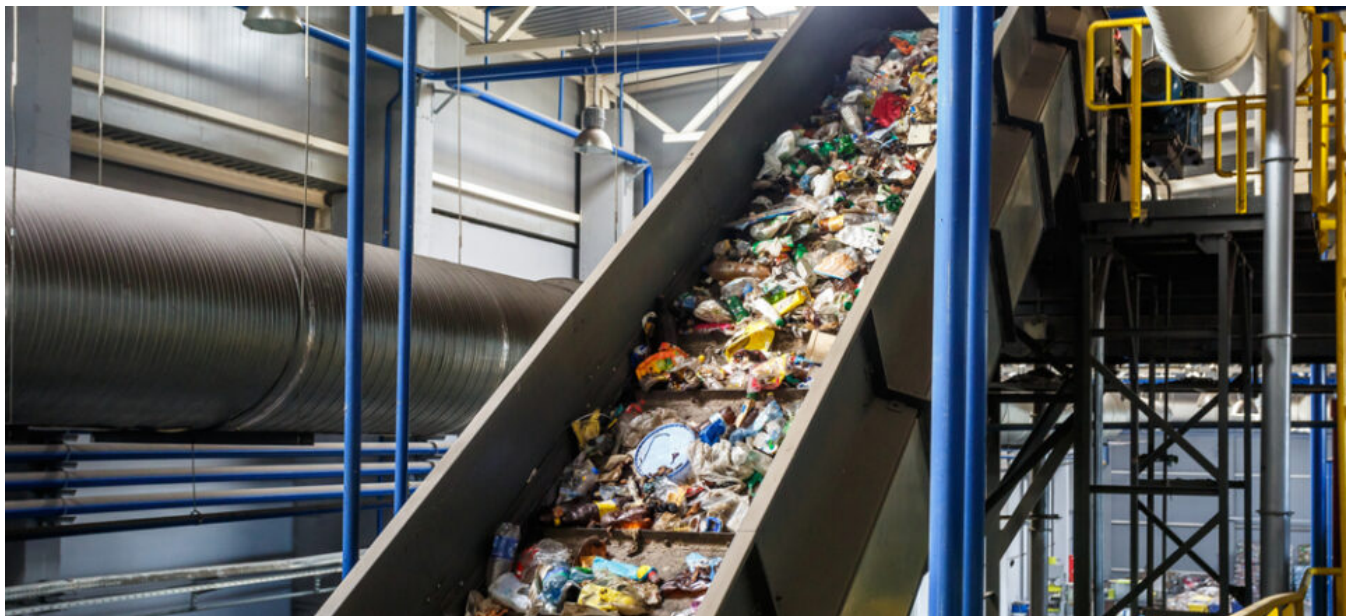
Just Zero – Fixing Recycling One Step and One Policy at a Time (Jan. 31, 2023).



Explainer

Fixing Recycling One Step and One Policy at a Time

By Peter Blair | January 31, 2023



The plastic pollution crisis has reignited conversations about both Bottle Bills and Packaging Reduction and Responsibility laws. Collectively, these policies can create the foundation of a new wave of recycling reform.

Photo Credit: jantsarik via Shutterstock

Our Recycling System Needs a Makeover

Our recycling system isn't working. It's expensive, confusing, and in many places inaccessible. This is especially true when it comes to plastic recycling. Right now, the U.S. has a **5% plastic recycling rate**. Unfortunately, there isn't a magic wand that will fix our failing system. Overhauling recycling in the U.S. will take time, effort, and an array of new policies targeting specific materials and problems with how we collect, sort, and manage waste.

Thankfully, there are two policies that can do most of the leg work: **Bottle Bills** and **Packing Reduction and Recycling Laws**.

Both policies are a form of extended producer responsibility, an unnecessarily complex name for a straightforward concept. Extended producer responsibility holds companies that manufacture specific products accountable for the waste they create.

Many states across the country have successfully developed and implemented producer responsibility programs for hard-to-manage products like **paint**, **car batteries**, **carpets**, and **electronics**. These policies have helped increase access to recycling services and created specialized recycling and waste management programs for hard-to-manage products. However, these programs only focus on a small portion of the waste stream. That's where Bottle Bills and Packaging Reduction and Recycling laws come into play.



New Policies Can Reform Recycling

Packaging makes up a significant portion of the waste stream. Roughly **a third of all household waste is packaging** – things like cardboard boxes, cans, plastic containers, bags, and glass jars. Some of these materials, like cardboard, glass, paper, and PET plastic bottles, are highly recyclable. We just need good systems to collect, sort, and recycle them. Other packaging materials like plastic film, plastic bags, Styrofoam, and most other forms of plastic are not, and will never be, recyclable. But with Bottle Bills and Packaging Reduction and Recycling Laws, we can create comprehensive programs to make sure the materials that are recyclable get recycled. The materials that aren't recyclable? Those should be phased out of production completely.

Bottle Bills

Bottle bills have been around for decades. And they've proven to be among the most **impactful recycling programs** ever created. Why? Because beverage containers are highly recyclable when kept clean. Bottle Bills remove beverage containers from curbside recycling systems and instead, collect and sort those containers through their own system. This means the containers are clean and free of contaminants, and ready to be recycled into new beverage containers. Even better, beverage companies pay the cost of collecting, sorting, and recycling these containers, not consumers.

The results speak for themselves. Nearly **60% of all the glass** that is recycled into new bottles in the U.S. comes from the ten states that currently have bottle bill programs. And a third of all aluminum cans that are recycled in the U.S. come from those same states. But the benefits of Bottle Bills don't end with increased recycling. These bills also **reduce litter**, and they can kickstart **reusable and refillable beverage container programs**.

Packaging Reduction and Recycling Laws

Packaging Reduction and Recycling Laws focus on fixing curbside recycling. How? By handling hard-to-manage materials like plastic containers, paper, cardboard boxes, and others, in a more efficient way. Right now, consumers – not corporations – pay the cost to manage all this packaging waste. As a result, corporations have no incentive to 1) redesign their products to use less packaging or 2) make the packaging reusable or

recyclable. Instead, corporations just focus on packaging their products as cheaply as possible.

Packaging Reduction and Recycling Laws change this. These laws require companies to manage the packaging waste they create. Now, companies will pay fees based on the amount of packaging their products use. The fees go towards paying for recycling and waste management services. On top of that, the laws require the companies to reduce the amount of packaging they use to sell and market their products. It also forces them to make that packaging recyclable. Most important of all, for packaging reduction and responsibility laws to achieve their goals, **they must not be undermined** by the industry that created this problem in the first place.

It's Not Enough to Have One Law or The Other

The plastic pollution crisis has reignited conversations about both Bottle Bills and Packaging Reduction and Responsibility laws, which is great! Collectively, these policies can create the foundation of a new wave of recycling reform.

However, it's important that states pursue both policies and more importantly, that they develop those policies separately. That means passing a Bottle Bill to create and implement a modern bottle recycling program that covers all beverage containers. It also means passing a Packaging Reduction and Recycling law that manages all other packaging material.

Including beverage containers in Packaging Reduction and Recycling laws gets messy. And that's because it keeps beverage containers in curbside recycling bins rather than separating them out and managing them through their own dedicated system. Remember, beverage containers are highly recyclable when kept clean and free of contamination. In the curbside system, they just won't be recycled as effectively as through an independent program.

When beverage containers are included in Packaging Reduction and Recycling laws you also lose the litter reduction benefits that come with Bottle Bills. A central part of Bottle Bill programs is that every container sold has a small refundable deposit placed on it.

Consumers pay that deposit when they purchase the beverage. And they get that money back when they bring the empty container back for recycling. This creates an incentive for consumers to participate in the program, which reduces the likelihood that these containers become litter. Why? Because they now have an economic value. That isn't the case with Packaging Reduction and Recycling laws.

Managing beverage containers through Packaging Reduction and Recycling laws also limits the development of reusable and refillable beverage container programs. The independent and specialized recycling system created by Bottle Bills can easily be transitioned to have beverage containers sterilized, refilled, and put back into circulation. While recycling is an important waste reduction component, it is not as good as reuse.

All Hands on Deck

There is no one-size-fits-all approach to fixing our recycling system. That said, the best approach to reforming recycling is to pass a variety of policies targeting the specific failures of our recycling system. We need policies that ultimately reshape how we produce, consume, and ultimately dispose of goods.

Bottle Bills and Packaging Reduction and Recycling Laws represent two critical tools at our disposal, and ones that should be adopted by all states. While these policies are impactful on their own, they work better in tandem. Simultaneously, the two take the burden of managing packaging off communities and place it onto the companies that create all this waste.

Just Zero is working to implement these bills in several states across the country. **Sign up for our emails** to stay connected and learn how you can help advocate for these bills.

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