



BENNINGTON COLLEGE

**Testimony of Alexis Goldsmith, Organizing Director, Beyond Plastics**

**Before the New York State Joint Committee on Environmental Conservation  
In support of the Bigger Better Bottle Bill**

(Senate bill 237/Senator May, Assembly bill 6353/Assemblymember Glick)

**October 23, 2023**

Thank you for the opportunity to testify on Senate Bill 237/Assembly Bill 6353. My name is Alexis Goldsmith; I am Director of Community Organizing for Beyond Plastics, a national organization dedicated to ending plastic pollution. I work with people and organizations across New York State to reduce waste, mitigate climate change, and protect environmental justice communities from pollution where plastic is produced and littered, landfilled or burned.

New York has seen the benefits of the Bottle Bill over the past 40 years:

- Litter prevention, including a 70% decline in litter in the state.
- Waste diversion: 5.5 billion valuable recyclable containers are recycled each year.
- Improved recycling of materials: the most valuable recyclables are well sorted and collected; they are much more likely to be made into new products.
- Climate benefits: reduced greenhouse gas emissions.
- Employment and equity: more than 10,000 people earn their income by collecting and redeeming deposit containers.

Bottle bills are a nice complement, not a replacement, for curbside municipal recycling programs. According to data from the Container Recycling Institute, containers that are included in bottle bills achieve a substantially higher recycling rate than containers collected in municipal recycling programs. This is because the beverage containers are kept clean and source separated at a much better rate than curbside recycling, particularly single-stream recycling programs.

**Deposit v Curbside Recycling Rates<sup>1</sup>**

Material	Recycling Rate- Deposit	Recycling Rate- Curbside
Polyethylene terephthalate (PET) plastic	63%	17%
Aluminum	83%	46%

<sup>1</sup> [2015 Beverage Market Data Analysis. Container Recycling Institute. 2017](#)

Glass	72%	12%
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These benefits can be improved upon by modernizing the law to:

- Increase the deposit to ten cents - a nickel isn't worth what it was 40 years ago
- Put a deposit on more types of containers
- Raise the handling fee
- Coke publicly pledged to have 25% of their containers in refillable containers by 2030. Statutorily require this and add a provision to the bill requiring 25% of beverage containers to be refillable within a refill system by 2030.
- Clearly prohibit "chemical recycling" from any definition of recycling

These components of a modernized bottle bill would increase the redemption rate and fully implement the first two pillars of the solid waste hierarchy, established by the 1988 New York State Solid Waste Management Act. First, to reduce the amount of solid waste generated, and second, to reuse material for the purpose for which it was originally intended or to recycle the material that cannot be reused. Refillable bottles is a great way to reduce waste - the top rung of New York's statutory waste hierarchy.

In addition to modernizing the law, we must ensure that the Department of Environmental Conservation is enforcing return to retail (the ability to return deposit containers to the store you bought them from). In New York City, it can be difficult to impossible to redeem deposit containers at grocery stores. Reverse Vending Machines (RVMs) are often full with the stores unwilling to empty them, or stores are not actually set up to accept deposit containers, despite being required to do so by the current law. This reality represents a clear failure of enforcement. It is critical that New Yorkers have access to redemption for the law to function as intended.

**Increasing the deposit.** The minimum five cent deposit, established by law in 1982, would be 30 cents today if adjusted for inflation<sup>2</sup>. Raising the deposit to ten cents is a relatively modest increase that would have pronounced effects on redemption rates. It is critical to note that the increase is not a tax but a redeemable deposit designed to motivate New Yorkers to separate beverage containers and return them.

In 2020, our state's redemption rate stood at 64%, according to the DEC<sup>3</sup>. While 5.5 billion deposit containers were redeemed, 8.6 billion deposits were initiated. Increasing the redemption rate to 90% would recover 2.2 billion additional containers each year. In addition to changing the deposit to ten cents, the legislature should consider including an automatic increase in the deposit if redemption rates fall below a certain threshold in the future.

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<sup>2</sup><https://slate.com/technology/2013/08/bottle-deposit-should-keep-up-with-inflation-time-to-raise-fee-from-a-nickel-to-30-cents.html>

<sup>3</sup> [https://www.dec.ny.gov/docs/materials\\_minerals\\_pdf/draftsswmp.pdf](https://www.dec.ny.gov/docs/materials_minerals_pdf/draftsswmp.pdf)

Increasing the deposit would support more than 10,000 low income New Yorkers who collect and redeem containers for their income. This community of recyclers perform a critical public service cleaning up streets and diverting valuable materials from the waste stream. They are usually people who have barriers to traditional employment; this is a matter of economic and environmental justice for this community. This work is being done at no cost to taxpayers.

**Including more containers for deposit.** Senate bill 237 / Assembly bill 6353 would place a deposit on most non-carbonated beverages, including tea, sports drinks, wine, liquor, and nips bottles. Nips are very small liquor bottles which are a new major source of litter. Dairy product containers are excluded. Including more types of containers in the deposit program is a critical upgrade that would divert more containers that could be reused or recycled from landfills and incinerators. This measure would also reduce litter; people don't litter if they can claim a deposit, or if a container winds up in the environment, someone will collect it for the deposit



Nips containers collected from the ground in a Brooklyn neighborhood.

**Raising the handling fee.** New York's handling fee requirement allows redemption centers across the state to provide critical redemption access to communities. Redemption centers are able to accept all types of deposit containers and help fill the gaps where return to retail is not a viable option- ie, in communities that don't have a grocery store.

Redemption centers across the state are closing or at risk of closing because they can no longer afford to operate on the 3.5 cent handling fee. This is particularly true in New York City, where realty prices are highest. Sure We Can, the state's only non-profit redemption center, is a community-based operation in Bushwick, Brooklyn. Sure We Can supports more than 1,000 canners and advocates for their well-being as part of its mission, while redeeming more than 12 million deposit containers each year. I urge you to visit Sure We Can and witness first hand the extraordinary work that they do.

The state needs more organizations like Sure We Can. Every redemption center that closes means less access for redemption and fewer opportunities for people who collect the

containers. Senator May has introduced Senate Bill 6869, which would support redemption access by directing DEC to distribute funds from unclaimed deposits to support redemption infrastructure for all the containers that would be covered under the expanded bill. I urge the legislature and Governor Hochul to work together to include this grant program in the budget and provide much-needed relief for redemption centers right away. Priority funding should be given to redemption centers that are operating in low-income communities where there are not existing supermarkets.

**Require 25% refill by 2030.** Reusable, refillable packaging contained within a reuse system is the solution we need to solve our municipal waste crisis. This statement is reaffirmed in the Climate Law Scoping Plan:

“Phase out single use packaging: The State should enact legislation that supports the reduction and eventual elimination of single-use packaged items for use in stores.” (page 326)

and in the DEC Draft Solid Waste Management Plan:

“The first step in rethinking the management of discarded 6 materials is to prevent materials from being discarded in the first place. Addressing the “take, make, toss” model includes replacing single-use systems with reuse systems.” (page 7)

This bill should be amended to require more refillable containers that align with with Coca-Cola’s commitment<sup>4</sup> to transition 25% of its products to refillable bottles by 2030. Putting this goal in law would hold beverage companies accountable to their commitment to refillables, and is an essential component of reducing waste at the source.

Up until the 1970’s, the majority of beverages were served at soda fountains supplied by refillable metal kegs, or in refillable glass bottles. A life cycle assessment performed by Coca-Cola and recreated by the EPA in 1974 found that a glass bottle refilled 10 times is far and away the environmentally preferable choice compared to other types of packaging.<sup>5</sup> At the time, Coca-Cola worked with local bottlers to distribute soda. It was the bottlers who placed a refundable deposit on refillable containers to be sure that customers returned them, resulting in a near 100% return rate and multiple refills of the bottles. It’s time to bring back refills in combination with deposits. Deposits ensure that the refillable containers actually get returned for refill.

Single-use packaging for beverages is relatively new, but has had devastating impacts on ecosystems. According to the recent report *Bring Back Refill* by Story of Stuff, “Globally, 580 billion [single-use] polyethylene terephthalate (PET) plastic beverage bottles are produced each year – nearly 1 million per minute.”<sup>4</sup> When these bottles are collected for recycling, they are not

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<sup>4</sup><https://www.coca-colacompany.com/media-center/coca-cola-announces-industry-leading-target-for-reusable-packaging>

<sup>5</sup> [https://www.storyofstuff.org/wp-content/uploads/2023/10/Story-of-Stuff\\_Bring-Back-Refill-Report.pdf](https://www.storyofstuff.org/wp-content/uploads/2023/10/Story-of-Stuff_Bring-Back-Refill-Report.pdf)

likely to be turned into new bottles. This is because when plastic is recycled, its quality degrades. Beverage bottles are mostly downcycled into products like polyester and decking. When the polyester is washed, microplastics are released into the wastewater. All plastic is eventually disposed of.

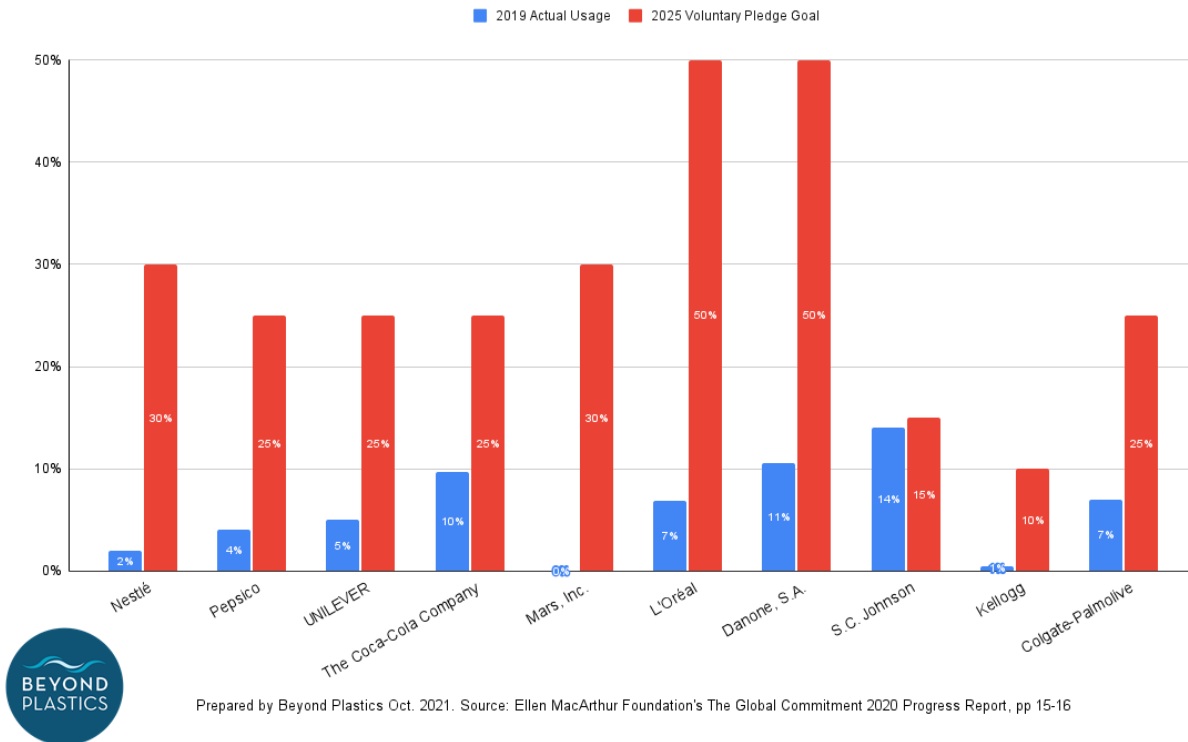
Global plastic pollution has soared in tandem. Made from a combination of fossil fuels and chemicals, plastic beverage containers contribute to climate change. In fact, plastic is responsible for double the climate-warming emissions as the global aviation industry. Yet, the production, use, and disposal of plastic continues to rise.

**Years of global brand audits have shown the world's largest beverage companies - Coca Cola, Pepsico, Nestle, Keurig Dr Pepper, etc - are also the world's largest plastic polluters.** It is a massive public relations problem, and so over the years companies have made various voluntary pledges to reduce pollution from their packaging choices. Yet, these promises always fall short, even as companies rake in billions in profits.

Between 21 and 34 billion one-liter PET bottles (706,000 to 1.1 million metric tons) enter the ocean each year<sup>4</sup>, with beverage companies holding no liability for the pollution. Billions more are landfilled, incinerated, or downcycled. While recycling efforts are important, reducing the production of beverage bottles from raw materials must be a priority for deposit systems.

The following chart documents the failure of various companies to honor their voluntary public pledges.

### Corporate Promises to Use Recycled Materials: Promises vs. Reality



Requiring refill within a refill system has enormous economic potential. The reverse logistics of getting back, washing, and redistributing bottles could create good-paying jobs and bolster local economies. The refill system could be incorporated into the existing redemption system. For instance, the containers are able to be processed by reverse vending machines. They just have a softer landing inside the machine.

The type of container is important to consider. Because plastic beverage containers contain toxic chemicals that can contribute to system health problems, and because plastic degrades over time, it is not the best choice for a refill system. Refillable glass provides the most environmental benefits and health protections. Aluminum containers could be redesigned to be refillable.

Finally, as with any legislation, enforcement is an important consideration. Reporting requirements would provide transparency and ensure that deposit containers are actually being refilled. Reporting should include, at least, how many refillable containers are sold on deposit, how many are redeemed and collected, how many are washed, and how many are redistributed.

Refill would require beverage companies to invest upfront in refill infrastructure, but the returns on the investment could outweigh the costs in the long term, while providing enormous benefits

for New Yorkers and the planet. Refillables are used in Europe, Latin America and other parts of the world. Why not in New York?

As the following chart illustrates, beverage companies are making a lot of money and have the resources to do much much more to alleviate the environmental damages caused by their products.

2022 Sales & Profits of Global Plastic Polluters

Producer	2022 Gross Sales	2022 Profit
Coke <sup>6</sup>	\$43 billion	\$10.9 billion
Pepsico <sup>7</sup>	\$86 billion	\$12.3 billion
Nestle <sup>8</sup>	\$105 billion	\$10.5 billion

### Plastic Pollution: The Visible and Invisible Threat

In recent years, a growing body of research dedicated to plastic provides mountains of evidence that plastic packaging is contributing to climate change, public health impacts, harm to wildlife, and near-universal contamination of air and water.

**Plastics and Climate.** More than 99% of plastics are manufactured from fossil fuels. In the U.S., emissions associated with plastic are on pace to exceed emissions from coal fired power plants by 2030.<sup>9</sup> Globally, plastics are responsible for twice as many emissions as the aviation industry.<sup>10</sup>

**Plastics and Environmental Justice.** Communities of color and or low-income communities bear the brunt of plastic pollution, which includes the disposal of plastic waste through landfilling, incineration, or dumping, and the emissions from plastic production. New York is home to 10 waste incinerators, more than any other state except Florida. Waste incinerators are a very large source of heavy metal and particulate matter emissions.

**Microplastics.** Micro- and nano-plastic pollution are generated at every stage of plastic production, use, and disposal. Microplastics are now pervasive in the human body and the environment. Endocrine disrupting chemicals added to plastic may contribute to systemic health

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<sup>6</sup><https://investors.coca-colacompany.com/news-events/press-releases/detail/1076/coca-cola-reports-fourth-quarter-and-full-year-2022-results>

<sup>7</sup> <https://pepsico.gcs-web.com/static-files/30d0eb62-6fa2-44d7-a883-721393a16064>

<sup>8</sup> <https://www.nestle.com/media/pressreleases/allpressreleases/full-year-results-2022>

<sup>9</sup>[https://static1.squarespace.com/static/5eda91260bbb7e7a4bf528d8/t/616ef29221985319611a64e0/1634661022294/REPORT\\_The\\_New-Coal\\_Plastics\\_and\\_Climate-Change\\_10-21-2021.pdf](https://static1.squarespace.com/static/5eda91260bbb7e7a4bf528d8/t/616ef29221985319611a64e0/1634661022294/REPORT_The_New-Coal_Plastics_and_Climate-Change_10-21-2021.pdf)

<sup>10</sup> <https://www.nature.com/articles/s41558-019-0459-z>

problems; exposure pathways include leaching into food and drink and ingestion of microplastics. A 2018 study found 93% of water bottled in plastic contains microplastics.<sup>11</sup>

**A Growing Threat.** Global plastic production exceeds 400 million metric tons annually. Nearly half becomes single-use packaging. Plastic production from fossil fuels is on track to triple by 2050.

### **The Failed Promise of Recycling**

Approximately 63% of PET beverage containers collected through deposit are recycled<sup>1</sup>, much better than the overall U.S. plastics recycling rate of 5% to 6%. However, they are not turned into new bottles. This is because when plastic is recycled, it degrades in quality. Rather, plastic bottles are downcycled into products like polyester, which go on to shed microplastics through their use, and are eventually disposed of. While recycling is critical for materials like aluminum cans, which can be made into new aluminum cans effectively, recycling is not working for turning plastic bottles into new plastic bottles. This is not likely to change.

Beverage companies have been promising for years to turn old plastic bottles into new plastic bottles. Despite lots of advertising, that has largely not been achieved for the vast majority of plastic soda bottles sold around the world.

Still, the beverage industry pushes the recycling narrative as a solution for plastic pollution - pollution which stems from the industry's *choice* to use plastic packaging. Nonprofit organizations funded by beverage manufacturers like Keep America Beautiful and The Recycling Partnership have been effective at keeping the focus on recycling rather than waste reduction.

Recently, the American Chemistry Council has hailed “chemical recycling” as the holy grail of plastics recycling, claiming that it can transform plastic waste back into feedstock for new plastics through a suite of energy-intensive technologies. The reality is that these technologies are highly polluting, generate large amounts of hazardous waste and greenhouse gas emissions, are very expensive, and, like mechanical recycling, cannot effectively turn plastic into new plastic.<sup>12</sup> Rather, “chemical recycling” is the new wave of plastics recycling promises, designed to once again distract from the comprehensive solutions we need.

**The current bill needs to be amended to include a definition of recycling which clearly prohibits chemical recycling from counting as real recycling. The Harckham/Glick Packaging Reduction and Recycling Infrastructure Act, S4246-A, A 5322-A, includes a good definition that should be added to this bill.**

### **Conclusion**

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<sup>11</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6141690/>

<sup>12</sup> <https://www.nrdc.org/sites/default/files/chemical-recycling-greenwashing-incineration-ib.pdf>



Modernization of the Bottle Bill to reduce solid waste, reduce emissions, protect environmental justice communities, and increase reuse of materials is supported by the Climate Law Scoping plan and is reaffirmed in the Dept. of Environmental Conservation Draft Solid Waste Management Plan.

Modernizing the Bottle Bill should include raising the deposit to ten cents, including more types of containers for deposit, increasing the handling fee to six cents, and requiring a provision requiring 25% of bottles to be refilled within a refill system by 2030.

I urge the legislature to modernize the Bottle Bill in 2024. Thank you for allowing me to testify today and I would be happy to work with you to design the best modern deposit system for New York. I can be reached at [AlexisGoldsmith@Bennington.edu](mailto:AlexisGoldsmith@Bennington.edu) or 260-444-1341.