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TESTIMONY
OF RELOOP NORTH AMERICA
BEFORE THE JOINT HEARING OF THE
NEW YORK SENATE ENVIRONMENTAL CONSERVATION AND
ASSEMBLY ENVIRONMENTAL CONSERVATION COMMITTEES
REGARDING THE EXAMINATION OF LEGISLATIVE SOLUTIONS TO INCREASE
THE EFFECTIVENESS OF THE BOTTLE BILL
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Albany, NY

Introduction to Reloop and our work

Thank you, Chairs Harkham and Glick and esteemed members of the Committee on Environmental Conservation, for the opportunity to submit testimony in support of comprehensive modernization of New York’s Returnable Container Act, or bottle bill.

My organization, Reloop, is an international nonprofit organization which pairs research and analysis with multistakeholder engagement to advance policies to accelerate the circular economy.

In many jurisdictions outside the US, deposit return systems routinely achieve a 90% or higher redemption rate. By researching high-performing systems, Reloop has determined the ten principles that define high-performing DRS, and pragmatic tools to implement reform effectively and equitably.

Modern, High-Performing DRS: A Key Part of the Solution reloop

TEN HIGH-PERFORMING PRINCIPLES



- 1 EASY & EQUITABLE
- 2 90% COLLECTION RATE
- 3 \$0.10 MINIMUM DEPOSIT
- 4 INCLUSIVE CIRCULAR SYSTEM



- 5 PRODUCER FUNDED
- 6 FAIR PAY FOR SERVICE PROVIDERS
- 7 FINANCIAL SUPPORT FOR MUNICIPAL RECYCLING PROGRAMS



- 8 CLEAR SYSTEM STANDARDS & FUNCTIONS
- 9 PRODUCER REPORTING ON UNITS SOLD
- 10 GOVERNMENT OVERSIGHT AND ENFORCEMENT

In 2022, we released analysis demonstrating how using this model to reform existing bottle RS would impact each of the five Northeast bottle bill states. The full results of that study are available at bottlebillreimagined.org.

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As detailed in our report, the potential impacts of bottle bill modernization encompass a huge range of environmental, climate, economic and social benefits for all parties involved, even the producers who fund the system. The findings speak clearly to the benefits of and need for bottle bill modernization, especially in New York.

NEW RESEARCH ON NEW YORK SHOWS THE IMPACT:

331,900
METRIC TONS
OF CO₂



reduced annually in reduced greenhouse gas emissions—the equivalent of 72,000 cars off New York roads each year¹

5.4
BILLION



additional beverage containers recycled each year, yielding 258,000 more tons of high-value material annually, with 167,000 tons in New York City alone

\$70.9+
MILLION
IN SAVINGS



for New York cities and towns by redirecting recyclables away from costly curbside collection systems

\$852
MILLION



added to New York's economy annually in Gross Value Added (GVA)³

85%
LITTER
REDUCTION



of beverage containers², creating far more livable communities—rural, urban, and suburban—in the Empire State

10,000
TOTAL JOBS



that bring additional economic benefits through taxes and spending by these workers



Increases access for consumers

with 13,648 projected locations (7,462 in NYC alone) to return containers so redemption becomes part of a New Yorker's daily routine



Includes more beverages containers

so would remove a significant proportion of glass and other containers from curbside recycling that are costly and difficult to manage



64% to 90% jump

in redemption rate for containers included in New York's deposit return system



Funded by producers

so New York consumers or their cities and towns do not pay for the management of these materials



Creates efficiencies

by establishing clear standards, oversight, and enforcement that optimize performance and reduce fraud



Producers will pay

\$454 million annually - not New York municipalities and consumers, as they do now



Government plays an oversight and enforcement role

to ensure performance standards are met by producers and retailers and enforce a 90% collection target in New York



We have also just finished A Guide to Modern DRS: 10 Essential Practices, which will be released next month.



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The need for a modernized bottle bill

Modern deposit systems, or bottle bills, are the world's most effective extended producer responsibility program, when defined by collection and recycling rates. And equally worth mentioning: bottle bills don't just improve recycling.

Modern deposit systems also play a critical, well-documented role in enabling the reduction of single-use packaging by making a consumer-friendly, job-generating refillable beverage sector possible. That is a waste reduction and climate outcome I know we would all like to see materialize.

The benefits of modernizing New York's bottle bill are well within reach if the legislature acts now to modernize this program.

Thus we support the current modernization bills with amendments, and hope for urgent action on this front.

In this written testimony, I lay out recommendations to improve the current proposals, based on the principles above, in order to achieve a modernized bottle bill in New York.

Specific recommendations

In Reloop's experience globally, for deposit systems to achieve a 90% or higher return rate, people need to be able to return close to their home or the location where the beverage is consumed, whether that user be an individual consumer, a business, or a canner. We propose interventions for each of these user types to make redemption easier in New York City, without burdening small businesses.

PRINCIPLE



Accessible & Accountable

1 EASY & EQUITABLE

Make deposit return system (DRS) simple for all consumers to understand and use. Establish a large network of redemption points, focused on retailers, so returning empties becomes a routine part of everyday life. In jurisdictions where the informal sector plays a critical role in collection and redemption, legally recognize and protect the rights of canners.

- Additional requirements for expanded redemption infrastructure, including specific high-volume redemption requirements
- Distributor take back requirements and / or financial obligations to close the current loophole wherein commercial generators are left with stranded containers and must forfeit the deposit

In New York City currently, many bottle bill containers are collected as recyclables and lost to the system (with their deposits lost to the consumer). Many more, still, are lost to landfills and incinerators. In fact, for every beverage container delivered to SIMS, four



more are buried, burned or littered. If you include commercial waste, 10 containers are lost for every one collected for recycling.

There are many reasons for this, though simply put redemption options in NYC are limited, hard-to-find, and inconvenient for most New Yorkers. In the case of businesses, the situation is more dire, still.

For the system to work, redemption options must be oriented to the redeemer – be it a large business, the consumer or, as is often the case in NYC, canners who are collecting high volumes of material. This requires more infrastructure in the form of neighborhood-distributed and canner-friendly redemption centers; building-level, block-face or transit-integrated RVMs for consumers; and distributor take back obligations for commercially generated material, as described further below.

For residential material, we recommend including both a high statewide requirement on total redemption sites and population-specific quotas. An example of where this has recently been done is in Quebec, which passed comprehensive DRS reforms in 2022. The updated system requires 1,500 sites across the province (bulk sites cannot be counted towards the 1,500 requirement), and includes a resident per site minimum thresholds based on population and other demographic conditions as follows:

- (1) Montréal and Laval, one return point for every 15,000 inhabitants;
- (2) Montérégie, Estrie, ...one return point for every 8,000 inhabitants;
- (3) Saguenay-Lac-Saint-Jean, ... one return point for every 6,000 inhabitants;
- (4) Abitibi-Témiscamingue, ...one return point for every 4,000 inhabitants.ta

Something similar in New York would ensure that the system is held to place-specific requirements and would work equally well given very different rural, suburban and urban conditions. We wish to see New York legislators develop place-specific quotas that enable redemption points within 5 miles of rural populations, within 2 miles of urban and suburban populations, and within ½ mile for New York City.

Likewise, Quebec set up a requirement for three types of redemption sites, each with its own set of requirements, which we recommend New York state lawmakers take steps to do, too. This would include specific requirements for:

- Return points: designed to accept small quantities of redeemable containers,
- Return centres: designed to accept both small and large quantities of redeemable containers; and
- Bulk return points

The full legislative language from Quebec offers extensive, additional detail, and ReLoop has additional resources we would be happy to provide to explain how this could and should be done in New York.

For commercially generated material (or sites with on-site consumption), something a bit different is required.



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At present, commercial generators of bottle bill material, predominantly small businesses with local ownership, struggle to deal with their empty glass bottles. Haulers often will not take this material as part of single stream recycling collection, as it is both heavy and is a source of contamination for paper and other valuable recyclable material. Consequently, it ends up with the refuse. At times, it is left behind altogether.

When glass is collected separately, its quality is maintained and it is a valuable and highly used commodity. In fact, in a study done by the Northeast Recycling Council, glass collected with other recyclables was turned back into glass bottles just 0.02% of the time, compared with the more than 85% rate of bottle-to-bottle, or closed loop, recycling of bottle bill glass. Not only is quality glass valued, but much more material is needed. A quick google news search turns up dozens of articles citing wine and beer manufacturers are currently facing material shortages.

As glass is one of the most energy-intensive materials to make, and glass made from virgin material is more energy-intensive than that made with recyclable material, we cannot afford to continue allowing glass to be landfilled or used in other, non closed-loop applications.

It makes neither environmental nor economic sense to do so.

While including the full range of beverages in glass containers in the bottle bill is an important step in the right direction, it is unfortunately only part of a sound solution.

Bottle bill legislation should explicitly make distributors responsible for the collection of bottle bill containers from businesses like bars and restaurants, where beverages are consumed on premise. At present, these establishments have no way to redeem large quantities of containers. By our estimate, NYC small businesses – the heartbeat of our economy and the soul of our city – are forced to forfeit \$55 to 60 million dollars in bottle bill deposits each year, which is instead turned over to the state and beverage brands.

If distributors use the same trucks to collect empties as they use to deliver new inventory – an acceptable and sanitary practice done throughout Western and Northern Europe – these reverse logistics will reduce emissions, get trucks off the road, and lessen the waste management burden environmental justice communities face.

They will bring additional environmental benefits still. Immediately, the closed-loop recycling rate for commercially generated glass will go from the current rate of 0% to more than 87% for single-use glass, avoiding production-based carbon emissions and need for virgin material.

Even more inspiring: such operations allow for use and circulation of refillable bottles, with the added benefit of reducing distributor costs. Again, this isn't fantasy, it's the reality in many parts of the world, including the more than 87% of beer bottles and half of all beverages sold in refillable bottles in Germany today. All that, and more, is possible in New York by explicitly obligating distributor container take back.





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Next, expanding and enhancing the redemption network is key. Reloop modeled a convenient bottle bill system in NYC and found that more than 7,400 return points are needed to guarantee convenient redemption. These would be distributed between retail locations, redemption centers, and apartment-integrated reverse vending machines.

For these reasons, Reloop recommends an update to the bottle bill incorporate additional requirements for expanded redemption infrastructure, including specific high-volume redemption requirements. This would include both:

- Expansion of building-based and or street / transport-integrated redemption infrastructure, (like at NYCHA), so that equitable access to redemption is guaranteed for all New York City residents.
- Inclusion of business-specific redemption requirements, as described below, to ensure that material moving through the commercial sector is easily redeemable

Legislative improvements to promote such a network can be found from other reference cases. For example, Quebec recently made many of the same adjustments to its system, including specific population-based and redemption volume-based requirements for network expansion. We wish to see similar requirements for expanded redemption infrastructure added to the New York bill.

PRINCIPLE

2 90% COLLECTION RATE

Set a high redemption target through legislation to hold producers accountable for meeting it, with enforced penalties if they do not

RECOMMENDATION(S)

- high performance target, with triggers / penalties in place if targets are not met

Meaningful targets are another key element in high-performing deposit return system design. In order to stimulate necessary investment and supply chain coordination, and to get the best performance from the system, it is critical to include a redemption target of 90% in legislation, complete with penalties in place if targets are not met.



Industry
Financed

PRINCIPLE

6 FAIR PAY FOR SERVICE PROVIDERS

Set a fair handling fee for parties providing services and redemption infrastructure that covers the cost of their receiving and storing beverage containers.

RECOMMENDATION(S)

- Set and revise handling fees on a cost of service basis, rather than setting them in the legislation



Effective deposit return systems work with return point operators to efficiently collect large quantities of beverage containers from consumers. Typically, retailers and redemption centers are paid a handling fee as compensation for their participation in the collection network. This is calculated to offset the costs incurred in hosting and operating a return point.

Handling fees should be determined based on the cost of service, not set arbitrarily in legislation, as this politicizes the issue and potentially subjects the legislature to lobbying, from both groups who want to see higher handling fees and those that wish to decrease handling fees. Also, it potentially exposes New York City to conditions that prevent accessible and equitable redemption infrastructure, given that the economic conditions in NYC make container collection and processing much more expensive.

In determining the rates, some of the key factors to consider are: 1) how the containers are recovered (using manual labor or automatically via RVMs); 2) the condition of the containers picked up (compacted or uncompacted); and 3) the container material. Typically, handling fee calculations also take into consideration costs of space, labor, equipment purchase, maintenance, and more. Table 1 below gives an overview of best practice for setting handling fees.

Table 1: Regulatory best practice for handling fees

HANDLING FEE TOPIC	BEST PRACTICE RECOMMENDATION
Establishment	Based on an assessment of actual retailer and redemption center costs, not fixed in legislation
Adjustment	Reviewed at set periods (annually or biannually) by the system operator or state agency, in consultation with return point operator
Differentiation	Careful consideration of opportunities for more efficient operations, with handling fees differentiating based on: <ul style="list-style-type: none"> • Technology use: manual and automated services • Consumer access: retailer or redemption center / depot return
	Consider storage costs, which vary by container type and whether compaction is required

Another key feature of modern DRS is clear system standards and functions, as detailed here.



**Well Managed
& Regulated**

PRINCIPLE

8 CLEAR SYSTEM STANDARDS & FUNCTIONS

Establish independent monitoring and safeguards to meet legislative requirements, and standards that producers can follow in the DRS process

- Product Placement on Market (recycling design, labeling)
- Administration (registration, database, reporting)
- Redemption (technology use, recycled claim standards, clearing)
- Pick-up and Recycling (contracts, processing, material ownership)
- Education and Outreach (public campaigns)

RECOMMENDATION(S)

- Requirements for “universal registration”, i.e.:
 - Producers / distributors must provide bar code information to RVM operators
 - Legal prohibition on the producer / distributor restriction on where their materials are / are not accepted

As explained above, bottle bills work best under conditions of equitably distributed, accessible redemption infrastructure and an inclusive program scope covering the full range of beverages. There is a third element that is necessary, a current loophole for which few legislators are aware. This is a requirement for "universal registration," which includes and goes beyond producers and distributors registering their products with the state program administrators.

In places where RVMs are installed, the RVM operator and site host (be it a redemption center or supermarket, for example) must have the barcode information in order to accept and process the bottle bill containers. Currently, this is done in an informal way – the information is requested of the producers and distributors, who typically meet the request but are *not obligated to do so*. In some instances, they have refused to do so.

For example, I learned about an instance where a bottled water company did not want to give the bar code information to the RVMs installed at Costco, fearing that there would be massive flows of material through that channel (as Costco is well known for its high volume sales of bottled water), leading to additional cost and operational burden on the distributor to collect and manage those containers. In the end, this was resolved only when Costco threatened to pull the bottled water brand from their shelves, and the bottle water company made the decision that assuming responsibility for managing the empty containers was preferable to losing all bottled water sales at Costco stores.

Producers / distributors restricting redemption by not providing RVM operators with bar code information likely happens in many other places, but few (if any) site hosts are as powerful as and have the leverage that Costco does, so the site host simply has to accept that specific RVMs cannot collect specific beverage containers.

I have had conversations with DSNY, NYCHA and RVM manufacturers about the potential to install RVMs at NYCHA. All parties were in favor and were operationally committed to make such a pilot work, and potentially expand at a much larger scale. However, the lack of universal RVM registration was cited as a potential barrier, if producers / distributors were not supportive of the initiative. In essence, the pilot hinged on their good will, not a legal requirement to facilitate RVM-based redemption, and has not moved forward.

For clarify, this condition is different from the right extended to site hosts in New York's bottle bill system which allows them to limit container redemption to only the beverages sold by their establishment. What I describe here is a producer / distributor activity to limit the return of containers at specific sites, which contravenes the intention of the law.

As such, Reloop recommends including a measure to require producers / distributors to provide bar code information for all bottle bill containers and wherever RVMs are deployed as a means of collection. It should explicitly be stated in the bill that producers / distributors are prohibited from restricting where their materials are accepted.



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PRINCIPLE

10 GOVERNMENT OVERSIGHT AND ENFORCEMENT

Establish specific government audit, oversight, and enforcement responsibilities. Set enforceable reporting requirements for producers with penalties high enough to incentivize compliance and system improvement investments, including government ability to raise deposit value if producers do not meet targets.

RECOMMENDATION(S)

- Enhanced reporting and oversight requirements, namely:
 - Required reporting of sales data; verifiable, unit-specific tracking of material and money flows
 - Counting and sorting requirements / auditable sorting / processing protocol where automation is not used

Deposit return system accountability is paramount. High-performing DRS are those with mechanisms to ensure program integrity and transparency. This can be achieved, in part, by mandating reporting of sales reconciled against trackable, verifiable and unit-specific flow of material and money to confirm redemption rates, enable technological efficiencies, and reduce fraud in the system (like producer and deposit initiator underreporting, redemption center overclaiming, and illegal forms of redemption).

I recently had the opportunity to see Lithuania's DRS, which achieves a more than 90% return rate, in action. A mostly automated system, one of its secrets to success is a unit-specific tracking and counting system. All cans and bottles, even the ones collected manually, like those from New York's redemption centers, are barcode counted, verified and reported.

Not only does this mitigate fraud and enhance system integrity and producer accountability, it removes the need altogether for the extraneous sorting redemption centers and canners do currently in New York. Currently, more than 200 sorts by container material, producer and beverage type are required of manual collectors before they are paid. It's too much work for 3.5 cents per container.

Mandating producer-funded counting centers for consolidated material and prohibiting commingling restrictions are critical ingredients to achieve fair pay for service providers, a key principle of modern DRS.

Conclusion

Our principles and analysis, in tandem, provide pragmatic tools and concrete steps to equitable and effective reform implementation.

Modernizing bottle bills is not easy work. I commend you for your efforts to bring much needed reforms, and humbly offer whatever expertise or support I can provide in this endeavor.

Thank you for your consideration.

