

Senators Christine Cohen & Derek Slap
 Assemblymembers Joseph Gresko & Christine Palm
 Environment Committee, Legislative Office Building, Room 3200
 Hartford, CT 06106
 By email: envtestimony@cga.ct.gov

March 18, 2021

Dear Co-Chairs Cohen & Gresko, Vice-Chairs Slap & Palm, and Members of the Committee,

This letter is revised; it replaces the letter we submitted at noon today (March 18, 2021). As you may know, the Container Recycling Institute (CRI) is a national nonprofit organization and an authority on the economic and environmental impacts of beverage container recycling. We **strongly support Senate Bill 1037**, “An Act Concerning Solid Waste Management.” This bill modifies Connecticut’s beverage container deposit law (or “bottle bill”) in four stages:

Stage 1: Effective July 1, 2021:

- **Removes exception for HDPE plastic** (currently only PET plastic has a deposit).
- **Raises the handling fee to 3.5¢**, up from 1.5¢ on beer and 2¢ on other beverages.
- **Establishes revenue sharing for unclaimed deposits** with beverage distributors.

Stage 2: Effective January 1, 2022:

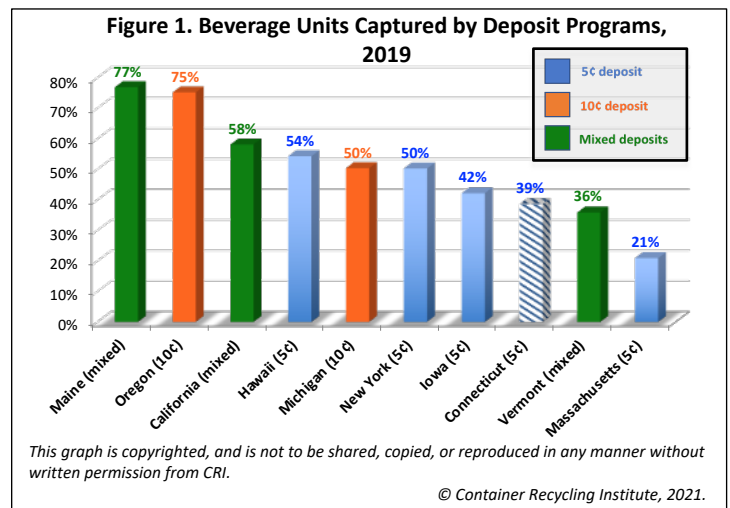
- **Raises the deposit value from 5¢ to 10¢.**
- **Requires deposit containers to have a UPC barcode** for ease of redemption.

Stage 3: Effective July 1, 2022:

- **Places deposit on “nips,”** the small liquor bottles that are littered ubiquitously.
- **Extends deposit to most non-carbonated beverages¹** not currently in the existing deposit law. In brief, this includes water, juice, sports and energy drinks, iced tea, and small liquor bottles (nips). It does not include wine or larger spirits bottles.

Stage 4: Effective July 1, 2024: **Extends deposit to wine and liquor** unless ≥80% of wine and liquor containers sold are already being recycled into furnace-ready cullet.²

Modernizing the deposit system has been done successfully in other U.S. states. As Figure 1 shows, higher deposit values (10¢ or mixed deposit values) **combined with** placing deposits on a broader range of beverages (as in ME, OR, CA, and HI) results in higher overall recycling “capture rates” than in states with nickel refund values and deposits on fewer beverage types. The capture rate is the product of the percentage of beverages covered by a deposit and the percentage of deposit containers redeemed for recycling (redemption rate). Connecticut, Massachusetts, and Vermont lag behind other deposit states in terms of how many beverage containers are captured as a proportion of those sold.



Adding non-carbonated beverages to Connecticut’s deposit program is long overdue

Sales of non-carbonated beverages have increased significantly over the last two decades. Non-alcoholic, non-carbonated beverages now comprise **52%** of total beverage sales in Connecticut (excluding dairy). Wine and liquor comprise another **4%** of beverage sales *in terms of units*, but **35% in terms of weight**, because large glass wine and liquor bottles are heavy.

Exempting these beverage containers from the deposit system has created a greater and greater financial burden on taxpayers, as billions more discarded bottles and cans must be managed through municipally-contracted recycling *and* landfilling. In addition, most glass managed through single-stream curbside recycling is too contaminated to be used as furnace-ready cullet, and must be disposed of in aggregate form that has little if any environmental benefit.

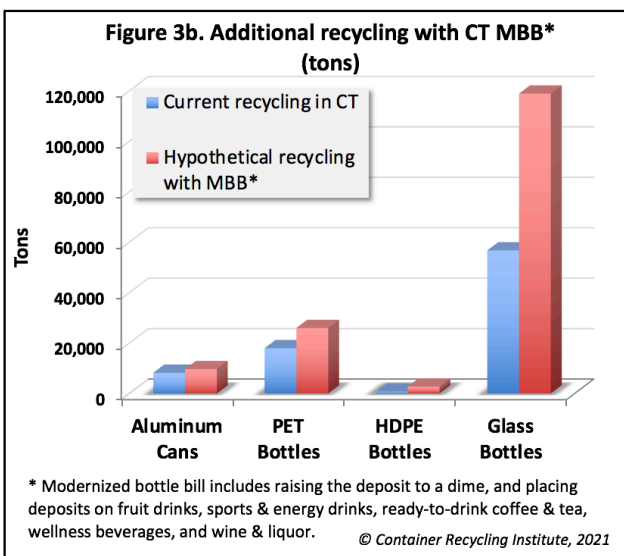
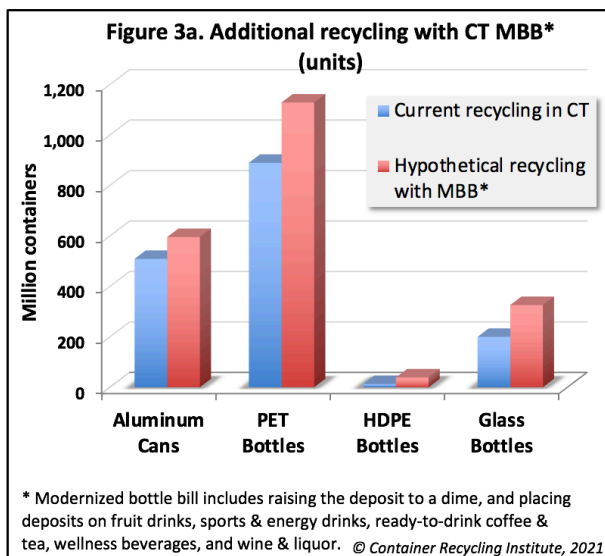
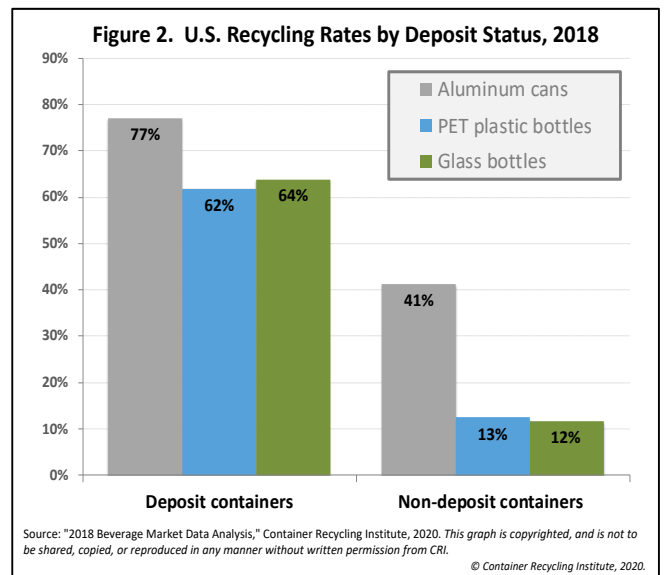
In Connecticut, adding non-carbonated energy drinks, sports drinks, iced tea, fruit drinks, then wine and liquor, will place deposits on sales of **460,000 additional bottles and cans per year**.

Recycling rates diverge widely based on deposit

At the national level, CRI has derived 2018 **non-deposit** recycling rates of 41% for aluminum cans, 13% for plastic bottles, and 12% for glass bottles, in contrast to average **deposit** container recycling rates of 77% for aluminum cans, 62% for plastic bottles, and 64% for glass bottles, as Figure 2 shows.

Under a modernized bottle bill (MBB) with a 10¢ deposit and a broad range of beverage containers, these rates could **double** (aluminum) or **more than quadruple** (plastic & glass bottles).

The **additional** beverage containers recycled under an MBB are shown in Figures 3a and 3b in units and tons. Figure 3b shows how glass bottle recycling in particular will increase by **about 61,000 tons**: not only will more tons be recycled, but they will be **cleaner tons**: furnace-ready cullet suitable for use in glass bottle making or fiberglass



manufacturing. Recycling these glass tons through the deposit system will also save about \$5 million in tip fees at waste-to-energy facilities in Connecticut.³

If SB1037 passes, CRI estimates that the state would ***eventually recycle approximately 480 million additional containers annually*** (and more in future years, as beverage sales continue to grow). This large increase in recycling is due to the **combination** of adding non-carbonated beverages **and** raising the deposit to a dime. This additional recycling will save money for municipalities, relieving them of the burden of handling these materials. It will also help save energy and reduce greenhouse gases.

Until the 10¢ deposit is put into effect on January 1, 2022, the new deposit beverages (that will be subject to the 5¢ deposit) are likely to be redeemed at the same rate that existing deposit beverages are now: about 45%, or perhaps lower as it takes customers a year or two to adjust to the law's new parameters.

When the deposit is raised to 10¢, and other modernizations are made to the Connecticut deposit system (such as increased handling fees, reverse vending machines, potential bag-drop locations, and improved requirements for manual take-back), we estimate that the redemption rate will increase to 68%. Again, this increased incentive to recycle, when combined with the new non-carbonated beverages on deposit, will lead to ***an estimated 480 million additional containers*** being recycled: over and above what is being recycled today.

These newly recycled containers will consist of ***about 72,000 tons of clean recyclable material***—over and above the recycling currently taking place:

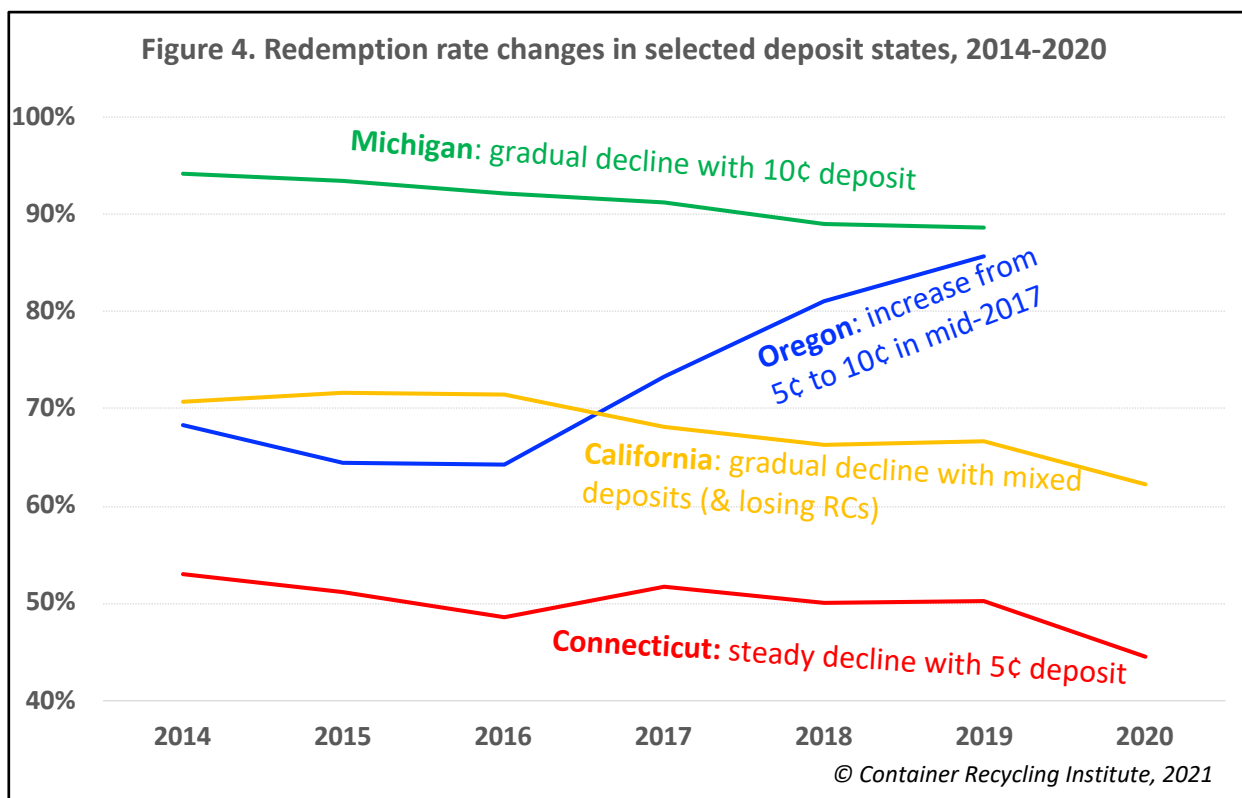
- About 1,400 tons of aluminum cans
- About 10,000 tons of plastic bottles (PET and HDPE)
- About 61,000 tons of glass bottles

Environmental benefits:

- By reducing the need to make new bottles and cans from virgin materials, this additional recycling would eliminate about 42,000 tons of greenhouse gas emissions: ***an amount equivalent to taking about 9,000 cars off the road for a year.***
- It would also **reduce bottle and can litter** along Connecticut's roadways, parks and fields, and beaches and rivers. Not only is litter unsightly and injurious to people, animals, and marine life, but it is expensive for municipalities, state agencies, and private businesses to clean up. By reducing bottle and can litter, deposit laws help reduce these cleanup costs.

Increasing the deposit value from a nickel to a dime is long overdue.

When the Connecticut deposit law was enacted in 1978, a nickel was worth what 20 cents is today. Connecticut's redemption rate was **44.5%** in FY2020: the lowest redemption rate of the deposit states for which 2020 data is available. While the Covid-19 pandemic has played a part in declining redemption in the year 2020, the downward redemption trend over the last ten years is unmistakable proof that 5 cents is no longer the financial incentive it once was. When Oregon's dime deposit kicked in by provision in 2017, the redemption rate quickly climbed from 64% in 2016 to 86% in 2019, as Figure 4 shows. Michigan achieved an 89% redemption rate in 2018. *Ten cents is a strong financial incentive for people to return containers rather than throw them in the trash or litter them.*



Placing deposits on wine and liquor will help alleviate the glass recycling crisis

Wine and liquor container sales account for more than 135 million containers sold annually, including about **80,000 tons of glass**.

While glass recycled through single-stream curbside collection is so dirty that it has a negative value (municipal recycling programs must pay \$15 - \$40 per ton to get rid of it), glass recycled through deposit programs is uncontaminated by other materials, and clean enough to color sort, giving it an average current value of \$50, \$35, and \$7.50 per ton for flint (clear), amber (brown), and green glass respectively.⁴

Handling fee increase: consumer convenience and environmental justice

This bill proposes raising the handling fee that beverage distributors pay to dealers (retailers) or redemption center operators for each container redeemed. Over the last few years, many redemption centers have closed in Connecticut due to rising costs and a stagnant handling fee. Raising the handling fee would return these redemption centers to a profitable business model.

We endorse raising the handling fee to better compensate retailers and redemption centers for their costs of operation. The current handling fees have been in place **since 1983 and 1986**. Clearly, the costs of operating any business have risen dramatically in the last 35 years, so a handling fee increase is well overdue.

We have heard anecdotally that in several low-income communities, consumers find it increasingly difficult to find a redemption location due to non-participation by retailers and a lack of redemption centers.

Revenue sharing on unclaimed deposits: Unclaimed deposits are those deposits that consumers do not redeem for a refund: either because they recycled their containers through curbside or other recycling programs, or because they littered them or threw them in the trash. Since 2010, 100% of unclaimed deposits have “escheated” (been remitted to) the State of Connecticut’s General Fund. In FY20, unclaimed deposit revenue amounted to \$43 million.

RB1037 establishes revenue sharing for the first time. Beginning with the fiscal years ending on June 30, 2022 and 2023, the proportion of unclaimed deposits that escheat (remit to) the State decrease from 100% to 82% of unclaimed deposits; in subsequent years that percentage decreases to 80%; beverage distributors and bottlers may keep the remainder. We believe that this revenue sharing scheme, coupled with a modest handling fee increase, will better compensate distributors and retailers for their recycling efforts, while still maintaining a steady revenue stream for the State.

Worldwide trend

Deposits on beverage containers were available to nearly 300 million people worldwide in 2017. With the announcement of 21 new deposit laws (including India, Turkey, Singapore, Ireland, and the United Kingdom), 640 million people will have access to deposit programs by 2023. This trend is projected to continue as more nations realize that deposits are a vital part of the solution to the problem of bottle and can waste and plastic pollution.

In sum, CRI strongly supports modernizing Connecticut’s beverage container deposit law by adding non-carbonated beverages, raising the deposit to a dime, and raising the handling fee. These actions will result in higher redemption rates, more jobs in the state’s recycling industry, and increased environmental benefits including the reduction of litter and greenhouse gas emissions.

Please contact me with any questions you may have.

Sincerely,



Susan Collins
President, Container Recycling Institute

About the Container Recycling Institute: CRI is a nonprofit organization and a leading authority on the economic and environmental impacts of beverage containers and other consumer-product packaging.

¹ According to Senate Bill 1037, "Noncarbonated beverage" means "any noncarbonated liquid intended for human consumption, including, but not limited to, water, including flavored water, nutritionally enhanced water, juice, tea, sports drink or energy drink and any beverage that is identified through the use of letters, words or symbols on such beverage's product label as a type of water, juice, tea, sports drink or energy drink but excluding mineral water.

² Units recycled are to be determined by the Commissioner of Energy and the Environmental Protection, and units sold are to be determined by CRI’s own “Beverage Market Data Analysis” or similar product.

³ Based on \$83 tip fee, as reported in “Low Deposit, Low Return: Recommendations to decrease solid waste by capturing redeemables that are now lost to the waste stream.” A Special Report of the [Connecticut] Council on Environmental Quality, October 30, 2020.

⁴ Average current prices for the northeast region, RecyclingMarkets.net, accessed on 3/17/21.