

Modernizing Vermont's Bottle Bill

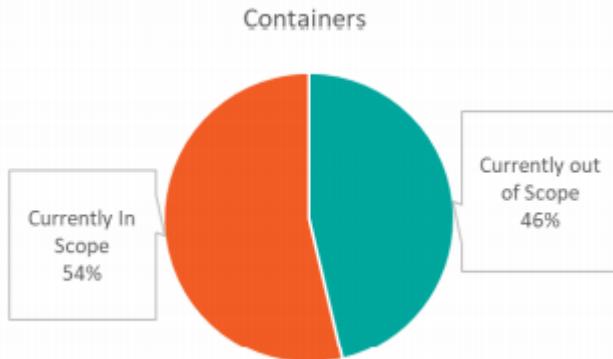
Paul Burns, VPIRG

pburns@vpirg.org

Overview and Policy Goals

Link to 2020 Eunomia Report, "Impacts of Increasing Vermont's Bottle Bill Scope and Deposit Value":

<https://www.vpirg.org/wp-content/uploads/2021/02/Eunomia-Report-Final-Issued-for-Publication.pdf>



Policy Goals:

- **Expand the scope of the Bottle Bill to include more containers.***
- **Increase the deposit from 5c to 10c.**

*Water, Sports Drinks, Energy Drinks, Fruit & Vegetable Drinks, Ready to Drink Tea & Coffee, Wine & Hard Cider.

How Does the Bottle Bill Work?

- Deposit initiators collect at least a 5-cent deposit from each distributor or dealer on each beverage container sold to such distributors or dealers in Vermont.
- Retailers pay the distributor or deposit initiator at least a 5-cent deposit for each beverage container purchased.
- Consumers pay the dealers the deposit for each beverage container purchased.
- Consumers may then return their empty beverage containers to a dealer or redemption center to get their deposit back.
- Retailers and redemption centers are reimbursed the deposit plus a handling fee by the distributor or the deposit initiator for each empty beverage container returned.

Vermont's Bottle Bill by the Numbers

- Since 1973, just over 10 billion deposit beverage containers have been redeemed.
- That's about 6 billion aluminum cans, 1 billion plastic bottles, and 2.6 billion glass bottles.
- If these containers were laid end-to-end, they'd stretch over one million miles, enough to circle the Earth's equator 41 times.

Redemption Rates and Other Features of 10 U.S. State Deposit Programs

Redemption Rates and Other Features of 10 U.S. State Deposit Programs													
State	Redemption Rates (a)							Estimated percent of deposit beverage sales recycled via curbside programs (b)	Beverages Covered	Amount of deposit	Handling Fee	% of Beverage Units Covered by Deposit (c)	Population with Curbside Access (d)
	2013	2014	2015	2016	2017	2018	2019						
Michigan	95%	94%	93%	92%	91%	89%	89%	2%	- Beer & malt beverages - Carbonated soft drinks, mineral water, kombucha - Wine coolers & distilled spirits coolers	10¢	None. No redemption centers.	57%	61%
Maine	90%	90%	90%	90%	84%			3%	- All beverages except dairy products and unprocessed cider.	Wine & liquor ≥ 50mL: 15¢ All others: 5¢	4.5¢	91%	67%
Oregon	71%	68%	64%	64%	73%	81%	86%	3%	- All beverages except wine, distilled liquor, dairy milk and plant-based milk, and infant formula.	10¢	None; Co-op funds redemption centers in partnership with retailers.	88%	95%
Vermont	75%							4%	- Beer & malt beverages - Carbonated soft drinks & mineral water - Wine coolers - Liquor	Liquor: 15¢ All others: 5¢	Brand-sorted containers: 4¢ Commingled brands: 3.5¢	48%	76%
California	74%	71%	72%	72%	68%	66%	67%	Redemption rate reflects direct CRV redemption. Curbside and dropoff programs collect 12% of CRV beverage containers recycled.	- Beer & malt beverages - Carbonated soft drinks & mineral water - All other non-alcoholic beverages - Wine coolers & distilled spirits coolers - Excluded: milk, some juices, wine, spirits	<24 ounces: 5¢ ≥ 24 ounces: 10¢	Handling Fee of \$0.00934 per container paid to handling fee sites only. Processing payments for glass, PET, and HDPE average \$0.007 per container to redemption centers, curbside programs and other programs. All RCs and programs also keep revenue from scrap sales.	87%	91%
Hawaii	74%	71%	60%	65%	63%	65%	62%		- Beer & malt beverages - Carbonated soft drinks & mineral water - All other non-alcoholic beverages - Wine coolers & distilled spirits coolers - Excluded: milk, wine, spirits	5¢	Variable fees: aluminum 3¢, glass 7¢, plastic 3.5¢, bi-metal 3¢. RCs also keep revenue from scrap sales.	88%	77%
New York	62%	64%	65%	66%	65%	64%	64%	7%	- Beer & malt beverages - Carbonated soft drinks & mineral water - Bottled water including flavored water - Wine coolers	5¢	3.5¢	78%	95%
Iowa	78%			65%				Recycling rate is 71%. An estimated 6% of containers sold are recycled through curbside & dropoff programs.	- Beer & malt beverages - Carbonated soft drinks & mineral water - Wine coolers - Wine & liquor	5¢	1¢	65%	66%
Massachusetts	66%	66%	59%	56%	57%	52%	50%	9%	- Beer & malt beverages - Carbonated soft drinks & mineral water	5¢	Redemption centers: 3.25¢ Retailers: 2.25¢	42%	77%
Connecticut	57%	53%	51%	49%	52%	50%	50%	9%	- Beer & malt beverages - Carbonated soft drinks & mineral water - Bottled water including flavored water	5¢	Bever: 1.5¢ Other beverages: 2¢	77%	86%

(a) Sources for redemption rates: CalRecycle reported recycling rates x supermarket & recycling center participant shares). Connecticut Department of Energy & Environmental Protection, Hawaii State Department of Health, Iowa Department of Natural Resources, Maine Beverage Association, Massachusetts Department of Environmental Protection, Michigan Department of Treasury, New York State Department of Taxation and Finance, Oregon Dept. of Environmental Quality, Oregon Liquor Control Commission, Oregon Beverage Recycling Cooperative, Vermont Agency of Natural Resources. Note: the recycling rates shown here do not correspond to those used in CIR's Beverage Market Data Analysis (2020), because our research indicates different sales numbers than those reported by CalRecycle.

(b) California is the only state to count deposit containers recycled through curbside and dropoff programs; these containers have been deducted to show true refund redemption rates here. Hawaii includes curbside recycling of deposit containers in their reported redemption rates; we used 2014 data (the most recent available) to deduct these containers to show a true refund redemption rate. In Iowa, where the deposit container recycling rate is derived from a combination of sales data and waste composition study data, and represents redeemed containers as well as those recycled through curbside or dropoff, we assume that 6% of total deposit containers are recycled through curbside or dropoff programs, and the remainder of containers recycled are through refund redemption (shown here). For the other states, CRTI has developed a scale that estimates that through the lower the redemption rate, the higher the percentage of deposit containers being recycled at curbside.

(c) Percent of total beverages covered by deposit is calculated using CRI's best estimates of sales of deposit and non-deposit containers in 2018, based on our "2018 Beverage Market Data Analysis," The Container Recycling Institute, 2020. Note: the denominator (all possible beverage container types) includes dairy- and plant-based milks, and includes cartons and foil. In some cases, CRI deposit sales estimates (units sold) are different than those reported to or by the state; however, the market share of deposit vs. non-deposit containers is likely to be accurate.

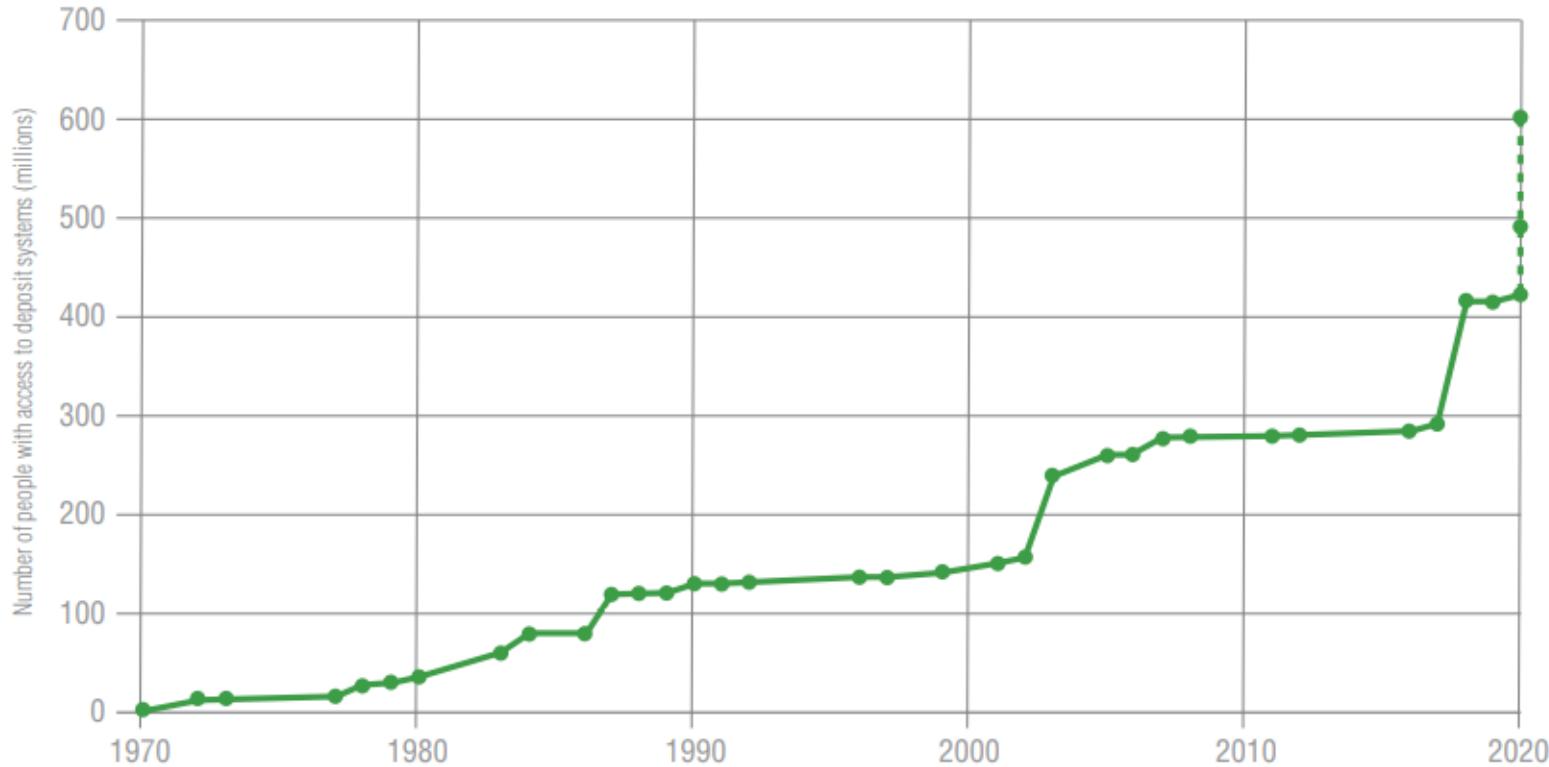
(d) Data derived from Table 2-3 in "Final Report, 2008 ABA Community Survey," by R.W. Beck for the American Beverage Association, Sept. 2009. MA & IA numbers estimated with assistance from MA DEP and IA DNR staff (2019).

State	% of Beverage Units Covered by Deposit	Beverages covered
Maine	91%	All beverages except dairy products and unprocessed cider
Oregon	88%	All beverages except wine, distilled liquor, dairy products and alternative dairy products, infant formula
Hawaii	88%	All beverages except dairy products, wine, spirits
California	87%	All beverages except dairy products, wine, spirits, some juices
New York	78%	Beer, carbonated soft drinks & mineral water, bottled water including flavored water, and wine coolers
Connecticut	77%	Beer, carbonated soft drinks & mineral water, bottled water including flavored water
Iowa	65%	Beer, carbonated soft drinks & mineral water, wine coolers, wine and liquor
Michigan	57%	Beer, carbonated soft drinks & mineral water, wine coolers and distilled spirits coolers
Vermont	48%	Beer, carbonated soft drinks & mineral water, wine coolers, liquor
Massachusetts	42%	Beer, carbonated soft drinks & mineral water

New Container Deposit Laws Enacted for 351 Million Since 2017

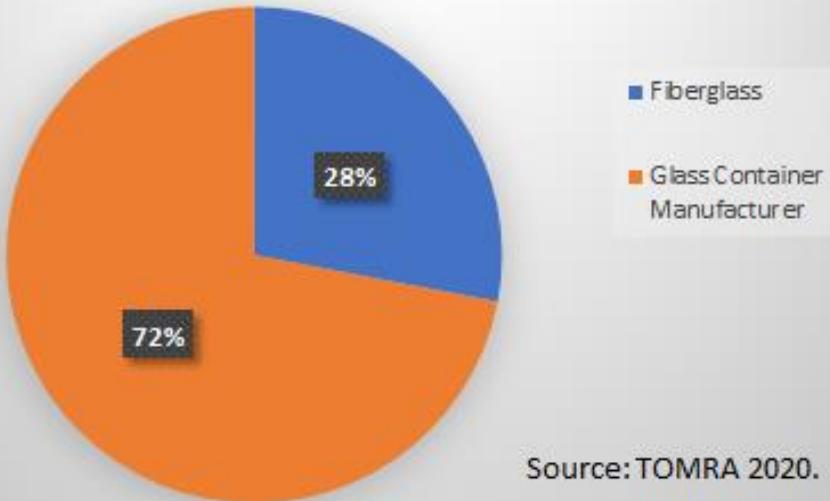
Region	Year Passed	Year Implemented	2018 Population (millions)
New South Wales, Australia	2016	2017	7.9
ACT - Canberra	2017	2018	0.4
Queensland	2017	2018	2.7
Maharashtra, India	2018	2018	121.4
Malta	2018	2019	0.4
Western Australia	2018	2020	2.7
Jamaica	2019	2020	2.9
Latvia	2018	2020	1.9
Slovakia	2019	2020	5.4
United Kingdom	2018	2021	66.6
Romania	2018	2022	19.6
Turkey	2018	2022	81.9
Portugal	2018	2022	10.3
Tasmania	2019	2022	0.5
New Zealand	2019	2022	4.8
Belarus	2020		9.5
Victoria, Australia	2020	2023	6.4
Singapore	2020	2022	5.9
Total			351.2

CONTAINER DEPOSIT LAWS: A GROWING GLOBAL TREND



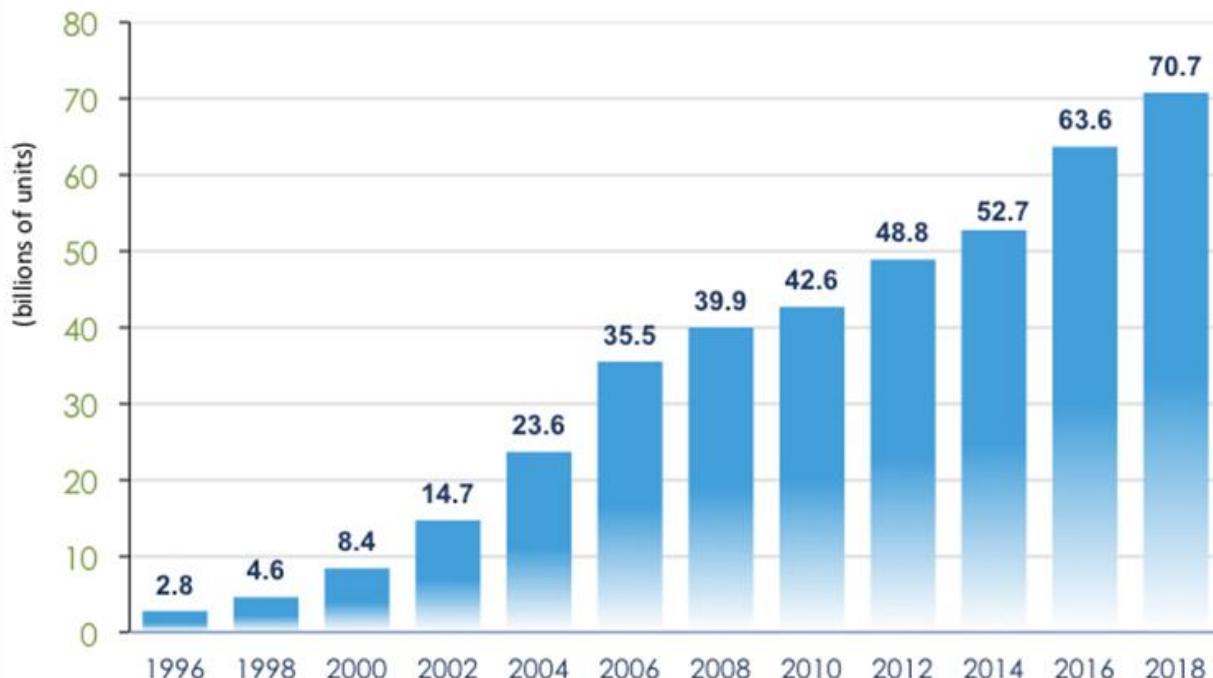
After decades of steady growth since 1970, use of container deposit laws across the globe is now expanding rapidly. With new programs coming on-line, in two years these laws will cover 600 million people worldwide – double the number of people covered in 2017.

Destination of Bottle Bill glass in VT



Source: TOMRA 2020.

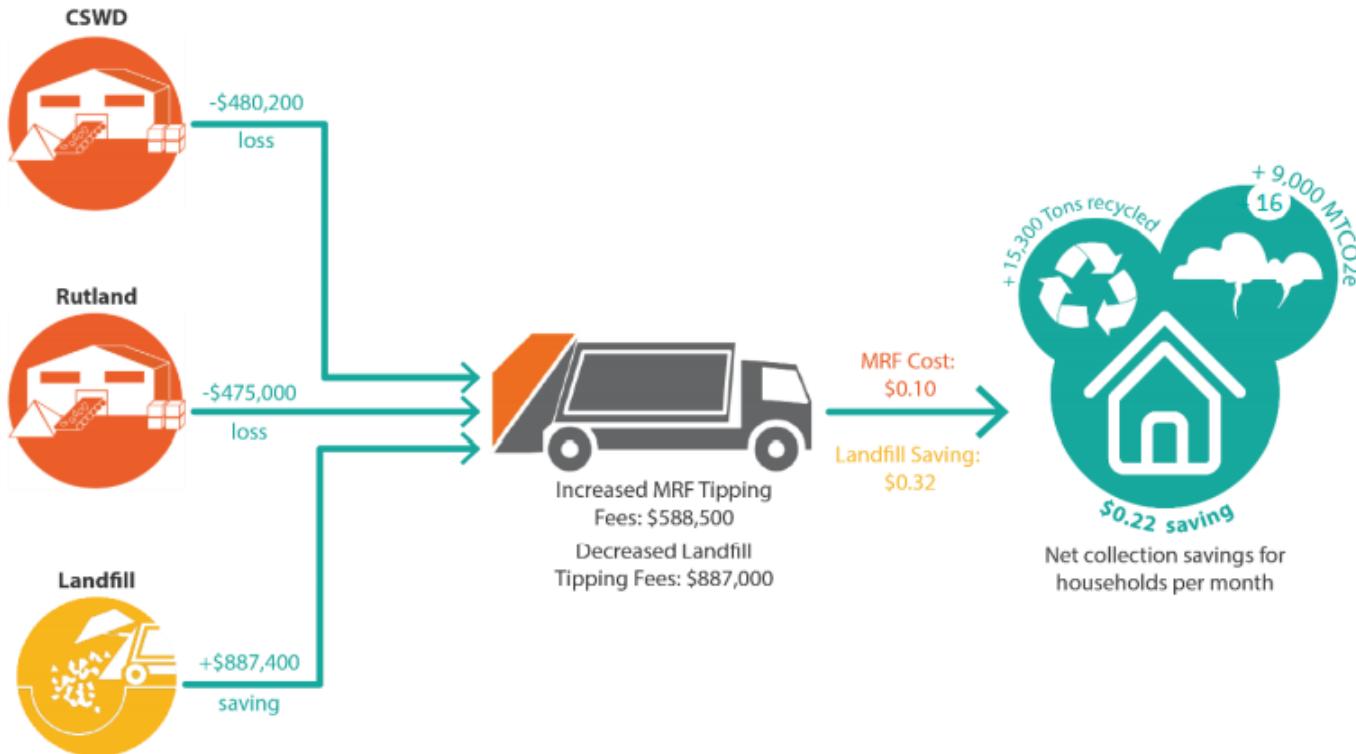
U.S. Plastic Bottled Water Sales, 1996-2018



* Defined as domestic, non-sparkling water packaged in plastic, in sizes of 1 gallon and less. Prior to 2015, excludes flavored, enhanced and sweetened waters (3.2 billion units in 2014). Derived from Beverage Marketing Corporation data, 2002-2018.

© Container Recycling Institute, 2020

Overall Cost Assessment





The Healthy Hydration Company™

ARROWHEAD®

Ozarka®

re-source.

DEER PARK®

Poland Spring®

AccuPure®

CALISTOGA®

Zephyrhills.

perrier

ICE MOUNTAIN®



ACQUA PANNA®

S.PELLEGRINO®

Nestle Pure Life non-deposit label example:



Nestle Pure Life deposit label example:



Poland Spring non deposit label example:



Poland Spring deposit label example:



Deer Park* non-deposit label example:



Deer Park* deposit label example:



Table 2. Projected Unredeemed Deposit Revenue in Vermont with Passage of H.175

Beverage Category	2020 Sales of bottles & cans: CRI original estimate (a)	2020 Sales of bottles & cans: VT reporting (b)	Reported VT sales as a proportion of CRI sales (c)	Scaling factor used to estimate sales under H.175 (d)	2020 VT Sales of bottles & cans, scaled down (d)	Unredeemed units with 90% redemption rate	Deposit value under H.175	Projected unclaimed deposit revenue
A. Carbonated (soda, beer, sparkling water)	338,474,779	260,754,670	77%	77%	260,754,670	26,075,467	\$0.10	\$ 2,607,547
B. Non-carbonated, non-alcoholic	295,750,957	n/a	77%	77%	227,841,033	22,784,103	\$0.10	\$ 2,278,410
C. Wine	20,780,872	n/a	77%	77%	16,009,197	1,600,920	\$0.10	\$ 160,092
D. Spirits	<i>Unclaimed deposits for liquor containers have been estimated by the Vermont Department of Liquor and Lottery.</i>							
All beverages (excluding dairy)	655,006,609				504,604,900	50,460,490		\$ 5,046,049

(a) Unit sales based on CRI's "2018 Beverage Market Data Analysis," The Container Recycling Institute, 2020. Scaled up by 10% to account for market growth from 2018 to 2020, using reported sales data from California as a reference point.

(b) Category A (soda & beer): data as reported by beverage distributors and bottlers to Vermont's Department of Environmental Conservation. Category D (spirits) as reported by Vermont's Department of Liquor and Lottery.

(c) The sales numbers as reported to the Vermont agencies are only 77% for carbonated beverages of the sales numbers CRI has derived in our Beverage Data Market Analysis, after 10% sales growth in the last two years is accounted for. We believe the discrepancy is due to underreporting by the beverage industry. We have used 77% across the board as a scaling factor to calculate expected sales under an expanded bottle bill (H.175).

(d) We have used 77% across the board as a scaling factor to calculate expected sales under an expanded bottle bill (H.175).

Why Modernizing the Bottle Bill, Why Now

1. The Bottle Bill improves and increases recycling, and will result in an estimated 397 million additional containers recycled with a 90% redemption rate;
2. Because materials that go through the Bottle Bill are cleaner and more valuable than single-stream recyclables, **Bottle Bill materials provide necessary stock for beverage brands required under state laws to use more recycled content in their bottles;**
3. Bottle Bill materials are captured at much higher rates from the trash and roadsides due to the financial incentives of bottle redemption, resulting in 13 million fewer containers littered;
4. An expanded Bottle Bill boosts Vermont's economy by delivering at least \$1.5 million additional dollars to the State in unclaimed deposits;
5. Under the Bottle Bill, it's producers rather than taxpayers who cover the cost of packaging recycling or disposal. The Bottle Bill works under an Extended Producer Responsibility (EPR) model, where the producer is responsible for the material it creates throughout its life cycle.