

BEVERAGE CONTAINER LAWS OVERVIEW

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INTRODUCTION

- According to the World Economic Forum, based on estimates from the National Oceanic and Administration (NOAA) and Woods Hole Sea Grant, it takes the ocean 450 years to break down one plastic bottle.
- In addition, according to BottleBill.org, beverage containers make up 40% to 60% of all litter; much of which occupies space in landfills.
- In order to decrease litter and landfill waste ten (10) states have enacted bottle bills, also known as a container deposit laws, that mandate a minimum refundable deposit be placed on beverage containers in that state.

HOW DOES A BOTTLE BILL, ALSO KNOWN AS A CONTAINER DEPOSIT LAW, WORK?

- When a retailer buys a beverage from a distributor, a deposit is paid to the distributor for each bottle or can purchased.
- This same amount is passed on to the consumer; such amount to be redeemed when the consumer returns the clean empty beverage container to the retail store, a reverse vending machine which is often located near the retail store, or a redemption center.
- If the retailer is responsible for the returns and payment to the consumer, they recoup that amount, plus a handling fee set by the state, from the distributor.

HOW DOES A BOTTLE BILL, ALSO KNOWN AS A CONTAINER DEPOSIT LAW, WORK?

- The cost to the distributors or bottler can be offset by the sale of the redeemed scrapped beverage containers.
- Some bottles are never redeemed so there is a profit.
- Each state mandates the amount of deposit which is on average between 5 cents and 10 cents, and the amount of the handling fee which can range, depending on the state, between 1 cent and 6 cents.
- Each state also mandates the type of beverages covered, some of which have been expanded over the last forty to fifty years, as new types of beverages have been introduced to the public.

THE TEN STATES WITH BOTTLE BILLS

- In 1971, Oregon was the first state in the United States to pass a bottle bill deposit law. Although various states have introduced legislation, only ten (10) states have a bottle bill law: **California, Connecticut, Hawaii, Iowa, Maine, Massachusetts, Michigan, New York, Oregon, and Vermont.**
- Oregon's redemption rate leads all Bottle Bill systems in the United States, followed by Maine and Michigan.
- In 2022, Oregon's redemption rate was approximately 86%; an increase of 5% from 2021.
- The next closest state was Maine with a redemption rate of 78%; an increase from 2021 of 3%.

THE TEN STATES WITH BOTTLE BILLS

- Michigan's redemption rate was 76%; a slight increase from 2021.
- Vermont dropped to from 78% in 2021 to 72% in 2022.
- Hawaii dropped from 62% in 2021 to 58% in 2022.
- California, New York, Massachusetts and Connecticut had little change.
- Iowa had no current data.

BEVERAGE DEPOSIT & REDEMPTION RATES

- **Oregon:**
 - The amount of deposit is 10¢.
 - Redemption rate = 86%
- **Maine:**
 - The amount of deposit is 15¢ on spirits and wine beverage containers and 5¢ on beer, hard cider, wine coolers, soda, or noncarbonated water beverage containers, and alcoholic or noncarbonated drinks.
 - Redemption rate = 78%
- **Michigan:**
 - The amount of deposit is 10¢.
 - Redemption rate = 76%

BEVERAGE DEPOSIT & REDEMPTION RATES

- **Vermont:**
 - The amount of deposit is 15¢ for liquor and spirits; all other is 5¢.
 - Redemption rate = 72%
- **New York:**
 - The amount of deposit is 5¢.
 - Redemption rate = 70%
- **California:**
 - The amount of deposit is 5¢ <24 oz and 10¢ >24 oz. In 2022, the fee was changed to include 25¢ for wine and distilled spirits in a box, bladder, pouch, or a similar container beginning in January 2024.
 - Redemption rate = 61%

BEVERAGE DEPOSIT & REDEMPTION RATES

- **Hawaii:**

- The amount of deposit is 5¢.
- Redemption rate = 56%

- **Connecticut:**

- The amount of deposit is presently 5¢ to be increased to 10¢ on January 1, 2024.
- Redemption rate = 46%

- **Massachusetts:**

- The amount of deposit is 5¢.
- Redemption rate = 38%

- **Iowa:**

- The amount of deposit is 5¢. Redemption rate-No current data.

BEVERAGE DEPOSIT & REDEMPTION RATES

- The states that have been most successful with their redemption rates are those with a higher amount of deposit. It is important to note that the Container Recycling Institute (CRI) claims that in order to be successful the container redemption rates must be 85% or higher.

MAINE'S BOTTLE BILL

- The State of Maine faced a problem. In Maine, at least 40 redemption centers have gone out of business since 2020 due to rising costs. In response, Maine passed a law this year to increase the handling fee from 4.5 cent to 6 cents.
- Beginning in 2025, the law also ends a requirement for redemption centers to sort containers by brand, instead of sorting by material type.
- The law also promotes the use of reusable and refillable containers including the development of washing facilities, and outreach and education on the benefits of refillable containers.

OREGON'S INNOVATIVE PROGRAMS

- **Green and Blue Bag programs**
- Individuals (via Green Bags) and nonprofits (via Blue Bags) can redeem containers in bulk, placing redeemable metal, plastic, and glass beverage containers all in the same bags and dropping them off at any BottleDrop bag drop location in Oregon, instead of redeeming them one container at a time.
- Customers place unique QR code bag tag stickers onto their bags, which associate the containers in their bag with the customer's BottleDrop account. Bags are counted and credited to customer accounts within seven days.

OREGON'S INNOVATIVE PROGRAMS

- **Smart Count AI system**
- Oregon-based Oregon Beverage Recycling Cooperative (OBRC) has developed and patented its Smart Count AI system, which uses artificial intelligence (AI), a neural network and specialized software to rapidly count containers by batch.
- OBRC received its patent for the Smart Count AI in January, 2023.
- According to OBRC, the new technology was developed in-house and has been designed to count beverage containers and credit customer accounts faster.
- The technology has been designed to work in cooperation with the state's BottleDrop network of collection centers.

OREGON'S INNOVATIVE PROGRAMS

- In addition to Smart Count AI to process Green Bags, OBRC says it has developed a technology called **Stream Count AI**, which it is a customer-facing front-of-house technology at redemption centers.
- **Stream Count AI** allows customers at some BottleDrop Redemption Centers to empty bags of containers onto a conveyor belt, where they are quickly counted through technology similar to the Smart Count AI.
- Customers receive a printed voucher at the end of the transaction and can redeem it for cash immediately.
- According to OBRC, what might have previously taken up to 30 minutes at a reverse vending machine can be done in a minute or two at the Stream Count.

PROBLEMS WITH BOTTLE BILLS

- As mentioned above, the Container Recycling Institute (CRI) noted that in order to be successful the container redemption rates must be 85% or higher.
- Various bottle bill articles have stressed that this goal cannot be achieved without an increase to a 10-cent deposit on all containers and a wider expansion of eligible containers.
- Another issue is that redemption centers are struggling to stay open or closing down as referenced in the State of Maine.
- New York State has a five cent deposit rate and a 3.5 percent handling fee. Owners of New York bottle and can redemption centers are urging their legislature to raise the deposit from 5 cents to 10 cents and raise the handling fee to 6 cents otherwise they claim they will have to close their doors.

PROPOSED FEDERAL LEGISLATION

- The Break Free from Plastic Pollution Act of 2023 (BFFPPA) was reintroduced on October 25, 2023 by Sen. Jeff Merkley (D-OR) and Rep. Jared Huffman of California (D-CA).
- If enacted, it would require all fifty states to follow the same rules and regulations for the amount of deposit, the type and size of beverage containers, and the process for redemption.
- Beverage companies would only have to comply with one nationwide set of regulations rather than procedures mandated state by state.

BREAK FREE FROM PLASTIC POLLUTION ACT OF 2023

- The bill would require producers of covered products (packaging, containers, food service products and paper) to design, manage, and finance programs to collect and process product waste that would normally burden state and local governments.
- Producers would invest in U.S. domestic recycling and composting infrastructure, cover the costs of waste management and clean-up, and promote awareness-raising measures to reduce waste.
- The legislation would create a 10-cent national refund program for all beverage containers, regardless of material, to be refunded to customers when they return containers.
- Any unclaimed refunds will go to beverage producers to supplement investments in nationwide collection and recycling infrastructure.
- This legislation would encourage states that have already implemented similar initiatives to continue their current systems if they match the federal requirements.
- The legislation would impose a fee on the distribution of carryout bags.
- The bill would allow retailers who implement a reusable bag credit program to retain the fee to finance the program.

BREAK FREE FROM PLASTIC POLLUTION ACT OF 2023

- This legislation would direct the EPA to establish a pilot program to test the efficacy and cost effectiveness of technologies to prevent and remove microplastics from the environment.
- The obvious benefit for a federal law is to provide uniformity through the country and to reduce fraud. There would also be no need for bottlers to mark containers by state.
- In summation, the problems associated with beverage containers are growing as viable solutions are evolving. The solution may require better public recycling education and a long-term investment in technology.

USEFUL LINKS

- Container Recycling Institute (CRI)
• <https://www.container-recycling.org/>
- Oregon Beverage Recycling Cooperative (ORBC)
• <https://obrc.com/>
- Break Free from Plastic Pollution Act of 2023 (BFFPPA)
• <https://www.merkley.senate.gov/merkley-huffman-introduce-bold-legislation-to-take-on-the-growing-plastic-pollution-crisis/>

QUESTIONS?

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