

Alberta's Beverage Container Recycling System

Briefing for the California Foundation on the Environment and the Economy

About Our System

Alberta's beverage container recycling system is one of the most successful in North America.

- Over 2.5 billion beverage containers are sold each year.
- Over 2.1 billion beverage containers are returned to depots annually for recycling and refund of the deposit.
- Annual container collection rates have ranged from 82% - 86% over the last five years.
- Foundation of the system's success is its deposit-refund model that provides a financial incentive for the public to return containers for a refund of the deposit paid at point-of-sale: 10 cents for containers 1 litre and under; 25 cents for those over one litre.
- All beverage container material streams are part of the system: 13 material streams are sorted into over and under 1L and include cans (aluminum/bi-metal), glass bottles, plastic bottles, dairy (plastic and gable), liquor/beer, tetra paks and ceramics.
- Aluminum collection rate was 87.2% in 2022 (approximately 51% of total system volume).
- Plastic beverage container collection rate was 79.4% in 2022 (approximately 32% of total system volume).
- All plastic containers are recycled in a closed-loop system in western Canada due to clean and separated sorting by depots.

How it Works

- Our system operates utilizing a depot network.
 - 221 locations in 160 municipalities across Alberta (approximately one depot for every 20,000 people).
 - Depots are privately owned, and permits are granted by the BCMB.
 - Most depots are represented through a membership organization – the Alberta Bottle Depot Association (ABDA).
- A collection system agent (ABCRC) collects and purchases all non-refillable, used beverage containers (98% of total system volume) from depots - it refunds the depot the deposit value and pays a handling commission on each container.
- ABCRC's board also sets an annual Container Recycling Fee (CRF). Manufacturers pay this fee to the ABCRC on each container sold in Alberta. The CRF, together with the commodity value of collected materials and unredeemed deposits funds the beverage container recycling system.



- Refillable beer is collected from depots, on behalf of the Alberta Beer Container Corporation (ABCC), by Brewers' Distributor Ltd. (BDL) – BDL refunds the deposit and pays a handling commission on each container.
- Although return-to-retail is permitted in regulation, there are only nine locations (liquor stores) across Alberta that provide this service.

Environmental, Economic & Social Benefits

- Alberta's successful model keeps beverage containers out of landfills and ensures they are recycled and become part of the circular economy.
- Using the deposit-refund system, beverage containers are stewarded from production to distribution, to sale and use, to recycling, and back to production.
- By reducing reliance on virgin material, preventing containers from reaching landfills and increasing recycling infrastructure, our system helps protect the environment and stimulates a vibrant economy that funds many social programs and communities.
- Many depots offer employment opportunities to people with disabilities, run donation programs, support bottle drives in their communities, and offer collection/pick-up services that make recycling convenient for businesses and other organizations.
- Some Albertans rely on their refunds as a means of financial support while others donate the deposit value of their beverage containers to community and charitable organizations which use that money to fund key programs for Albertans.
- Municipalities that collect containers through blue-box or drop-off recycling stations return those containers to a depot for a refund of the deposit.

Industry Partnership

The key stakeholders in Alberta's beverage container recycling system are:

1. [Beverage Container Management Board](#) (BCMB) - regulator
2. [Alberta Bottle Depot Association](#) (ABDA) – depot member organization
3. [Alberta Beverage Container Recycling Corporation](#) (ABCRC) – collection system agent (CSA) for non-refillable containers
4. Alberta Beer Container Corporation (ABCC)/BDL – main collection service provider (CSP) for refillable beverage containers (beer)

Collectively, the organizations form one of North America's most successful and efficient beverage container recycling partnerships.

BCMB

The BCMB is responsible for regulating and delivering Alberta's beverage container recycling system and leads the development of policies and programs that enable the recycling of beverage containers in Alberta.



Regulatory Structure/Mandate

- Established 26 years ago through the [Beverage Container Recycling Regulation](#), which was enacted under the [Environmental Protection and Enhancement Act](#).
- Also a not-for-profit association incorporated under the Societies Act of Alberta.
- Operates with a 13-person stakeholder board with equal representation from manufacturers, depots and the public, as well as a representative from the Government of Alberta.
- The BCMB is a [Delegated Administrative Organization](#) (DAO) created through legislation to aid the Ministry of Environment and Protected Areas in achieving its goals and objectives. That means we purposefully align with the Government of Alberta and the Ministry's strategic direction and priorities, but we function as an arms-length, self-funded, legal entity in carrying out our services and mandate.
- A [Memorandum of Understanding](#) was developed collaboratively between the BCMB and the Government of Alberta to outline each of their roles and responsibilities.

Role/Responsibilities

- Permits the collection system (depots).
- Approves the Collection System Agent.
- Operates a registry for all beverage containers sold in the province.
- Approves the method of recycling.
- Administers compliance of regulated parties through inspections, audits, reporting and evaluation, and administrative hearings for suspension or cancellation of operating permits.
- Sets handling commissions.

ABDA

The ABDA is the recognized voice for Alberta's bottle depots.

- Member depots are a network of independently owned businesses serving as collection sites that refund deposits paid by consumers for their beverage containers at the point of sale.
- Represents depots in relation to collection service agreements developed with the CSA/CSPs and through important roles related to the establishment of handling commissions (setting of fees paid to depots).
- Depots are paid exclusively through handling commissions and have no financial interest in the sale of recycled materials.

ABCRC

The Alberta Beverage Container Recycling Corporation (ABCRC) operates under not-for-profit provisions as the agent for beverage manufacturers in Alberta to collect, transport, process and recycle non-refillable beverage containers.



Role/Responsibilities

- Collection of beverage containers from the depot network.
- Payment to depots of the refunds paid for containers returned to their depots, and the regulated handling commissions established by the BCMB.
- Processing recovered containers to commodity market standards and selling the containers to both domestic and international buyers.
- Developing and establishing communication and marketing campaigns to inform and educate consumers about beverage container recycling.
- Collecting the deposits and recycling fees from manufacturers for the containers sold in Alberta.

ABCC/BDL

The ABCC/BDL is the main CSP for refillable beverage containers. It is responsible, on behalf of manufacturers, for the recovery and recycling of empty, refillable beer containers from depots. The BCMB has an agreement with ABCC to operate the collection service.

System Technology

Automated Counting/Sorting

- Use of this technology in Alberta depots began in 2012.
- Currently 35 depots use the technology, with the majority being Tomra and Anker Anderson equipment.
- Automated counting at the front-end of depots provides efficiency, accuracy and confidence for consumers that their refunds are accurate.
- In older depots, the technology was retrofitted, while some newer depots have been designed around the equipment.

Point-of-Return (POR) Software

- Most depots use POR software to manage depot operations.
- ABDA is the primary POR software provider in the industry with 95% of the market share. It provides development and user support for its POR software which has generally demonstrated improved efficiency in several areas of depot operations and in improved customer satisfaction.
- BCMB requires depots handling six million or more containers annually to use a POR system.

Handling Commissions

A Handling Commission is the amount paid by the CSA (non-refillable containers) or a CSP (refillable containers) to a depot operator for containers collected from that depot. Depots are paid to collect registered containers, sort and prepare the containers for shipment. Handling Commissions are set in by-law.



The BCMB administers a Handling Commission Review process in which handling commissions are reviewed annually. A full handling commission review process is required at least every six years. Stakeholders are engaged in policy discussion and rate-setting processes through the BCMB's Handling Commission Review Committee. The average Handling Commission for May 1, 2023 through to April 30, 2024 is 6.084 cents per container.

Additional Reference Material

Beverage Container Flow Chart – page 6

[BCMB 2022 Annual Report](#)

[ABCRC 2022 Sustainability Report](#)



BEVERAGE CONTAINER RECYCLING SYSTEM

The following flow chart depicts the movement of beverage containers through the system, from the manufacturer/distributor to end markets where the containers are recycled or reused (glass beer bottles).

Beverage Container Flow

