



Global Deposit Book 20 24

An Overview of Deposit
Return Systems for Single-Use
Beverage Containers



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About us

Reloop is an international not-for-profit organisation, established as an AISBL under Belgian law in 2015 and based in Brussels. Founded on the belief that cross-sector collaboration is essential for achieving a global transition to a thriving circular economy, Reloop operates at the intersection of governments, industry stakeholders and NGOs. Our association brings together and works collaboratively with a diverse range of partners from around the world, whose insights and expertise help shape our policy positions and recommendations.



Disclaimer

Reloop provides the information contained in this report in good faith, and every attempt has been made to ensure accuracy. However, we recognise that in a report of this breadth some errors of accuracy or omission are possible. The facts and data contained in this document are taken primarily from external sources, including publicly accessible annual reports released by system operators, stewardship agencies, or other involved entities. Other information was obtained through personal communication and e-mail correspondence. We welcome any comments, clarifications, and suggestions for improvement to our Research and Analysis Manager at:



Acknowledgements

Reloop extends its sincere gratitude to the many individuals who contributed valuable information and data, making this report possible. Their expertise and insights were instrumental in its development. We would like to give special thanks to the following individuals for their thoughtful reviews and input:

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Research date:

January 2024 to September 2024

Publication date:

December 2024

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Glossary

ALUMINIUM

A type of metal container commonly used for packaging beverages such as soda, beer, and energy drinks. They also typically contain a thin plastic lining made with Bisphenol A (BPA) to create a protective barrier between the contents and the metal.

ASEPTIC CONTAINER

Also known as a Tetra Pak, Tetra Brik, drink box, liquid paperboard or multi-material container (while some jurisdictions include cartons in this category, cartons are made from a different combination of materials). It is a type of packaging made from layered paper, aluminium foil, and plastic. These containers are designed to maintain sterility and preserve the freshness of their contents and are commonly used for packaging juice or milk.

BAG DROP

A designated location or facility where people can return empty beverage containers in bulk. Typically, these containers are deposited in a bag provided by the system operator. The bags are then counted, and the deposit refunds are credited to the customer's account or issued as cash or vouchers. This system streamlines the return process by allowing customers to return large quantities of containers without the need to individually handle and count each item.

BARCODE

A visual method for identifying products within retail sales. Barcodes can be categorised into two primary formats: Universal Product Code (UPC) and European Article Number (EAN). The UPC format comprises 12 digits and is predominantly used in the US and Canada, while the EAN

format, consisting of 13 digits, is utilised in the rest of the world. Each barcode corresponds to a Stock Keeping Unit (SKU), representing a specific product and container combination from a particular producer.

In the context of DRS, barcodes play a crucial role in product registration, which is essential for the effective functioning of deposit systems. Failure to include barcodes on containers and register them with system operators before sale can lead to consumer deposit payments without subsequent refunds. These codes enable automated redemption technology, such as RVMs, to identify and count each deposit container accurately, ensuring consumers receive fair payments and transparent financial accounting occurs. While automated return locations may conduct additional container verification based on factors like shape, weight, and material, overall system traceability hinges on the barcode identifier.

It's crucial to differentiate between barcodes used in traditional DRS and those being proposed for use in serialised (or digital) DRS. In the digital DRS concept, instead of a barcode per product line (SKU), each individual container would have a unique identifier – both a reference number in the system records and a unique marker on the container (e.g., a QR code or data matrix).

BARCODE-BASED SYSTEM

A system that employs barcode scanning technology to identify, track, and verify eligible drinks containers for the purposes of providing refunds, collecting accurate data for reporting and financial auditing. Almost all deposit return systems worldwide, except California, many Canadian provinces/territories, and small pacific island states, utilise barcode-based recording systems.

It's worth noting that a barcode-based system is different to a "serialised" system, where instead of a barcode per product line (SKU), each individual container would have a unique identifier – both a reference number in the system records and a unique marker on the container. The container marker could take several forms but is likely to be a 2D code such as a data matrix or QR code. These are the codes that underpin the working of so called "digital deposit return systems."

BI-METAL CONTAINER

Type of beverage container typically made from two layers of different metals, usually steel and aluminium. Commonly used for packaging beverages such as beer and soft drinks, these containers also contain a thin plastic lining usually made of Bisphenol A (BPA). BPA is frequently present in the coatings of metal tin cans to create a protective barrier between the contents and the metal.

CALIFORNIA REFUND VALUE (CRV)

A sum of money paid by consumers to retailers at the point of purchase, which is refunded to consumers when they return empty drinks containers to certified collection points for recycling. Similar to deposits in other jurisdictions. See "Deposit."

CLEARING SYSTEM

The process by which deposit return claims are managed and settled between all participating entities in the system. Key responsibilities of a deposit system clearinghouse include aggregation of data from automated and manual redemption points and settling of deposits across the different trade levels in the system. A centralised clearing system is considered best practice as it helps to ensure transparency in respect to units placed on the market. Centralised systems also help to ensure that logistics are optimised, avoiding duplication of activities

that could increase producers' costs and workload. All of Canada's deposit systems operate a centralised framework, as do most European countries (except for Germany and Poland). In contrast, most deposit systems in the U.S. operate a decentralised model, in which there is no central coordination of data. In these cases, beverage producers are directly responsible for administering the system, including collecting their own containers and ensuring payment accounts are reconciled.

COLLECTION METHOD

In the context of this report, refers to the way in which empty drinks containers are returned for recycling, sorted, and/or counted. Empty containers can either be returned manually (i.e., handed over at the counter to a retail clerk, or through bulk return systems), or automatically via reverse vending machines (see "Reverse Vending Machine"). When collection is done automatically, containers are scanned, counted, compacted and stored by the RVM. In contrast, when collection is done manually, empty containers need to be sent to a counting centre to be counted and verified.

COMMINGLING

The practice of collecting and processing beverage containers from different brands or types together rather than sorting them by brand, material, or distributor. This approach is used to simplify the logistics of the return system, making it more efficient and cost-effective. Commingling allows for a streamlined collection, transportation, and recycling process, as all containers can be handled collectively rather than requiring separate streams for each brand or type. This can reduce the administrative burden on retailers and redemption centres while still ensuring that the containers are recycled properly.

CONSUMER CONTAINER FEE

A non-refundable fee added to the price of eligible beverage containers, paid at the point of purchase by consumers. The fees, set by the system operator, typically vary by material type as they are intended to represent the net cost of collecting and recycling specific beverage containers, once unredeemed deposits and material revenues have been used. In British Columbia, Alberta, and New Brunswick (Canada), the fee is called a "Consumer Recycling Fee" and is readjusted on an annual basis by the system operator. In Saskatchewan, Yukon, and the Northwest Territories, the fees are set by government. In Saskatchewan, the fee is called an "Environmental Handling Charge"; in Yukon, it is called a Recycling Fund Fee; and in the Northwest Territories it is called a Container Handling Fee or "surcharge."

CONTAINER DEPOSIT MARKING

Any distinguishable identifier (e.g., label, sticker, logo) affixed to a beverage container or its lid, cap, or cover, indicating its inclusion in a deposit return system. Best practice dictates the use of standardised text such as "Return for Refund," accompanied by a special logo on each container. These unique markings serve several purposes within a DRS, including facilitating consumer recognition of eligible containers, aiding staff at manual return locations, and enhancing accountability and fraud prevention. Decisions on what level of marking and labelling to adopt are influenced by various factors, including the deposit amount, proximity to bordering markets, impacts on distribution of beverages, costs of additional labels (including redesign), and potential costs of fraudulent redemptions. These markings may be legislated or may be voluntarily adopted by brand owners, especially where there is a clear benefit to do so. If direct printing on beverage containers is not feasible, options such as stickers or stamps purchased from the system operator may be utilised and affixed to containers.



DEPOSIT

A sum of money that is charged on applicable drinks containers at the point of purchase, which retailers are required to collect from consumers. Intended to act as an incentive to recycle, it is refunded when the consumer returns the empty container to an authorised redemption centre/depot or retailer for recycling. In some jurisdictions, deposit levels are set in legislation, and in others they are established by the system operator. Deposit values can be variable or flat; in a system with variable deposit values, the deposit varies depending on the size of the drinks container, material type, or even beverage type. In contrast, in a system with a flat deposit value, all beverage containers, regardless of size or material type, have the same deposit placed on them.

DEPOSIT INITIATOR

The first agent (i.e., producer, bottler, distributor, importer) to collect the deposit on a beverage container sold in the jurisdiction.

GABLE TOP CONTAINER

Also known as 'carton' or 'liquid paperboard' in some jurisdictions. A type of packaging commonly used for beverages such as milk and juice. These containers are typically made from paperboard or cardboard, lined with a wax coating to provide a barrier against moisture and improve rigidity. The distinctive gable top design features sloping sides meeting at a peak, often with a resealable cap or closure.

HANDLING FEE

A fee that is paid, often by bottlers/distributors (or in some cases, the state [e.g., California]) to retailers and/or redemption centres/deposits as compensation for receiving, sorting, and storing redeemed drinks containers. On a long-term basis, handling fees also cover expenses related to investments in reverse vending machines (RVM), manual and automated

redemption points, electricity costs, space requirements, and additional personnel required to handle the containers. In most North American deposit return systems, the handling fee is either set at a flat rate or is different for alcohol and non-alcohol drinks. Conversely, in most European systems, handling fees vary depending on the mode of recovery and the degree of sorting and processing (i.e., whether containers are collected manually or via a RVM).

HORECA (Hotels, Restaurants, and Catering)

European term for the food service and hotel industries that consists of establishments that prepare and serve food and drinks. These businesses are required to pay the deposit price on drinks they purchase for sale on their premises but are not required to pass the deposit price on to the consumer. If they do, they must provide a take-back service in line with the requirements set for other collection points.

HDPE (High density polyethylene)

A type of resin commonly used in plastic drinks bottles, especially those used for milk.

HYBRID REDEMPTION SYSTEM

A collection model in which privately-owned redemption centres operate alongside retail stores to facilitate the return of empty drinks containers.

LDPE (Low-density polyethylene)

Type of plastic resin. While not commonly used for beverage packaging due to its relatively soft and flexible nature, it is suitable for certain beverage applications like squeezable sports drinks or single-serve portion packets for flavoured syrups or drink mixes.

MATERIAL OWNER

The entity holding ownership rights over recyclable commodities (empty containers), with the authority to sell the material on the market or retain it for conversion into raw materials for producing new bottles or cans. In best practice systems, the material owner is typically the system operator.

MATERIAL RECOVERY FACILITY (MRF)

A facility that receives commingled recyclable materials from residential and commercial recycling programmes for the purpose of sorting, processing and marketing them for sale to recyclers. These facilities are not typically accessible to the public.

MATERIAL (SCRAP) REVENUES

Money generated from the sale of empty drinks container material that has been collected for recycling. In deposit systems that follow best practice principles, these funds typically contribute to financing the system.

ONLINE TAKE-BACK

Refers to a service offered by online retailers selling in-scope beverage containers, where they collect empty containers from customers. For instance, a supermarket could retrieve empty containers during the delivery of a customer's next online grocery order. In the UK, previous consultations and ongoing stakeholder engagement have explored whether mandatory requirements for online take-back should be implemented and which retailers might be obligated to provide this service. While there are some examples of online take-back programmes in other countries (e.g., Norway), they are generally small-scale and voluntary initiatives.



PET (Polyethylene terephthalate)

A type of plastic resin that is widely used for packaging drinks, especially soft drinks, juices, and water.

PROCESSING FEE

A per unit fee paid by system operators to material processors in some North American deposit return systems. Similar to producer fee in other jurisdictions (see “Producer Fee”).

PROCESSING PAYMENT

In California’s system, processing payments are defined as the difference between the average cost to recycle and the average scrap value for the material, and processing fees are equal to a percentage of processing payments ranging from 10-65%. If a material scrap value is high enough to cover recycling costs, then no processing fee is imposed. If a material’s scrap value is less than the state-wide, weighted-average recycling costs, then a processing fee is intended to make up this difference, or net cost.

PROCESSING REFUND

In some Australian states, material recovery facility (MRF) operators are entitled to claim processing refunds for each eligible beverage container collected through residential waste management services within local council areas (i.e., kerbside recycling bins) and delivered for reuse or recycling. The calculation of refunds involves a container factor, which is used to convert container weights into a count that is calculated based on independent sampling data obtained from kerbside collections for glass and from MRF output streams for all other material types. The revenue that MRFs earn from these refunds must be shared with local councils as per a revenue sharing agreement. The specific amount allocated to councils is determined by the terms outlined in the agreement. This arrangement enables councils to benefit taxpayers by receiving a portion of the refunds for containers collected within their

kerbside recycling systems. To facilitate negotiations between councils and MRFs, most state governments have established a “revenue sharing protocol” or similar framework.

PROCESSORS

Entities that provide services that may include counting, weighing, and measuring of empty drinks containers. Their services may also include scrap buying/selling, overseas shipping and brokering, as well as materials transformation, which involves converting collected materials into new products or materials for further use (e.g., recycling used plastic bottles into flakes for bottle manufacturing).

PRODUCERS

In this report, a producer refers to the entity that first places an eligible beverage container on the market. This could be a brand owner, manufacturer, importer, or distributor. Producers supply their products to retailers, who then sell them to consumers.

PRODUCER FEE

Also known as a producer administration fee, extended producer responsibility (EPR) fee, manufacturer’s fee, supplier contribution, or processing fee, this is a fee paid by beverage producers/importers/distributors to the system operator to cover the proportion of system costs not covered by material revenues and/or unredeemed deposits. Although different terms may be used in different jurisdictions, they all represent the same thing. Producer fees are most common in European and Australian systems (in Canada, the only deposit system that charges producer fees is Quebec). Producer fees are typically eco-modulated, meaning they vary by material based on the net costs to collect and recycle that material. This ensures no one material is cross-subsidising for another. In some systems, producers are charged higher fees for materials that are more difficult-to-recycle (e.g., a coloured PET bottle or containers that

have a sleeve that covers more than 75% of the container), creating an added incentive for producers to utilise packaging that is designed for recyclability. Some jurisdictions also charge different producer fees based on whether the container has an international (also known as universal, or non-market specific; allows the beverage to be sold in any market) barcode or a national (also known as a unique, market-specific or domestic) barcode. System operators may set higher fees for producers that use international barcodes to count for potential losses to the system from cross-border fraud.

PRO (Producer Responsibility Organisation)

An entity, typically established by legislation or industry agreements, tasked with managing and implementing extended producer responsibility (EPR) programmes, including those for packaging.

PS (Polystyrene)

Type of plastic resin suitable for a wide range of applications including beverage containers. Not as prevalent in beverage containers as PET or HDPE.

REDEMPTION CENTRE (DEPOT)

A dedicated establishment for the collection of empty beverage containers in exchange for a deposit refund. These centres, which may be operated by private businesses or the system operator, are typically situated in retail parking lots, near shopping centre entrances, or in warehouses on city outskirts. In some jurisdictions, redemption centres complement the return-to-retail network by offering a more suitable option for individuals or organisations redeeming large volumes of containers.



RETAILER

Party that buys drinks from producers and sells them to consumers for consumption off its premises. In best practice deposit systems, they are also responsible for accepting empty drinks containers from consumers and paying out deposit refunds.

RETURN RATE

The amount of drinks container material that is collected (by unit) expressed as a percentage of the amount of drinks container material placed on the market, excluding exports. In terms of system results, it is important to point out that the way in which system performance is measured or reported on can vary between jurisdictions. While some system operators may report out a 'collection rate', others report a 'recycling rate' or 'redemption rate.' For the sake of consistency and because it is impossible to know exactly how performance is measured in each jurisdiction, this report uses 'return rate' as a catch-all term.

RETURN-TO-REDEMPTION CENTRE (DEPOT)

A redemption model where consumers bring their empty beverage containers to designated facilities, which are specifically established for the collection and processing of these containers. This model is most common in countries like Canada, the United States, and Australia.

RETURN-TO-RETAIL

A redemption model in which beverage retailers accept—and refund the deposit on – empty deposit-bearing beverage containers from consumers for the purpose of recycling. In some jurisdictions, retailers below a certain size (e.g., 1,076ft² or 100m²) may be exempt from participating in the deposit system. This model is considered best-in-class as it is most convenient for consumers, allowing them to return containers where they shop. While most common in Europe, return-to-retail systems are also used in some North American markets.

REVERSE VENDING MACHINE (RVM)

An automated device designed to accept empty beverage containers, facilitating the return and redemption process. Consumers deposit eligible containers into these machines at designated return locations in exchange for a refund of their deposit. Some RVMs are equipped with advanced features, like the ability to compact containers, which optimises storage and transportation efficiency. Modern RVMs are often internet-connected, enabling real-time monitoring and allowing for remote diagnostics, software updates, and data analytics, enhancing operational efficiency. Additionally, some RVMs provide an option for consumers to donate their deposit refunds to charities or other non-profit organisations via a dedicated button on the machine's interface.

RIGHT OF FIRST REFUSAL (also called PRIORITY ACCESS or PRE-EMPTION RIGHTS):

A right of first refusal is a contractual or regulatory provision that grants a specific party the privilege to match or reject an offer on an asset before the owner can sell it to a third party. In the context of recycled materials and deposit return systems (DRS), priority access or right of first refusal ensures fair and legitimate access to recycled materials for beverage producers. This mechanism allows beverage producers, as obligated industry stakeholders, the opportunity to procure recycled materials captured by the deposit system, particularly food-grade recycled content, which originates from the packaging they placed on the market. By exercising their right of first refusal, producers can secure access to recycled materials to enhance the level of recycled content in their products, fostering closed-loop recycling and sustainable packaging practices.

SYSTEM OPERATOR

Entity responsible for the operation of a deposit system, including (but not limited to) the following tasks: meeting performance targets; managing the system's finances; designing and establishing the collection infrastructure; registering

producers and new products into the system; establishing and managing contracts with service providers; auditing activities; and quality assurance. Deposit systems are usually operated by beverage producers but can also be operated by government (including arms'-length government agencies) or a not-for-profit organisation, each with assigned responsibilities. In some jurisdictions, the system operator may be referred to by a different name, such as a "Deposit Management Organisation."

In some Australian states, instead of having one entity responsible for the system's operation, the deposit system operates as a split-responsibility model, which involves one entity—the 'scheme coordinator'—responsible for managing the administration and finance of the system (i.e., financial operations, marketing and community education, ensuring the integrity of the system through audits) and a separate entity – the 'Network Operator' – responsible for overseeing the network of redemption locations and ensuring returned containers are recycled.

UNREDEEMED (UNCLAIMED) DEPOSITS

The value of deposits paid on beverage containers that consumers have not redeemed. In best practice deposit systems, unredeemed deposits are retained by the system operator and utilised to support and sustain the programme's operations.



List of abbreviations

ACT	Australian Capital Territory (Australia)
AUD	Australian Dollar
CAD	Canadian Dollar
CDS	Container Deposit Scheme
CRF	Container Recycling Fee (Canada)
CRS	Container Refund Scheme
CRV	California Refund Value
DKK	Danish Krone
DRS	Deposit Return System or Deposit Return Scheme
EPR	Extended producer responsibility
EU	European Union
GST	Goods and Services Tax (charged in Canada and Australia)
HDPE	High density polyethylene
HRK	Croatian Kuna
HST	Harmonised Sales Tax (Canada)
HUF	Hungarian Forint
ILS	Israeli New Shekel
ISK	Icelandic Króna
KRW	South Korean won

LDPE	Low-density polyethylene
LPB	Liquid paperboard
MRF	Material recovery (or recycling) facility
NOK	Norwegian Krone
NSW	New South Wales (Australia)
PET	Polyethylene terephthalate
PPWR	Packaging and Packaging Waste Regulation (EU)
PRO	Producer Responsibility Organisation
PS	Polystyrene
RC	Redemption Centre
RON	Romanian Leu
RVM	Reverse Vending Machine
R2R	Return-to-Retail
SCR	Seychellois Rupee
SUPD	Single-Use Plastics Directive (EU)
TRY	Turkish lira
USD	United States Dollar
VAT	Value Added Tax (charged in the European Union and the United Kingdom)



Foreword

The challenges we face today are urgent and multifaceted. Climate change is no longer a distant threat looming on the horizon; it is happening now, with devastating impacts felt worldwide. Concurrently, our oceans and landscapes are besieged by a relentless tide of waste, predominantly plastic. In the face of these interconnected crises, UN Member States agreed in 2022 to develop “an international legally binding instrument on plastic pollution including in the marine environment” – more commonly known as the Global Plastics Treaty – by the end of 2024. Inger Andersen, executive director of the UN's Environment Programme (UNEP) has described the agreement as the most important international multilateral environmental deal since the Paris Climate Accords. This treaty is meant to be a legally binding international agreement that outlines measures to regulate the production and consumption of high-risk plastics, including implementation timelines. The treaty negotiations were unable to reach a resolution in 2024 and will be extended into 2025.

In the meantime, the world looks to innovative solutions like deposit return systems (DRS) to play a pivotal role in mitigating the plastic pollution crisis and fostering a more sustainable future, where resources are cherished and waste is minimised. At Reloop, we recognise DRS as not just a solution, but a cornerstone principle of the circular economy – going beyond the traditional linear model of consumption followed by disposal, to a solution that allows more efficient and effective systems of recycling and reuse, funded by those who pollute.

As we unveil the 2024 Global Deposit Book, it's truly remarkable to reflect on the evolution since our inaugural report in 2016. What began as an exploration of 38 deposit systems worldwide (representing about 280 million people) has now blossomed into a comprehensive overview of 57 systems (representing a global population of nearly 357 million people), a testament to the accelerating momentum behind DRS as a linchpin of global environmental strategy.

The landscape of DRS has seen significant developments, particularly with the recent adoption of new rules within the European Union (500 million population), such as the recently adopted Packaging and Packaging Waste Regulation (PPWR). The PPWR mandates that Member States separately collect at least 90% of single-use plastic bottles and metal beverage containers up to 3 litres by 1 January 2029, using mandatory DRS unless a Member State has achieved a minimum 80% collection rate through a separate system in 2026, and can present a viable path to achieving a minimum 90% collection rate. Beyond these ambitious collection targets, the PPWR mandates a minimum recycled content of 25% in PET bottles by 2025, increasing to 30% by 2030, further driving demand for sorted and high-quality recycled materials. With 14 of the 27 EU Member States already having introduced DRS, the PPWR is poised to serve as a catalyst for other EU countries to embrace DRS as a pivotal strategy in achieving their environmental goals.

In presenting this report, we do so with a profound sense of purpose and optimism. It is our hope that the information contained within these pages continues to serve as a valuable reference guide for stakeholders, by providing a comprehensive overview of DRS around the globe. The imperative for action has never been clearer. We stand at a pivotal moment in history, where the decisions we make today will reverberate for generations to come. Together, let us seize the opportunity to turn the tide on beverage container waste and usher in an era of environmental stewardship.

Clarissa

Clarissa Morawski
CEO & Co-founder



Introduction

As of January 2025, nearly 357 million people¹ globally will live in jurisdictions with deposit return systems (DRS) for the collection and recycling of single-use beverage containers. Known as container deposit (or refund) schemes (CDS or CRS) in Australia or “bottle bills” in the United States of America (USA), these programmes require consumers to pay a small deposit at the point of purchase, which is refunded upon returning the empty container to a designated collection point.

This process enables beverage containers to be recycled or reused in the production of new beverage packaging, reducing waste and minimising the need for virgin materials.

Over the past decade, governments worldwide have shown a growing interest in DRS, introducing new systems or modernising existing ones to boost participation and increase redemption rates. Based on our knowledge of existing programmes as well as planned initiatives, it is projected that by the end of 2027, more than 70 jurisdictions—covering approximately 641 million people—will have operational DRS programmes for single-use drinks containers. This marks a significant increase from 38 jurisdictions (280 million people) in 2016, the year of our first report.

The European Union (EU) has been a leading force in this global trend, with several new programmes introduced in recent years. In November 2023, Romania launched one of the world’s largest national centralised DRS, by volume of containers, followed by Hungary in January 2024 and the Republic of Ireland a month later. Austria is scheduled to roll out its system in January 2025, and while Poland has the same target date, recent developments suggest there might be a delay. Looking ahead, new DRS programmes are anticipated in the Czech Republic (2026), Portugal (2026), and the four nations of the UK (2027), while Spain, Slovenia and Greece have expressed intentions to implement systems in the near future. Straddling the continents of Europe and Asia, Türkiye – home to 85.3 million people – is also preparing to launch a mandatory DRS in 2025 after several delays.

Additionally, several European countries have expanded the scope of their deposit systems: the Netherlands, for instance, added beverage cans in 2023, Sweden included juice and syrup products starting January 2023, and Germany extended its system to encompass milk in January 2024.

There have also been significant developments in Asia over the past few years. Hong Kong is preparing to implement a Producer Responsibility Scheme (PRS) for plastic beverage bottles and cartons, expected to begin in 2025.

The Indian state of Goa is also preparing to introduce its DRS in 2025, featuring a distinctive system where each container will have a unique serialised identifier, such as a QR code, printed or embossed on the packaging. Singapore had also planned to introduce a DRS in 2025 but has since postponed its implementation to 2026. Meanwhile, the Republic of Korea planned to implement the world’s first DRS for single-use cups after passing a law in 2022. However, the initial plan for a nationwide rollout was scaled back, with no immediate plans for further expansion.

DRS has also been making some progress in North America. The last two years have seen a couple of U.S. states modernise their legislation. In Connecticut, significant updates to the programme were implemented in January 2023, including an expansion of the types of beverages covered. Additionally, in January 2024, the state doubled the deposit amount on certain containers, a move expected to positively impact return rates in the coming years. California also made notable advancements by expanding its programme to include additional container types, with changes effective from 1 January 2024. The state has also invested nearly USD\$70 million in grants to establish 250 new redemption sites across the state, improving access for consumers. Other states, such as Massachusetts and New York, have pursued modernisation efforts but faced challenges. Massachusetts included a proposal to update its bottle bill as part of a broader climate bill, aiming to increase deposit values, handling fees, and the range of covered beverages. However, this proposal did not pass before the legislative session ended.

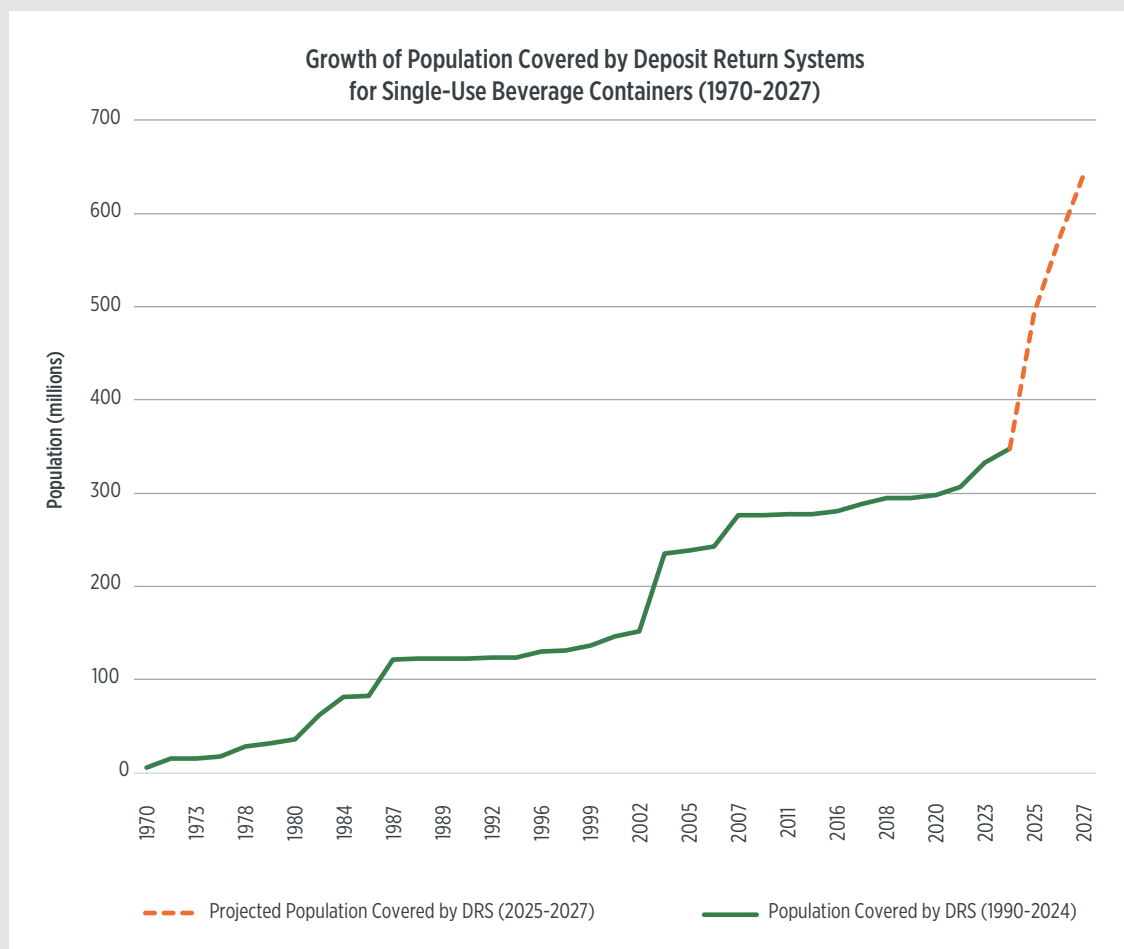
¹ This includes the population of Austria, which is scheduled to implement its DRS on 1 January 2025. The populations of Türkiye and Poland, which are also expected to launch their deposit systems in January 2025, are excluded due to significant uncertainties at the time of writing, which may delay the rollout of these systems.



In New York, a proposed update for 2024, which sought to raise deposit values, handling fees, and expand coverage, also failed to advance. Despite these setbacks, the ongoing discussions highlight a continued interest in enhancing DRS programmes across the U.S. At the federal level, there have been preliminary efforts to draft a bill for a nationwide DRS, however, legislative details and support are still in the early stages. If passed, the bill would allow states with existing programmes to either maintain their current systems or opt into the federal system.

In Canada, similar efforts to modernise existing DRS programmes have been underway. In November 2023, Quebec began the rollout of Phase 1 of its DRS modernisation plan, expanding coverage to include all aluminium beverage containers and increasing deposit amounts. The second phase, set to begin in March 2025, will further expand the programme to include all plastic containers, while cartons and wine and spirit glass containers will be added in 2027. Ontario, after establishing a working group to look at the feasibility of expanding its DRS to cover non-alcoholic containers, decided in July 2024 to abandon those plans and keep those containers within the kerbside collection system. Over on the Atlantic coast, the province of New Brunswick transitioned to a full refund system under an Extended Producer Responsibility (EPR) model in April 2024, effectively doubling the refund paid out to consumers. Prince Edward Island is also considering raising the deposit amount, pending legislative approval in Spring 2025.

Meanwhile, Australia is progressing towards becoming the first continent to implement a DRS across all states. Victoria introduced its DRS in November 2023, and Tasmania is set to launch its system in mid-2025 following several delays. In addition to these new programmes, several states have either recently updated their systems or are considering reforms to expand coverage. For instance, Queensland expanded its system in 2023 to include glass wine and spirit bottles. More recently, the Northern Territory and South Australia have both released draft legislations in 2024 aimed at broadening the coverage of their existing programmes.



Momentum around deposits is also gaining traction in the Pacific islands, with several nations advancing efforts to improve beverage container recycling. Samoa, for example, is developing regulations to implement deposits on PET and aluminium containers. The PacWastePlus Programme (2018-2023) has been instrumental in this progress, aiding Pacific Island states—including the Cook Islands, Nauru, Niue, Solomon Islands, and Vanuatu—in their DRS initiatives by providing support in system design and regulatory documentation. By June 2023, over 20 legislative and policy documents had been drafted under the programme, with several already submitted to national parliaments. Similarly, Trinidad and Tobago in the Caribbean have recently announced that they are planning on implementing a national DRS, guided by the 2024 Revised Municipal Solid Waste Sector Framework, with plans to cover a wide range of beverage containers up to 5 litres. Meanwhile, Jamaica's DRS initiative, announced in 2022, has made limited progress with no updates to report.

In South America, Uruguay is set to make a landmark move by becoming the region's first country to implement mandatory deposits on beverage containers. Announced in November 2022, Uruguay's 'Vale Plan' aims to achieve a 50% recovery rate by 2025 through the introduction of a DRS, projected to roll out by 2026.

So, what is behind this growing global momentum towards DRS?

› Deposit systems = higher collection rates:

The new EU Packaging and Packaging Waste Regulation (PPWR), approved in 2024, sets ambitious recycling targets, including a 90% separate collection rate for plastic bottles and cans by 2029 (Article 50). To meet this target, member states must implement a DRS unless they achieve an 80% collection rate by 2026. Although Member States can avoid DRS if they reach the 80% target, experts suggest it would be nearly impossible for many of them with current collection rates below 50% (e.g., Spain, France, and Italy) to do so without a DRS in place. This regulation marks a major shift in EU recycling practices and sets a global benchmark for packaging circularity.

› High levels of public support:

Public support for DRS remains strong across different regions and stakeholders. Multiple recent polls highlight this widespread approval for such systems. For instance, a 2024 poll in Poland showed continued public support for the upcoming DRS rollout in the country. Additionally, following the launch of the Republic of Ireland's DRS in February 2024, a survey revealed strong consumer satisfaction with the system². Retailers are also gradually aligning, with many starting to recognise the benefits of DRS. A 2024 survey by Latvia's system operator confirmed this shift, showing increasing support from retail businesses that once held reservations. Moreover, in North America, the Solid Waste Association of North America (SWANA) released a policy paper endorsing DRS, acknowledging its effectiveness in reducing waste and improving recycling rates³. These reactions underscore a growing recognition of the system's potential benefits, not just among the public but also within industries that traditionally opposed DRS.

› DRS = improved circularity:

The expansion of deposit markets is also being driven by recycled content legislation and targets, as DRS can supply high-quality materials suitable for closed-loop recycling by minimising contamination in collected beverage containers. In recent years, beverage producers and industry groups have increasingly supported DRS as the most effective way to boost the supply of quality recycled content. For example, in April 2024, Danone endorsed the implementation of a DRS in Ireland, citing its potential to improve recycling rates and advance circular economy goals⁴. According to Reloop's Target 90 report, Spain's 37% PET bottle collection rate in 2022 resulted in 1.9 billion bottles' worth of recycled material. By increasing the collection rate to 90% with a cleaner, separate stream via DRS and reduced yield loss, over 29 billion bottles could be recycled, reflecting a 1347% increase in circularity⁵.

²<https://www.reloopplatform.org/resources/public-support-for-deposit-return-systems/>

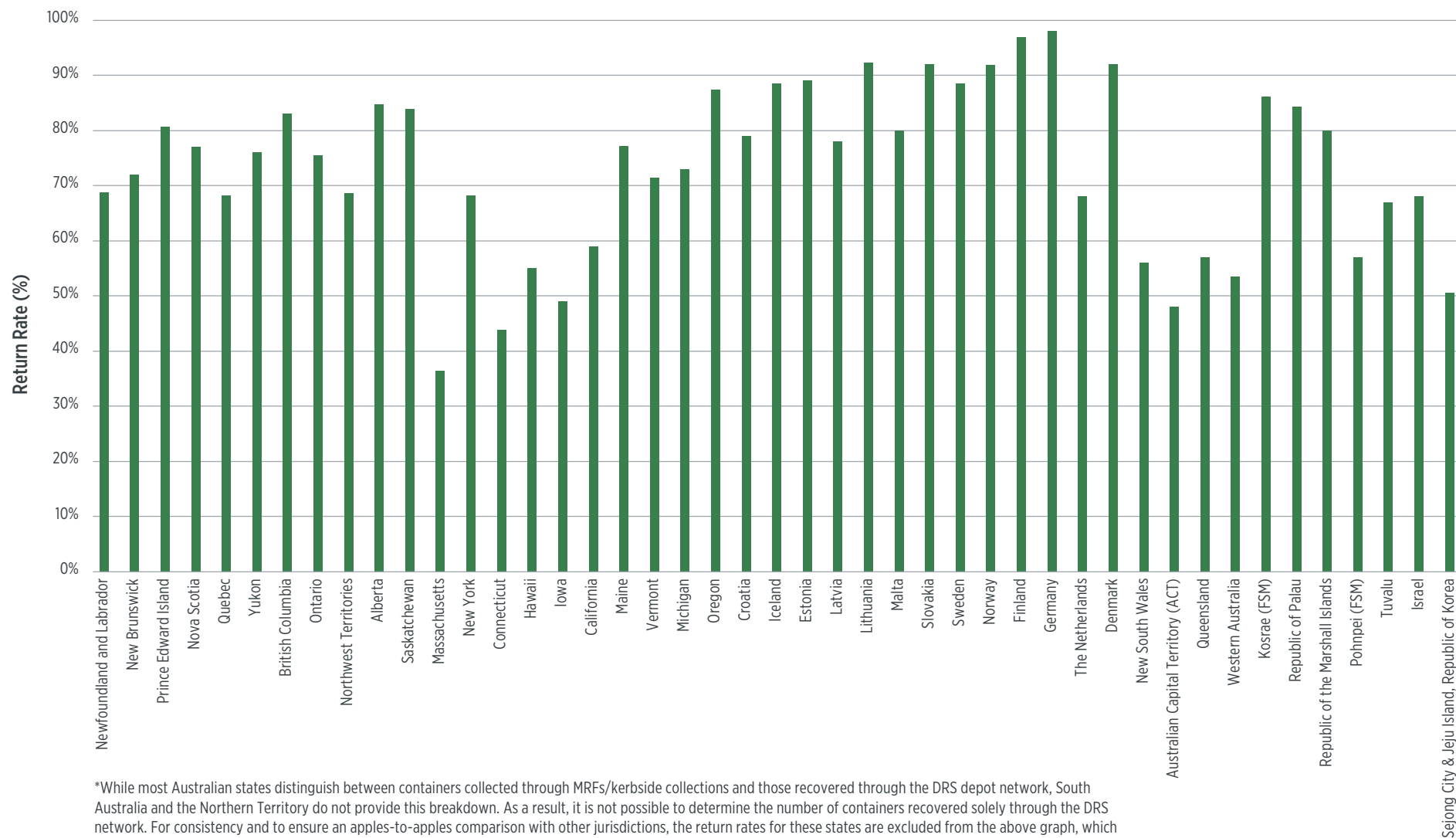
³<https://www.wastedive.com/news/swana-advocates-for-bottle-bill-container-deposit-system/707634/>

⁴<https://www.packagingnews.co.uk/news/materials/rigid-plastics/drs-danone-25-04-2024>

⁵<https://www.reloopplatform.org/wp-content/uploads/2023/04/Target-90-Report-Feb-16-2023.pdf>



Latest Return Rates in Deposit Return Systems for Single-Use Beverage Containers, Globally*

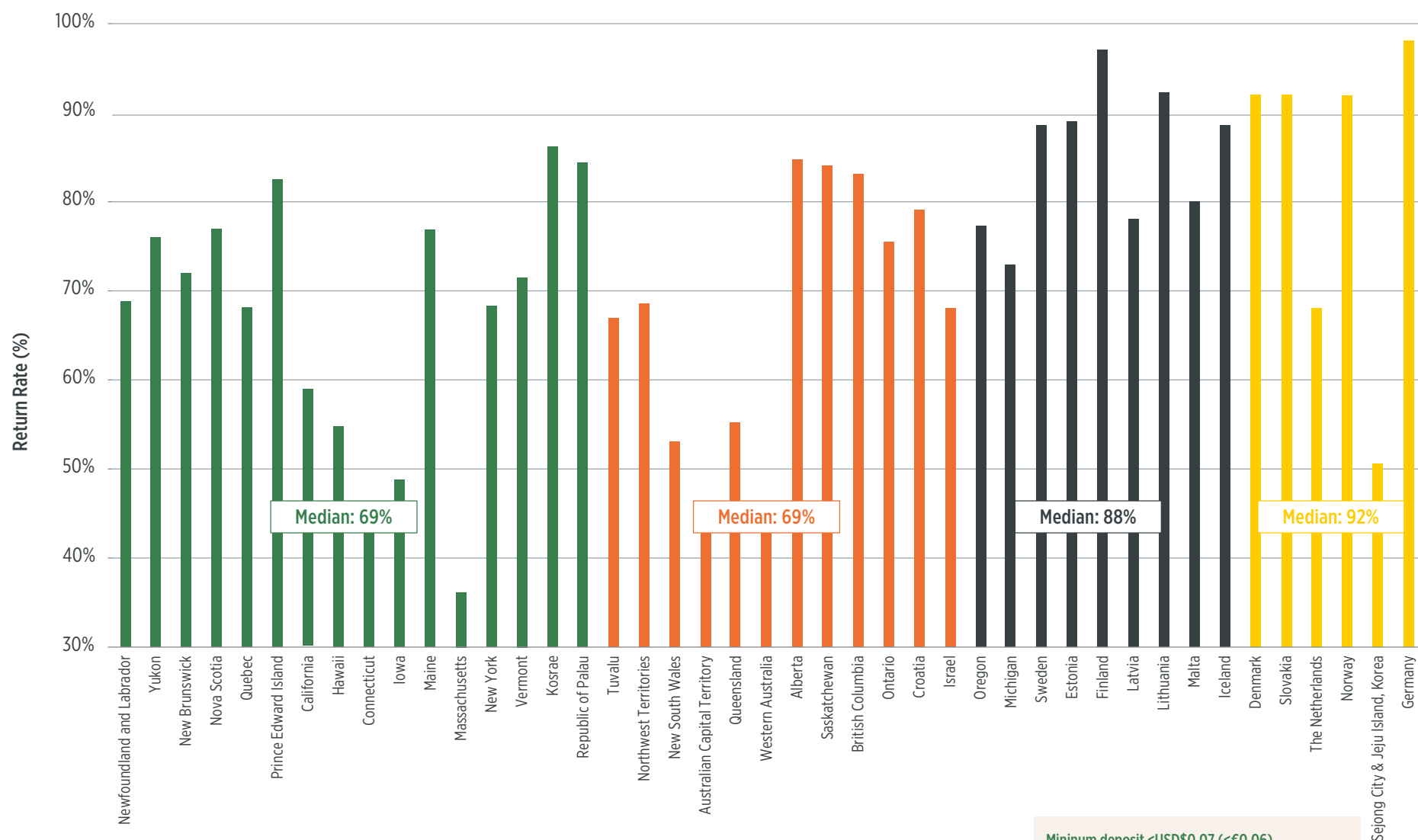




*While most Australian states distinguish between containers collected through MRFs/kerbside collections and those recovered through the DRS depot network, South Australia and the Northern Territory do not provide this breakdown. As a result, it is not possible to determine the number of containers recovered solely through the DRS network. For consistency and to ensure an apples-to-apples comparison with other jurisdictions, the return rates for these states are excluded from the above graph, which presents return rates that include only containers collected through the DRS network (retail or depot collection points).



Latest Return Rates in Deposit Return Systems for Single-Use Beverage Containers, by Minimum Deposit Value*



*While most Australian states distinguish between containers collected through MRFs/kerbside collections and those recovered through the DRS depot network, South Australia and the Northern Territory do not provide this breakdown. As a result, it is not possible to determine the number of containers recovered solely through the DRS network. For consistency and to ensure an apples-to-apples comparison with other jurisdictions, the return rates for these states are excluded from the above graph, which presents return rates that include only containers collected through the DRS network (retail or depot collection points).

Minimum deposit <USD\$0.07 (<€0.06)
 Minimum deposit USD\$0.07-\$0.09 (€0.06-€0.08)
 Minimum deposit USD\$0.10-\$0.14 (€0.09-€0.13)
 Minimum deposit ≥USD\$0.15 (€0.13)



Report overview

Continuing the legacy of its predecessors, this fifth edition delivers a comprehensive overview of deposit return systems (DRSs) across Europe, North America, South America, Central America and the Caribbean, Africa, the Middle East, Asia, and Oceania. It presents information on existing markets as well as upcoming programmes scheduled for implementation in the next few years, detailing the following aspects where data is available:

- › **Key demographic statistics:** population density, and gross domestic product (GDP) in international dollars per capita
- › **Legislative framework:** information related to the legal underpinnings of the DRS, including enactment dates, system start dates, and legislated performance targets.
- › **Scope:** an overview of the drinks and container types encompassed within the system, information on whether a DRS exists for refillable containers
- › **Deposit and fees:** summary of deposit/refund values by container/beverage type, and different fees paid by various participants in the system, such as handling fees and producer fees (by material)
- › **System structure and administration:** clearing system, system operator, system finance
- › **Container return and refund points:** details on the collection model including number of collection points, population per collection point (excluding HORECA), method of container return (automated vs. manual), barcode verification, and container marking requirements

- › **Return rates:** latest data on beverage container return rates, overall and material-specific
- › **Money, material, and data flow:** visual depiction of the physical flow of drinks containers, money, and sales/returns data through the system

It's worth noting that this year we added several new parameters to the report. These include identifying the presence of co-existing deposit systems for refillable containers in each jurisdiction⁶, highlighting the percentage market share of refillable containers, identifying whether online retailers are mandated to accept container returns, identifying any unique container marking requirements, and providing insights into refund payment options. We also include "GDP per capita (PPP)" as a key demographic statistic. GDP per capita is important because the significance of a deposit amount varies between countries; for instance, a €0.10 deposit may be substantial in a poorer country, while a €0.25 deposit might be more effective in a richer country.

Building upon the foundation laid by our previous reports, the 2024 edition also offers summaries of proposed programmes, highlighting jurisdictions that have committed to introducing deposit systems pending the enactment of supporting legislation.

⁶ Please note that while we have included identification of whether a jurisdiction has a co-existing DRS for refillable containers, all other information and data presented in the Global Deposit Book pertain exclusively to single-use deposit systems. This limitation arises because refillable systems are typically operated by private companies, making data collection challenging.



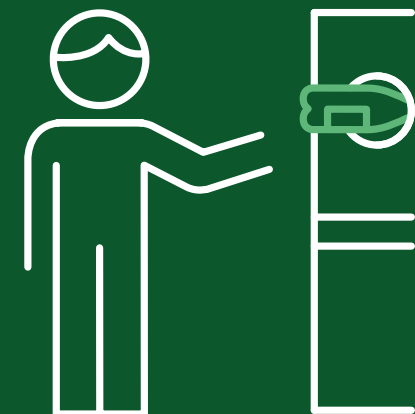
Data sources

Information for this report, current as of September 2024, has been meticulously collated from personal communications with system operators, publicly available annual reports, internal documents, government publications, and consultancy studies. A detailed list of sources is provided in each programme summary. Additionally, the appendix furnishes links to DRS legislation for each jurisdiction, where accessible.

Data on the percentage of refillable market share in each jurisdiction (where available) is sourced from GlobalData. Materials included in the calculation include metal, glass, paperboard, PET, and HDPE.

The beverage categories covered are beer/cider, wine/spirits/flavoured alcohol, and soft drinks (including carbonates, waters, juice/nectar/still drinks, ready-to-drink iced tea/coffee, and sports/energy drinks). This methodology aligns with what will be presented in our new [What We Waste Dashboard](#) update.

Please note that while every effort has been made to ensure accuracy, information may have changed by the time of publication, and new data released publicly after September 2024 is not included. Additionally, the currency conversions presented in this report are accurate as of 9 September 2024.

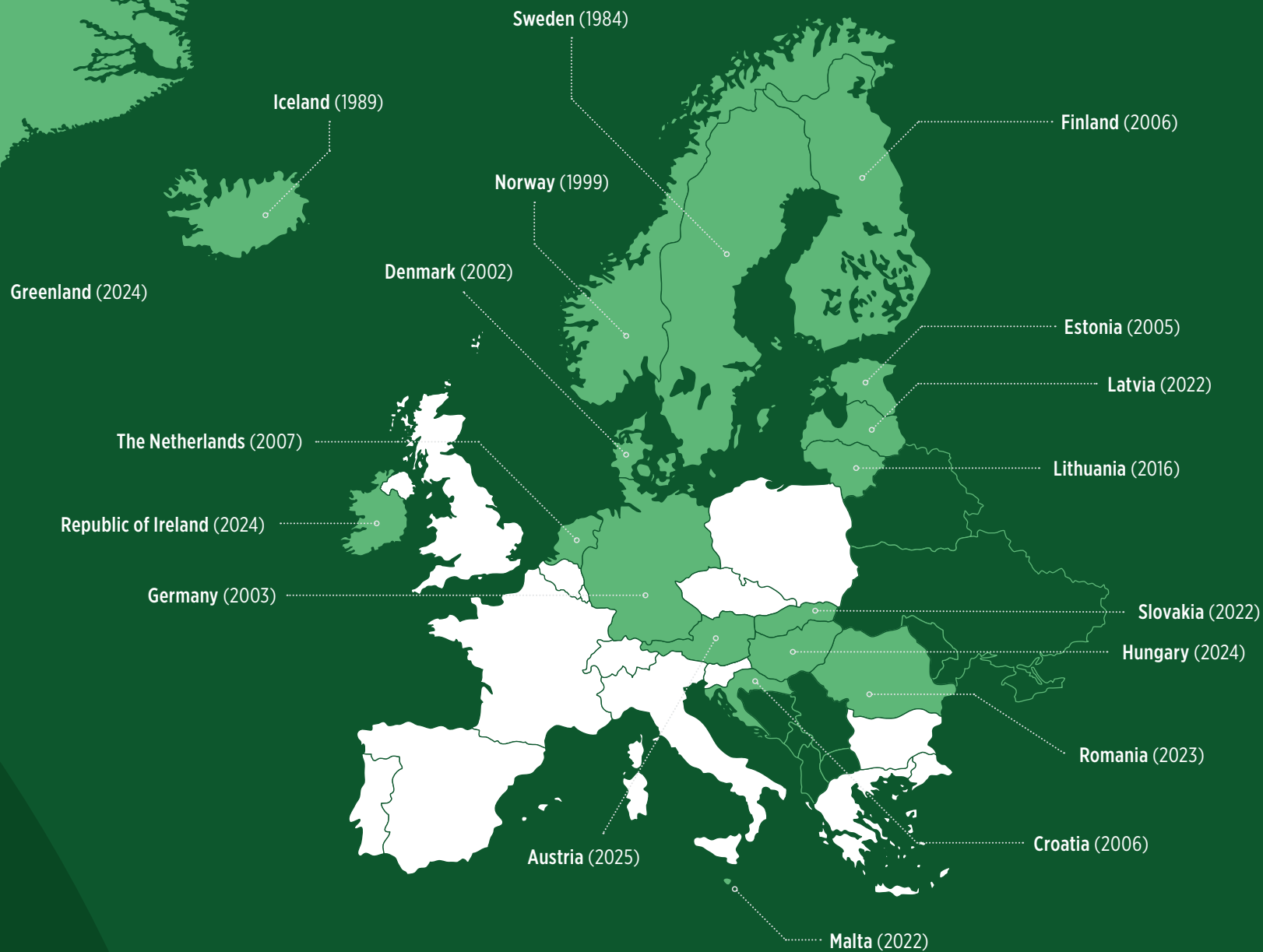


Existing programmes



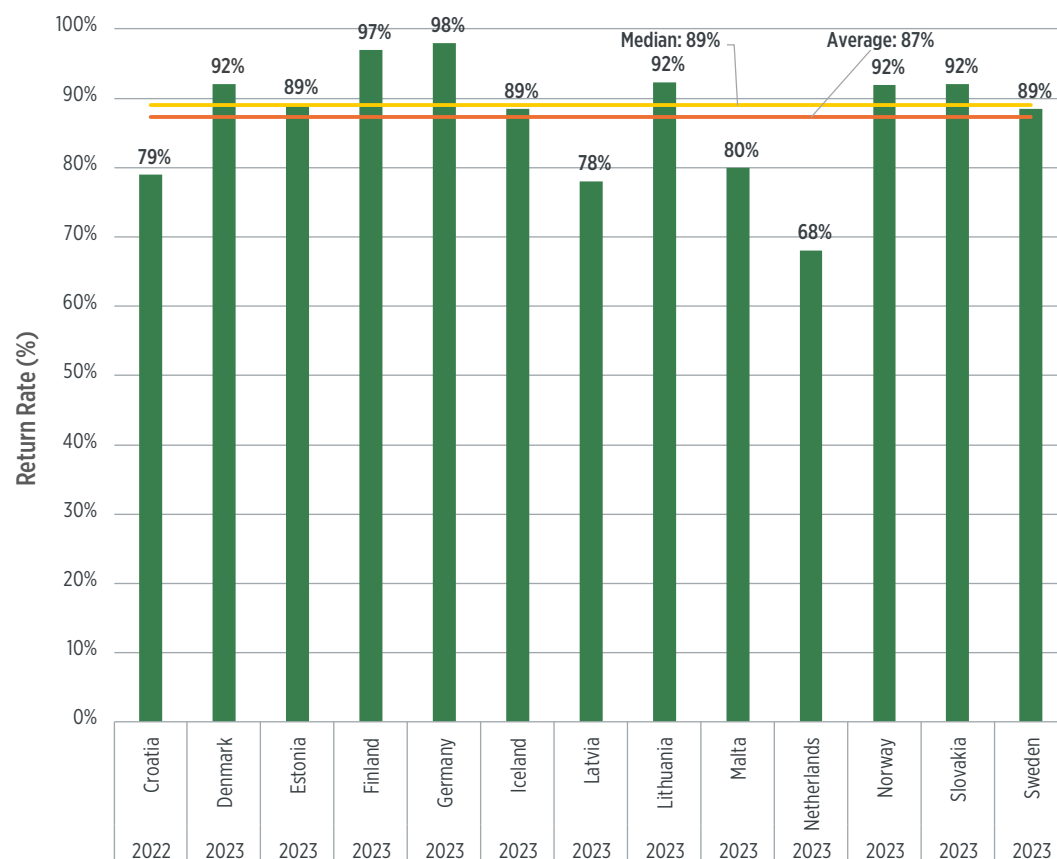
Europe

Region snapshot



Europe

Latest Return Rates in European Countries
with Deposit Return Systems for Single-use Beverage Containers



Country	Population (million)	Population Density (population/km ²)	Legislation Enacted	System Started
Austria	9.2m	109.6	2023	2025
Croatia	3.9m	69.0	2005	2006
Denmark	6.0m	140.6	2001	2002
Estonia	1.4m	31.0	2004	2005
Finland	5.6m	18.3	1994	1996
Germany	83.4m	237.2	1991	2003
Greenland	0.06m	0.0	Unknown	2024
Hungary	9.6m	105.7	2021	2024
Iceland	0.4m	3.8	1989	1989
Latvia	1.9m	29.7	2019	2022
Lithuania	2.9m	45.2	2014	2016
Malta	0.6m	1,692.7	2020	2022
The Netherlands	17.9m	517.8	2003	2007
Norway	5.6m	17.7	1993	1999
Republic of Ireland	5.3.m	75.2	2021	2024
Romania	19.1m	81.3	July 2018/ October 2021	2023
Slovakia	5.4m	111.5	2019	2022
Sweden	10.6m	25.7	1982	1984
Total*	188.6m			

Note: Hungary, Romania, and the Republic of Ireland are not included in this graph as full-year return rate data was unavailable at the time of writing.

*Due to rounding, the sum of each country's population may not exactly match the total population.

Source for population: Eurostat. "Data browser: Population on 1 January." Last updated 11/07/2024." Available at:

<https://ec.europa.eu/eurostat/databrowser/view/TPS00001/default/table?lang=en>

Source for population density: Eurostat. "Data browser: Population density by NUTS 3 region." Last updated 26/03/2024. Available at:

https://ec.europa.eu/eurostat/databrowser/view/DEMO_R_D3DENS_custom_10822572/bookmark/table?lang=en&bookmarkId=9daaf3b7-86a3-40fc-9171-fcd05d859892



Austria

Population: **9.2m**

Population density: **109.6/km²**

GDP per capita, PPP (international \$): **73,751.4**

System operator's website:

Sources

- 1) BNN Correspondents. 25 September 2023. "Austria to Implement Single-Use Deposit Scheme in 2025." Available at: <https://bnn.network/breaking-news/climate-environment/austria-to-implement-single-use-deposit-scheme-in-2025/>
- 2) EWP Recycling Pfand Österreich gGmbH. June 2024. "Producer's Manual – version 3." Available at: <https://www.recycling-pfand.at/downloads/producers-manual-englisch.pdf?1719324132>
- 3) Plastic Action Centre. "Story 4: Austria's New Legislative Quota for Refillable Beverage Containers." Available at: <https://plasticactioncentre.ca/directory/austria-quota-refillable-containers/>
- 4) Recycling Pfand Österreich. "Produzentenbeitrag." Available at: <https://www.recycling-pfand.at/downloads/ewp-infoblatt-produzentenbeitrag.pdf?1718354056>
- 5) Recycling Pfand Österreich. "The single-use deposit system." Available at: <https://www.recycling-pfand.at/ueber-pfand.html>
- 6) Recycling Pfand Österreich. "Handling Fee." Available at: <https://www.recycling-pfand.at/downloads/handling-fee-information.pdf?1706600318>

Legislative framework

Name of legislation

Deposit Regulation for Single-Use Beverage Containers, made under an Amendment to the Waste Management Law (Abfallwirtschaftsgesetz – AWG) (Federal Law Gazette II No. 283/2023)

Legislation enacted

26 September 2023

Appointment of system operator

2023

System start

1 January 2025

Regulatory authority

Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK)

Legislated targets

› Collection:

- › 80% by end of 2025
- › 90% by 2027

Reuse:

- › 25% of beverages to be sold in refillable containers by 2023, increasing to 30% by 2030 (non-alcohol beverages <500ml are exempted from the refillable quotas)

Scope

Material type

Plastic, metal (aluminium)

Beverage type

All sealed beverages including beer and beer mixes, alcoholic

beverage mixes, cider and other fermented beverages, juices and nectars, soft drinks, waters, wines, spirits

Size

100ml to 3L (0.03 gal to 0.79 gal)

Excluded:

Milk and mixed milk drinks, coffee cups, coffee beverages in a can with a milk proportion in excess of 51%, beverage cartons

Is there a DRS for refillables?

Yes (27% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producers/Importers

Deposit value

› **Flat rate:** €0.25 (USD\$0.28)

Handling fee (2025)

Variable rate:

› Manual:

- › Plastic: €0.0288 (USD\$0.032)
- › Metal: €0.0261 (USD\$0.029)

› RVM:

- › Plastic: €0.0399 (USD\$0.044)
- › Metal: €0.0372 (USD\$0.041)

Producer fee (2025)

- › Plastic: €0.0245 (USD\$0.027)
- › Metal: €0.0107 (USD\$0.012)
- › Containers with international barcodes incur an additional fee of €0.03 (USD\$0.03)



System structure & administration

Clearing system

Centralised

System operator

EWP Recycling Pfand Österreich gGmbH (owned by Trägerverein Einwegpfand, a non-profit limited liability company, whose members include leading beverage producers, retail partners and related associations)

System finance

Unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operator

Material owner

System operator (bottlers will have a right of first refusal for the recycled material)

Container return & refund points

Collection model

Return-to-Retail: Retailers must take back in-scope containers of the same type and size they sell, regardless of the brand. This means that if a store sells 500ml PET bottles of Coca-Cola, it must also take back 500ml PET bottles of other brands. However, retailers selling only PET bottles aren't required to accept cans.

Restaurants and small retailers are only required to accept returns in quantities matching their average sales (e.g., a sausage stand selling two to three drinks per customer doesn't have to accept 20 containers at once).

Joint (central) collection points can also be set up in high-traffic areas such as railway stations, shopping centres, and airports.

Exceptions to the return-to-retail obligation include online and vending machine sales. In the case of vending machine sales, a collection point must be indicated on the vending machine, and it must be within walking distance. Collection at events is voluntary.

Online take-back? No

Number of collection points

TBD

Population per collection point:

TBD

Method of return

Automated and manual

Barcode-based system?

Yes

Container deposit markings

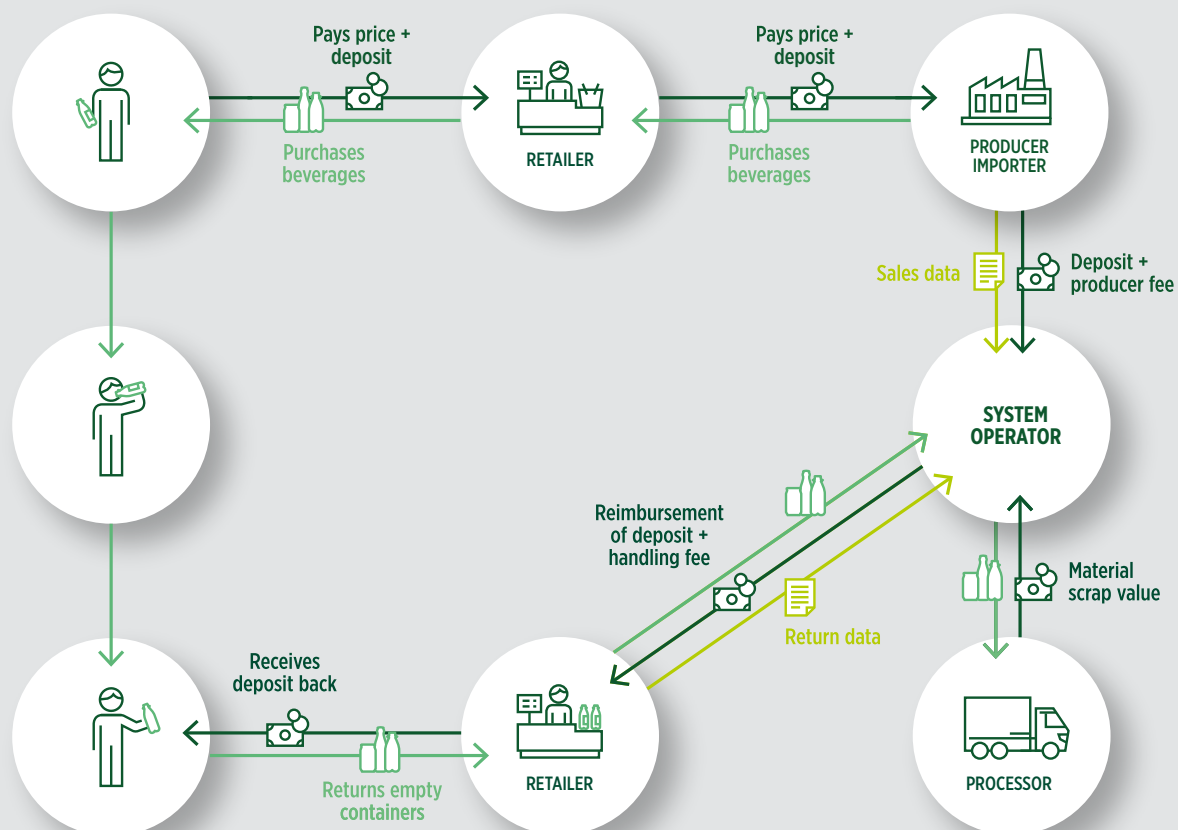
Containers must be labelled with a deposit symbol which consists of the € symbol surrounded by recycling arrows and symbols of a bottle and can in the background

Refund payment options

TBD



Money, material & data flow



¹ The regulation mandates that producer fees be calculated per unit, with no negative fees allowed. Any surplus must be used to enhance the system. When determining fees, in addition to overall system revenues and expenses, factors such as whether the container has an international barcode and its recyclability are considered. Fees vary depending on how recyclable the container is according to defined criteria and whether the use of resources could be minimised. More information is available in the system operator's Producer's Manual..



Croatia

Population: **3.9m**

Population density: **69.0/km²**

GDP per capita, PPP (international \$): **45,909.6**

System operator's website:

Sources

- 1) Environmental Protection and Energy Efficiency Fund (FZOEU). 29 June 2021. "Milk and dairy products packaging back in the deposit system." Available at: <https://www.fzoeu.hr/en/milk-and-dairy-products-packaging-back-in-the-deposit-system/8586>
- 2) Environmental Protection and Energy Efficiency Fund (FZOEU). PowerPoint presentation titled "Environmental Protection and Energy Efficiency Fund (EPEEF)." Available at: https://www.ca-eed.eu/wp-content/uploads/2021/10/EPEEF_AHalavanja.pdf
- 3) Personal communication with Žana Žarkov, Environmental Protection and Energy Efficiency Fund, 26 August 2024
- 4) Republika Hrvatska. "Izješće o ambalaži i otpadnoj ambalaži za Republiku Hrvatsku u 2022. Godini." Available at: https://www.haop.hr/sites/default/files/uploads/dokumenti/021_otpad/izvjesca/izvie%C5%A1%C4%87e%20o%20ambala%C5%BEi%20i%20otpadnoj%20ambala%C5%BEi%20za%20Republiku%20Hrvatsku%20u%202022_WEB.pdf
- 5) Zvonimir Majić. "Deposit Refund System in Croatia." Available at: https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1602852020.pdf
- 6) https://narodne-novine.nn.hr/clanci/sluzbeni/2015_09_97_1872.html
- 7) https://narodne-novine.nn.hr/clanci/sluzbeni/2020_01_7_93.html
- 8) https://narodne-novine.nn.hr/clanci/sluzbeni/full/2023_11_137_1864.html

Legislative framework

Name of legislation

Ordinance on Packaging and Packaging Waste (97/05),
Ordinance on Packaging and Waste Packaging (88/15),
Regulation on management of waste packaging (97/15),
and Act on Sustainable Waste Management (84/21)

Legislation enacted

July 2005

Appointment of system operator

July 2005

System started

January 2006

Key updates

- › January 2021 – expansion to all drinks $\geq 200\text{ml}$
- › July 2021 – expansion to milk and dairy products
- › January 2027 – expansion to aseptic containers (i.e., Tetra Pak) and change to container size threshold ($\leq 3\text{L}$)

Regulatory authority

Ministry of Economy and Sustainable Development

Legislated targets

Recycling: 80%

Scope

Material type

Plastic (predominately PET), metal (aluminium, steel), glass

Beverage type

All alcohol (beer, wine, hard liquor) and non-alcohol drinks (including juices, waters, soft drinks, milk and dairy products, etc.)

Size

$\geq 200\text{ml}$ (0.05 gal)

Excluded

None

Is there a DRS for refillables?

Yes (39% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value¹

› **Flat rate:** €0.07 (USD\$0.08)

Handling fee (2024)

› **Variable rate:**

- › Manual: 0.05 HRK (€0.01, USD\$0.01) (25% VAT included)
- › RVM: 0.18 HRK (€0.02, USD\$0.03) (25% VAT included)

Producer fee (2024)

- › Milk containers: 0.20 HRK (€0.03, USD\$0.03)
- › All other containers: 0.10 HRK (€0.01, USD\$0.01)



System structure & administration

Clearing system

Centralised

System operator

Environmental Protection and Energy Efficiency Fund
(Fond za zaštitu okoliša i energetska učinkovitost – FZOEU)
(extra-budgetary public institution)

System finance

Material revenues, unredeemed deposits, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Retail: Retailers $\geq 200\text{m}^2$ (2,153 ft²) must take back empty containers. Smaller retailers ($<200\text{m}^2$) can participate voluntarily provided they are approved by FZOEU.

Online takeback?

Unknown

Number of collection points

-2,100

Population per collection point

-1,839

Method of return

50% manual / 50% automatic

Container deposit markings

For the first nine years of system operation, deposit containers featured only small text without any visual deposit markings. In 2015, the system underwent a significant overhaul, making logo-based container markings mandatory.

Refund payment options

Cash

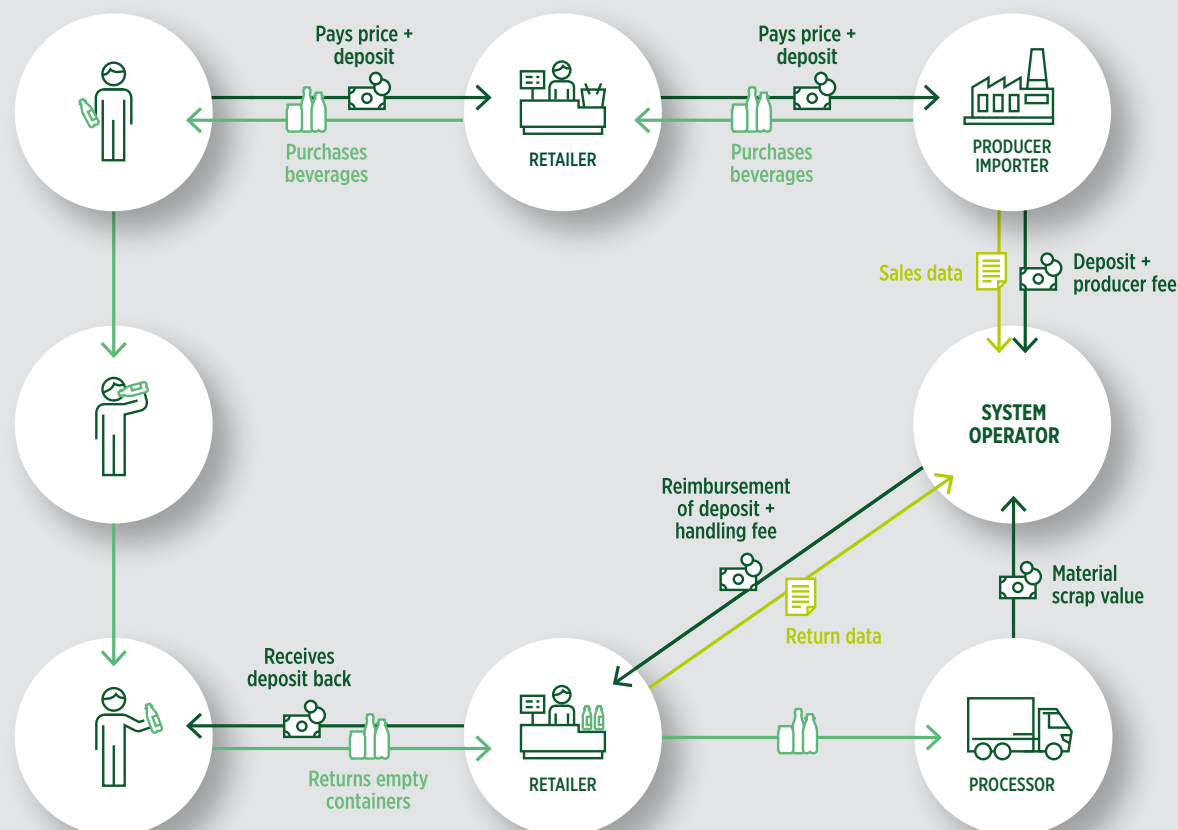
Barcode-based system?

Partial

Return rate (2022)

Plastic (PET)	Metal	Glass	Total
87%	80%	77%	79%

Money, material & data flow



¹ From 2006 to end of 2022, the deposit value in Croatia's deposit system was 0.50 HRK per container; however, following Croatia's adoption of the euro as its official currency on 1 January 2023, the deposit value is now €0.07 (USD\$0.08). While the deposit is now charged in euros, it's important to note that legislative Acts adopted prior to the implementation of the euro (e.g., those outlining producer and handling fees) still refer to currency in Croatian kuna.



Denmark

Population: **6.0m**

Population density: **140.6/km²**

GDP per capita, PPP (international \$): **76,687.9**

System operator's website:

Sources

- 1) Dansk Retursystem. "Where to take bottles and cans." Available at: <https://danskretursystem.dk/en/about-deposits/where-return/>
- 2) Dansk Retursystem A/S. "Årsrapport 2023." Available at: <https://danskretursystem.dk/app/uploads/2024/03/Aarsrapport-2023-samlet.pdf>
- 3) Dansk Retursystem. "Satser for håndterings-godtgørelse 2023-2024." Available at: https://danskretursystem.dk/app/uploads/2024/02/HG_satser_2023_v2.pdf
- 4) Dansk Retursystem A/S. "Driftsgebyrer 2024." Available at: https://danskretursystem.dk/app/uploads/2023/11/Driftsgebyrer_2024.pdf
- 5) Dansk Retursystem A/S. "Gennemsnitsgebyrer og pantetiketter 2024." Available at: https://danskretursystem.dk/app/uploads/2023/11/Gennemsnitsgebyrer_2024.pdf
- 6) Dansk Retursystem A/S. "Deposit marks and amounts." Available at: <https://danskretursystem.dk/en/about-deposits/deposit-marks-and-amounts/>
- 7) Dansk Retursystem A/S. "Driftsgebyrer for 1. April til 31. December 2024." Available at: https://danskretursystem.dk/app/uploads/2024/03/Driftsgebyrer_2024-pr-1-april-2024.pdf
- 8) Personal communication with Hanne Svenningsen, Head of Environment and Climate, Dansk Retursystem, 27 March 2024.

Legislative framework

Name of legislation

Statutory Order on Deposits and Collection etc. of Packaging for Beer and Certain Soft Drinks, Order No. 626 of 30/05/2023 under the Environmental Protection Act

Legislation enacted

May 2001

Appointment of system operator

June 2001

System started

23 September 2002

Key updates

- › March 2005 – expansion to include alcohol soft drinks ('alcopops'), cider, and energy drinks
- › April 2008 – expansion to include non-carbonated drinks (e.g., mineral water, lemonade, iced tea)
- › January 2020 – expansion to include fruit juices and fruit concentrates

Regulatory authority

Danish Environmental Protection Agency (Miljøstyrelsen)

Legislated targets

None

Scope

Material type

Plastic (predominantly PET), metal (predominantly aluminium), glass

Beverage type

Ready-to-drink alcohol and non-alcohol beverages including beer, carbonated drinks (soft drinks with an alcohol content up to 0.5%), fermented drink products other than wine and alcohol drinks made from fruit (such as cider with an alcohol content <10%), mixer products (spirits, wine or other fermented

products mixed with other drinks such as soft drinks, cider or juice), mineral water, water, lemonade, iced tea, syrup, juice

Size

<20L (5.28 gal)

Excluded

Milk and milk-based products, cocoa, wine and spirits, plastic bottles >10L (2.64 gal) containing water/spring water/non-carbonated mineral water, certain types of barrels or casks, packaging made of cardboard (including laminates consisting of cardboard and other materials)

Is there a DRS for refillables?

Yes (11% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

› Variable rate:

- › Metal, glass <1L (0.26 gal): 1 DKK (€0.13, USD\$0.15)
- › Plastic <1L (0.26 gal): 1.5 DKK (€0.20, USD\$0.22)
- › Metal, glass, plastic 1-20L (0.26 – 5.28 gal): 3 DKK (€0.40, USD\$0.45)

Handling fee (2024)

Variable rate:

› Manual:

- › Metal: 4.6 øre (€0.006, USD\$0.007)
- › Plastic < 1L (0.26 gal): 7.5 øre (€0.010, USD\$0.011)
- › Plastic > 1L (0.26 gal): 10.8 øre (€0.01, USD\$0.02)
- › Glass: 15.3 øre (€0.02, USD\$0.02)



› RVM with compaction:

- › Metal: 2.7 to 3.7 øre (€0.004-€0.005, USD\$0.004-\$0.006)
- › Plastic <1L (0.26 gal): 3.2 to 4.1 øre (€0.004-€0.006, USD\$0.004-\$0.006)
- › Plastic >1L (0.26 gal): 3.5 to 5.6 øre (€0.005-€0.008, USD\$0.005-\$0.008)
- › Glass: 4.0 to 7.9 øre (€0.005-€0.01, USD\$0.006-\$0.01)

› RVM with collection bags:

- › Metal: 4.6 øre (€0.01, USD\$0.01)
- › Plastic <1L (0.26 gal): 4.4 øre (€0.01, USD\$0.01)
- › Plastic >1L (0.26 gal): 9.4 øre (€0.01, USD\$0.01)
- › Glass: 5.2 øre (€0.01, USD\$0.01)

Producer fee (2024)

- › Plastic: 0-170 øre (€0.00-€0.23, USD\$0.00-\$0.25)
- › Aluminium: none
- › Steel: 7-57 øre (€0.01-€0.08, USD\$0.01-\$0.09)
- › Glass: 0-459 øre (€0.00-€0.62, USD\$0.00-\$0.68)

Circular economy surcharge (2024)¹

- › Plastic (e.g., coloured plastic, PVC, PP): 8-23 øre (€0.01-€0.03, USD\$0.01-\$0.03)
- › Aluminium (e.g., plastic sleeve, paper label): 5-22 øre (€0.01-€0.03, USD\$0.01-\$0.03)
- › Glass (e.g., plastic closure, sleeve made of PVC): 2-68 øre (€0.003-€0.09, USD\$0.003-\$0.10)

System structure & administration

Clearing system

Centralised

System operator

Dansk Retursystem A/S (private non-profit organisation established by several breweries together with the Danish retail trade; ownership is split as follows: Dansk Retursystem Holding [85.6%], which is owned by Carlsberg, Royal Unibrew, Thisted Bryghus, and Bryggeriet Fuglsang; Harboes Bryggeri A/S [14.3%]; and A/S Bryggeriet Vestfyen [0.1%])

System finance

Material revenues, unredeemed deposits, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-retail: Retailers with RVMs must accept all types of single-use drinks packaging. Stores without RVMs that sell drinks must accept the same types of packages as those they sell regardless of the brand. In addition to retail locations, consumers can return containers in bulk to 'Pantstations' (buildings designed for the sole purpose of accepting empty containers). 'Pantstations' are available in 12 towns/cities throughout the country.

Online takeback? Yes

Number of collection points

-13,292

Population per collection point

~448

Method of return

90% automated / 10% manual

Barcode-based system?

Yes

Container deposit markings

The deposit mark comprises a deposit rate circled by two arrows above a deposit code consisting of five black dots, as well as the letters "Pant A", "Pant B" or "Pant C", which represent different deposit amounts. Producers can choose between primary marking (printing the mark directly on the packaging or on the label of the packaging) or secondary marking (using a self-adhesive deposit mark which they attach to the container).

Refund payment options

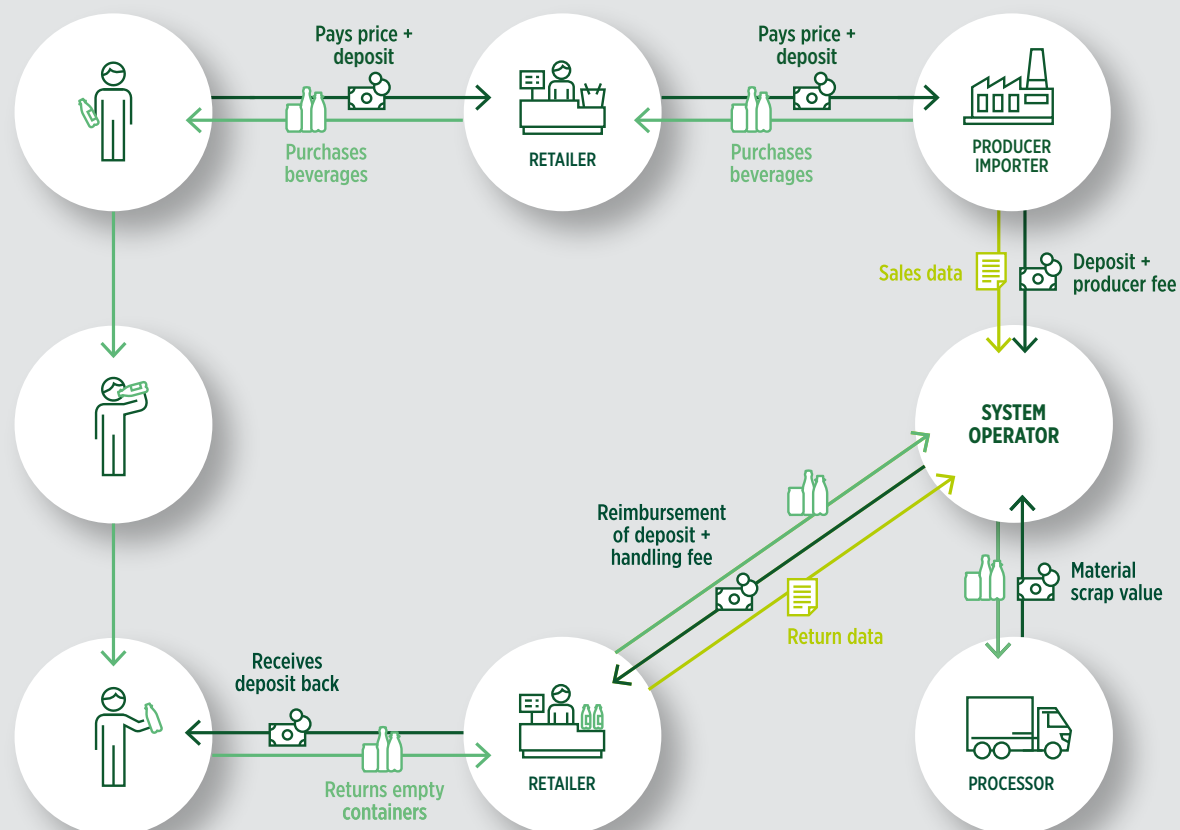
Cash, deposit on customer's credit card (for containers returned to 'Pantstations'), donation to charity (at some stores)



Return rate (2023)

Plastic (PET)	Metal	Glass	Total
91%	93%	88%	92%

Money, material & data flow



¹ Materials that are more difficult to recycle are subject to a circular economy surcharge.



Estonia

Population: **1.4m**

Population density: **31.0/km²**

GDP per capita, PPP (international \$): **48,992.1**

System operator's website:

Sources

- 1) Eesti Pandipakend. 2024. "Pakendite Üleandmise Ja Sellega Seonduvate Teenuste Leping - Lisa 1 Huvitise Määrad." Available at: <https://www.eestipandipakend.ee/documents/Leping-Jaem%C3%BC%C3%BCjaga-lisa-1-h%C3%BCvitise%20m%C3%A4%C3%A4rad.pdf>
- 2) Eesti Pandipakend. "Majandusaasta Aruanne." Available at: https://www.eestipandipakend.ee/documents/epo-aastaaruanne-2023.pdf?_gl=1*19vind8*up*MQ..*qa*MIvODE00DqxOS4xNzIIOTgIMDY0*_ga_X36NYFGHJT*MTcyNTk4NTA2Mv4xLjAuMTcyNTk4NTA2Mv4xLjAuMA..
- 3) Eesti Pandipakend. 2024. "Pakendite Ja Pakendijäätmete Kogumise Ja Taaskasutuse Korraldamise Leping - Lisa 1 Käitlustasu Määrad, Teenustasu Määr, Liitumistasu Ja Registreerimistasu Määrad." Available at: <https://www.eestipandipakend.ee/documents/Leping%20pakendijettev%C3%B5tiaga%20%E2%80%93%20lisa1%20k%C3%A4itlustasud.pdf>
- 4) Personal communication with Kaupo Karba, CEO, Eesti Pandipakend OÜ, 6 March 2024.

Legislative framework

Name of legislation

Packaging Act (Pakendiseadus) and Packaging Excise Duty Act (Pakendiaktsiisi seadus)

Legislation enacted

June 2004

Appointment of system operator

March 2005

System started

1 May 2005

Key updates

- › June 2010 – deposit increase for cans
- › July 2011 – deposit increase for all container types and sizes
- › February 2015 – deposit increase for all container types and sizes (unified deposit level)
- › 2021 – amendment to allow producers of some low and strong alcohols and syrups to voluntarily join the DRS

Regulatory authority

Ministry of Environment

Legislated targets

- › **Recycling:**
- › Plastic (PET): 85% (by weight)
- › Glass: 85% (by weight)
- › Metal: 50% (by weight)

Scope

Material type

Plastic (PET), metal (aluminium, steel), glass

Beverage type

Soft drinks, water, juice, juice concentrates, nectars, beer, cider, perry, low-alcohol (\leq 6% alcohol content) drinks

Size:

100ml to <3L (0.03 to 0.79 gal)

Excluded¹

Strong alcohol drinks (vodka, wine, etc. – excluded but producers can join voluntarily since 2021), dairy products, cartons, aseptic containers

Is there a DRS for refillables?

Yes (13% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

- › **Flat rate:** €0.10 (USD\$0.11)

Handling fee (2024)

Variable rate:

› Manual:

- › Plastic and metal: €0.0137 + VAT (USD\$0.015)
- › Glass: €0.0154 + VAT (USD\$0.017)

› RVM with compaction:

- › Plastic: €0.0377 + VAT (USD\$0.042)
- › Metal: €0.0331 + VAT (USD\$0.037)

› RVM without compaction:

- › Glass: €0.0488 + VAT (USD\$0.054)

- › An additional fee of €0.0208/unit is paid annually as a lump sum to collection points with RVMs processing an average of up to 27,000 units/month



Producer fee (2024)**Containers with national barcode:**

Steel: €0.0300 (USD\$0.033)

Aluminium ≤330ml: none

Aluminium >330ml: €0.0100 (USD\$0.011)

Clear plastic ≤750ml: €0.0126 (USD\$0.014)

Clear plastic >750ml: €0.0212 (USD\$0.023)

Coloured plastic ≤750ml: €0.0186 (USD\$0.021)

Coloured plastic >750ml: €0.0322 (USD\$0.036)

Single-use glass ≤500ml: €0.0442 (USD\$0.049)

Single-use glass >500ml: €0.0558 (USD\$0.062)

Containers with international barcode:

Steel: €0.0300 (USD\$0.033)

Aluminium ≤330ml: none

Aluminium >330ml: €0.0100 (USD\$0.011)

Clear plastic ≤750ml: €0.0176 (USD\$0.019)

Clear plastic >750ml: €0.0262 (USD\$0.029)

Coloured plastic ≤750ml: €0.0236 (USD\$0.026)

Coloured plastic >750ml: €0.0372 (USD\$0.041)

Single-use glass ≤500ml: €0.0492 (USD\$0.054)

Single-use glass >500ml: €0.0608 (USD\$0.067)

System structure & administration

Clearing system

Centralised

System operator

Eesti Pandipakend OÜ (state-accredited, non-profit organisation owned by producers and retailers through relevant trade associations; ownership is split as follows: the Association of Producers of Soft Drinks (25%), the Association of Importers of Soft Drinks and Beer (25%), the Estonian Association of Brewers (25%), and the Estonian Retailers Association (25%])

System finance

Material revenues, unredeemed deposits, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Retail: All retailers ≥200m² (2,153 ft²) must take back containers. Retailers <20m² (215ft²) are automatically exempt, and retailers 20-199m² can apply to their local municipality to be exempt.

Online takeback? No**Number of collection points**

800 retail stores, including over 500 with RVMs.
In addition, there are 500 HORECA collection points.

Population per collection point

~1,718

Method of return

93% automated / 6-7% manual

Barcode-based system?

Yes

Container deposit markings

Since 2009, containers must be marked with a deposit emblem, which indicates the type of package (material), the volume, and the value of the deposit

Refund payment options

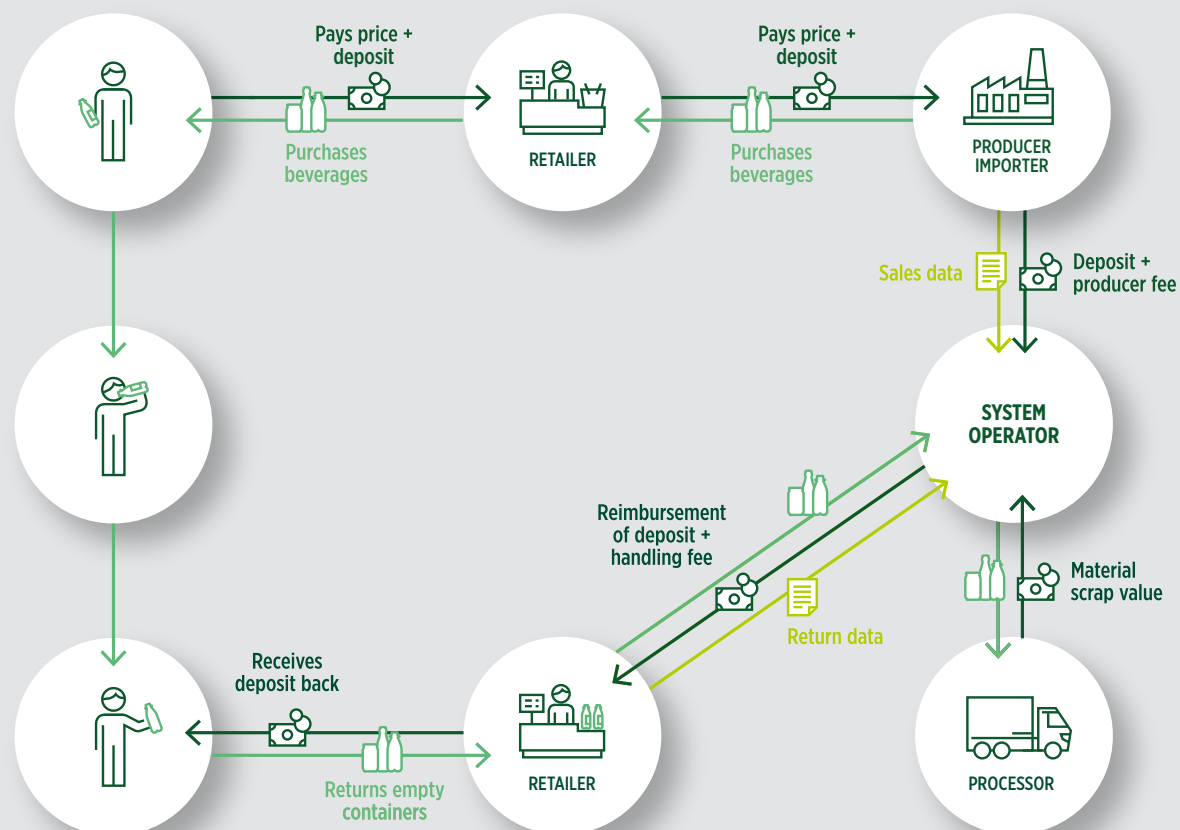
Cash, retail voucher, donation to charity (donation option available on 60% of RVMs)



Return rate (2023)

Plastic (PET)	Metal	Glass	Total
89%	85%	88%	89%

Money, material & data flow



¹ In 2021, changes were made to the Estonian Packaging Act to allow producers of alcohol beverages with an alcohol content >6% to voluntarily join the DRS.



Finland

Population: **5.6m**

Population density: **18.3/km²**

GDP per capita, PPP (international \$): **65,060.7**

System operator's website:



Sources

- 1) PALPA. "Deposit-based system." Available at: <https://www.palpa.fi/beverage-container-recycling/deposit-refund-system/#return-rates>
- 2) PALPA. "Price list – PET bottle." Available at: https://www.palpa.fi/static/studio/pub/Materiaalipankki/Hinnastot/Price%20list_PET_2024-01-01.pdf
- 3) PALPA. "Price list – Beverage can." Available at: https://www.palpa.fi/static/studio/pub/Materiaalipankki/Hinnastot/Price%20list_Can_2024-01-01.pdf
- 4) PALPA. "Price list – Glass bottle." Available at: https://www.palpa.fi/static/studio/pub/Materiaalipankki/Hinnastot/Price%20list_Glass%20bottle_2024-01-01.pdf
- 5) Personal communication with Tommi Vihavainen. Suomen Palautuspakkaus Oy (PALPA), 8 March 2024

Legislative framework

Name of legislation

Government Decree on a return system for beverage containers (526/2013), Waste Act (646/2011), and Act on Excise Duty on Certain Beverage Packaging (2037/2004)

Legislation enacted

1994

Establishment of system operator

1996

System started

March 1996

Key updates

- › 2008 – expansion to PET bottles
- › 2012 – expansion to glass bottles

Regulatory authority

Ministry of Environment

Legislated targets

Recycling: 90% (by weight)

Scope

Material type

Plastic (predominantly PET), metal (aluminium), glass

Beverage type

Almost all soft drinks; water; beer; cider; sport drinks; juice and beverage concentrates; liquor/spirits/wine sold by Alko

Size

100ml to 3L (0.03 gal to 0.79 gal)

Excluded

Milk

Is there a DRS for refillables?

Yes (2% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

› Variable rate:

- › Plastic ≤350ml (0.09 gal): €0.10 (USD\$0.11) (VAT included)
- › Plastic 351ml to 999ml (0.09 – 0.26 gal): €0.20 (USD\$0.22) (VAT included)
- › Plastic ≥1L (0.26 gal): €0.40 (USD\$0.44) (VAT included)
- › Metal: €0.15 (USD\$0.17) (VAT included)
- › Glass: €0.10 (USD\$0.11) (VAT included)

Handling fee (2024)

Variable rate:

› Manual (processing compensation):

- › Plastic: €0.0201 (USD\$0.022)
- › Metal: €0.0129 (USD\$0.014)
- › Glass: €0.0190 (USD\$0.021)

› RVM (processing compensation + device compensation):

- › Plastic: €0.0252 (USD\$0.028)
- › Metal: €0.0250 (USD\$0.028)
- › Glass: €0.0200 (USD\$0.022)

- › In addition to handling fees, retailers equipped with at least one RVM (that is no more than 6 years old) receive a fixed compensation fee of €99.04 (USD \$109.71) for automated collections, paid twice monthly.

Producer fee (2024)

› Plastic:

- › Clear PET <1L: €0.02105 (USD\$0.023)
- › Clear PET ≥1L: €0.04211 (USD\$0.047)
- › Coloured PET <1L: €0.03344 (USD\$0.037)
- › Coloured PET ≥1L: €0.05350 (USD\$0.059)
- › PET mixed material <1L: €0.10489 (USD\$0.12)
- › PET mixed material ≥1L: €0.15734 (USD\$0.17)

Note: Unlike most other European DRSs, Finland's DRS is voluntary; producers are not obliged to participate; however, if they don't create or join a DRS, they must pay a packaging tax to the government. This tax, in place since 1994, is levied on soft and alcohol drinks. The rate is €0.51/L for product lines not part of the DRS.



› Aluminium:

€0.00971 (USD\$0.011)

› Glass:

› Retail glass ≤500ml (international barcode): €0.08130 (USD\$0.09)

› Retail glass >500ml (international barcode): €0.13550 (USD\$0.15)

› Retail glass ≤500ml (national barcode): €0.07453 (USD\$0.083)

› Retail glass >500ml (national barcode): €0.12872 (USD\$0.14)

› HORECA glass ≤500ml: €0.12449 (USD\$0.14)

› HORECA glass >500ml: €0.20748 (USD\$0.23)

System structure & administration

Clearing system

Centralised

System operator

Suomen Palautuspakkaus Oy (PALPA) (not-for-profit company; ownership is split 50/50 between retailers and drinks producers, including Alko Oy, Inex Partners Oy (S Group), Kesko Oyj, Oy Hartwall Ab, Olvi Oyj, and Oy Sinebrychoff Supply Company Oy)

System finance

Material revenues, unredeemed deposits, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Retail: All retailers, kiosks, and service stations selling in-scope beverages must take back containers. Small retailers can refuse container returns if the volume is disproportionately high in relation to its size.

HORECA outlets can also register as a collection point.

Online take-back? Yes

Number of collection points

There are ~4,000 RVMs in operation with 4,000 retail collection points and an additional 9,000 HORECA recycling points.

Population per collection point

1,401

Method of return

97% automated / 3% manual

Barcode-based system?

Yes

Container deposit markings

Containers must be marked with the deposit marking, which consists of an arrow symbol surrounding the deposit value

Refund payment options

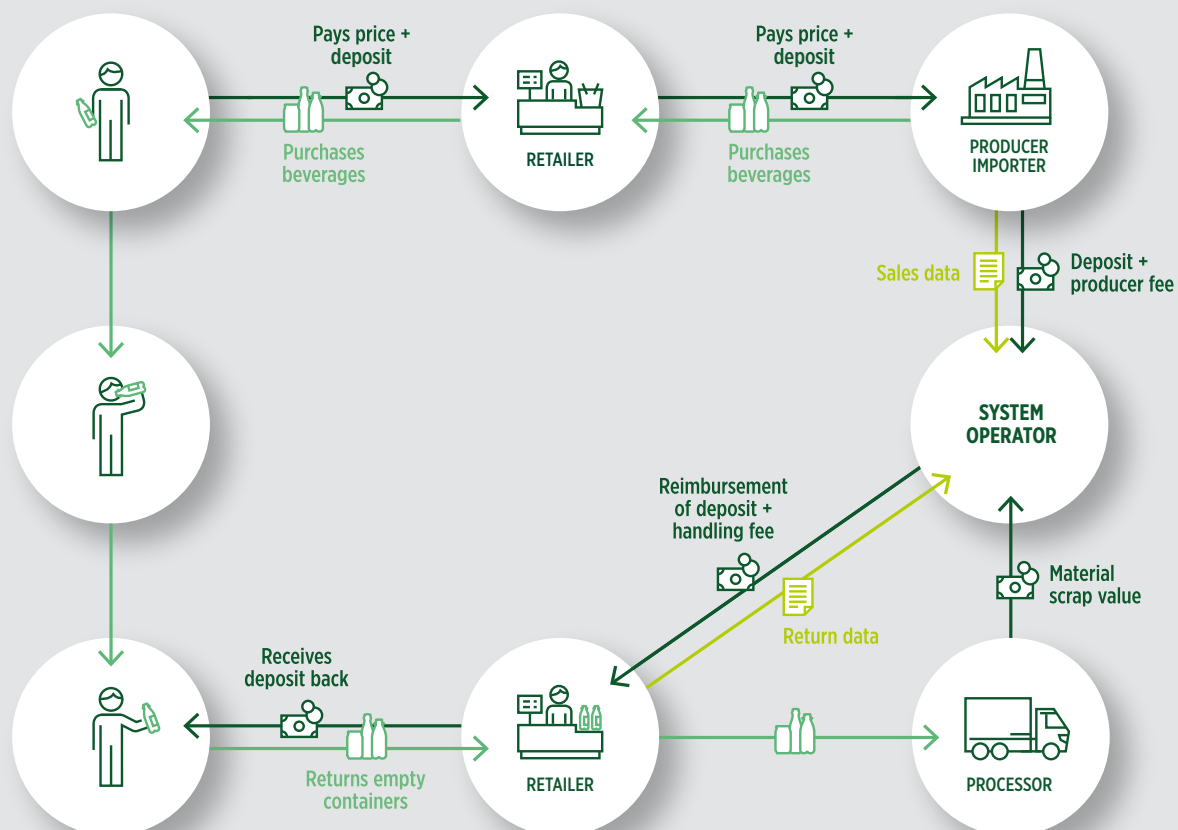
Cash, donation to charity



Return rate (2023)

Plastic (PET)	Metal	Glass	Total
90%	98%	99%	97%

Money, material & data flow



Germany

Population: **83.4m**

Population density: **237.2/km²**

GDP per capita, PPP (international \$): **69,338.3**

Standard setting organisation's website:

Sources

- 1) DPG Deutsche Pfandsystem GmbH. 29 May 2023. "Expansion of deposit obligation as of 1 January 2024." Available at: <https://dpg-pfandsystem.de/index.php/en/the-one-way-deposit-system/useful-information/108-legal-changes/345-expansion-of-deposit-obligation-as-of-1-january-2024.html>.
- 2) DPG Deutsche Pfandsystem GmbH. 14 December 2022. "International expansion of deposit systems – EU presents draft of EU Packaging Regulation." Available at: <https://dpg-pfandsystem.de/index.php/en/the-one-way-deposit-system/useful-information/108-legal-changes/347-draft-eu-packaging-waste-directive.html>.
- 3) DPG Deutsche Pfandsystem GmbH. "Overview of drinks subject to deposit." Available at: <https://dpg-pfandsystem.de/images/pdf/220105-DPG-Overview-drinks-3cols-S.pdf>.
- 4) DPG Deutsche Pfandsystem GmbH. 4 January 2023. "Small but powerful – what a single icon can do." Available at: <https://dpg-pfandsystem.de/index.php/en/the-one-way-deposit-system/useful-information/109-notice/343-small-but-powerful.html>.
- 5) "Gesetz über das Inverkehrbringen, die Rücknahme und die hochwertige Verwertung von Verpackungen (Verpackungsgesetz - VerpackG)." Available at: <https://www.gesetze-im-internet.de/verpackg/BJNR223410017.html#BJNR223410017BJNG000400000>.
- 6) Kalkan, D. 15 December 2020. "How the deposit return scheme was introduced in Germany." Available at: <https://www.economia.rs/how-the-drs-for-packaging-was-introduced-in-germany/>.

Legislative framework

Name of legislation

German Packaging Act (VerpackG)
(replaced the Packaging Ordinance)

Legislation enacted¹

July 1991

Establishment of system operator

Not applicable

System started

January 2003

Key updates

- › January 2022 – expansion to alcohol drinks and juices in plastic bottles and cans, as well as milk-based mixed drinks in cans
- › January 2024 – expansion to plastic bottles containing milk, mixed milk drinks and all drinkable milk products

Regulatory authority

Ministry of Environment

Legislated targets

Reuse: 70%

› Separate collection:

- › Plastic: 77% (by weight) from 1 January 2025, increasing to 90% from 1 January 2029

› Recycling:

- › Overall: 65% (by weight) by 31 December 2025, increasing to 70% by 31 December 2030
- › Plastic: 50% (by weight) by 31 December 2025
- › Aluminium: 50% (by weight) by 31 December 2025
- › Ferrous metals and glass: 70% (by weight) by 31 December 2025
- › Paper and cardboard: 75% (by weight) by 31 December 2025

Scope

Material type

Plastic (predominantly PET), metal (aluminium), glass

Beverage type

Water (mineral, spring, table and medicinal waters and all other drinkable waters carbonated and non-carbonated), carbonated and non-carbonated soft drinks (e.g., lemonades, fizzy drinks, iced tea, milk substitutes such as oat milk, soy milk, etc.), milk and mixed milk drinks and other drinkable milk products, fruit juices and vegetable juices, non-carbonated fruit and vegetable nectars, carbonated fruit spritzers, dietary drinks exclusively offered to infants or young children (if packaged in cans), dietary drinks not exclusively offered to infants or young children (regardless of material), sparkling wine/prosecco as well as sparkling drinks made from non-alcohol or reduced-alcohol wine, wine (if packaged in cans or plastic bottles), beer (including non-alcohol beer), other alcohol products and alcohol drinks (including de-alcoholised mixed drinks)

Size

100ml to 3L (0.03 to 0.79 gal)

Excluded

Wines and spirits in single-use glass and beverage cartons in the form of block, gable or cylinder packaging as well as polyethylene tubular bags and foil stand-up pouches

Is there a DRS for refillables?

Yes (50% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value:

› Flat rate:

€0.25 (USD\$0.28) (VAT included)

Handling fee (2024)²

None

Producer fee (2024)

None (though there are no producer fees, all DPG members pay a small annual fee based on the size of their operations)

System structure & administration

Clearing system

Decentralised: There are several clearing service providers including CCR Clearing GmbH, Clearing Solution GmbH, Der Grüne Punkt – Duales System Deutschland GmbH, Intercycle GmbH, Interseroh Pfand-System GmbH, Reconsys Dienstleistungsgesellschaft mbH, Remondis Recycling GmbH & Co. KG

System operator

Producers and retailers (in the case of private labels)

Standard setting organisation

Deutsche Pfandsystem GmbH (DPG) (not-for-profit company founded in 2005; operates the central database for deposit clearing and manages the marking standards related to the deposit label [DPG security mark and barcode identification number]; its shareholders include the German Retail Federation [50%] and the Federation of German Food and Drink Industries [50%])

System finance

Annual membership fees paid by producers go to DPG to cover costs related to maintaining the central barcode database. All other operational costs (e.g., operation of redemption points, logistics) are covered by each individual party.

Unredeemed deposits

Producers and retailers (in the case of private labels)

Material owner

Retailers

Container return & refund points

Collection model

Return-to-Retail: Retailers must take back containers of the same type they sell (i.e., a retailer that only sells PET bottles is not obliged to take back aluminium or glass containers, but must accept all PET bottles regardless of their size or brand). Retailers <200m² (2,153 ft²) are exempt; they only need to take back containers of the products they sell.

Online take-back? Yes

Number of collection points

Approximately 130,000

Population per collection point

~642

Method of return

90% automated / 10% manual

Barcode-based system?

Yes

Container deposit marking

Containers must be marked with the DPG logo, which is printed directly onto containers/labels (the printing of this code requires a special ink that is supplied only through authorised can and label producers)

Refund payment options

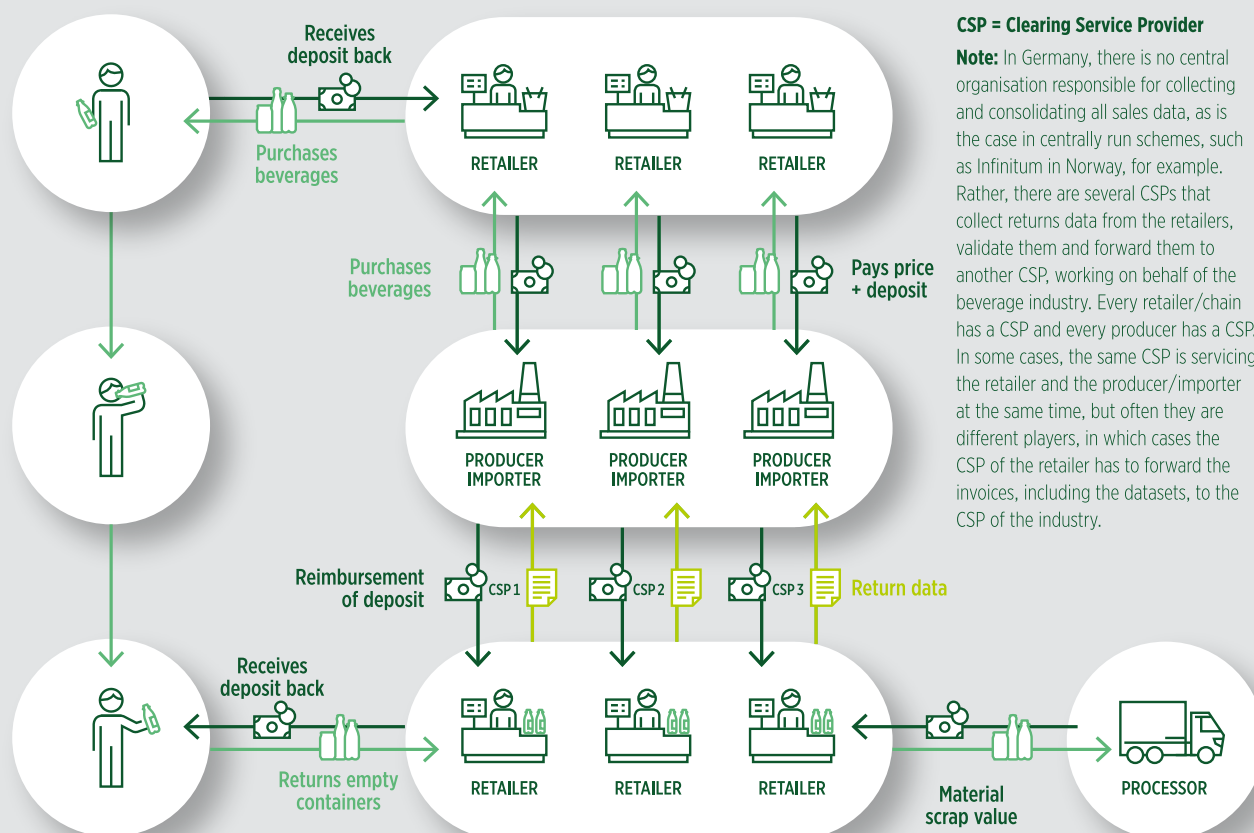
Cash, donation to charity



Return rate (2023)³

Total
98%

Money, material & data flow



¹ This regulation stipulates that the national market share of refillable packaging must reach 72%, and in case this quota is not met, a mandatory deposit will be imposed for single-use beverage packaging. After only a few years, the share of refillable packaging fell below the target quota, and in early 2003, a mandatory DRS was introduced.

² Although retailers do not receive a handling fee, they own the collected material and are responsible for selling it. This has led to some large retailers, such as Lidl, to become vertically integrated and expanding into processing and recycling of material, producing recycled PET to feed back into the supply chain.

³ DPG, the standard-setting organisation, reports an overall return rate of "more than 98%" on its website. However, it's worth noting that due to the decentralised nature of Germany's system, comprehensive performance data is unavailable and there is no transparency on how the return rate is calculated.



Greenland

Population: **0.06m**

Population density: **0.0/km²**

GDP per capita, PPP (international \$): **68,086.5**

System operator's website:



In 2002, Greenland implemented a DRS specifically for glass and plastic bottles used for beer and carbonated soft drinks. This initiative originated from an executive order issued in the early 1990s, which addressed the packaging requirements for these beverages. The system set an ambitious target of achieving a 90% return rate for the specified containers. The DRS operated exclusively in West Greenland, where it mandated that beer and carbonated soft drinks must be sold and served only in refillable packaging. Notably, this policy did not extend to other beverages such as drinking water, wine, or spirits. As a result, only four specific types of plastic and glass bottles were authorised for the sale of beer and soft drinks, while single-use containers for these beverages were prohibited in West Greenland. The system was highly effective, with a return rate of 98.5% and a deposit set at 2 DKK (USD \$0.29 0.27 €) per container. However, the less densely populated regions of North and East Greenland were exempt from this scheme, allowing beverages in these areas to be imported in alternative packaging.

On 1 January 2024, it was announced that the system for refillable containers would be phased out within eight months,

and that a new DRS for single-use containers will be expanded nationwide. This new system encompasses plastic, metal, and glass containers, though specific details about which beverages are included are not available. The deposit remains a flat rate of 2 DKK for all materials. Utertitsisa is responsible for operating the system, which is centralised and financed through material revenues, unredeemed deposits, and producer fees.

The DRS utilises a hybrid collection model: retailers with RVMs are required to accept all types of single-use drinks packaging, while stores without RVMs that sell drinks must accept the same types of packages as those they sell, regardless of the brand. As of August 2024, there are 51 collection points, translating to one collection point for every 1,118 people. The system supports both manual and automatic container returns and is barcode-based. Consumers receive their deposit refunds in the form of vouchers.

At the time of writing, these are the most detailed updates available on Greenland's DRS. It is expected that more information will become available for the 2026 version of the report.

Money, material & data flow

Not available

Sources

- 1) Nordic Council of Ministers. 2019. "Analysis of Nordic regulatory framework and its effect on waste prevention and recycling in the region." <https://norden.diva-portal.org/smash/get/diva2:1304371/FULLTEXT01.pdf>
- 2) Personal communication with Michael Loewe, VP Public Affairs, Head of System Design, TOMRA, 4 September 2024



Hungary

Population: **9.6m**

Population density: **105.7/km²**

GDP per capita, PPP (international \$): **45,942.2**

System operator's website:

Sources

- 1) Mercédesz, H. 7 July 2024. "Deposit refund system – New era in Hungarian stores: Bottle redemption system takes off." Available at: <https://dailynewshungary.com/bottle-deposit-refund-system-hungary/>
- 2) Mohu. <https://www.mohu.hu/visszavaltasi-rendszer/visszavaltasi-pontok>
- 3) Mohu. 13 August 2024. "More than 100 million bottles, jars and boxes returned in a few weeks in Hungary." Available at: <https://mohu.hu/media/hirek/tobb-mint-100-millio-palackot-uveget-es-dobozt-vallottak-vissza-par-het-alatt-magyarorszagon.html>
- 4) Mohu. "Dokumentumtar." Available at: <https://mohu.hu/media/dokumentumtar#pickedCategory=45&pickedSubCategory=136>
- 5) https://repoint.hu/storage-mohu_repont/documents/hu/DRS_Rendelet.pdf
- 6) Vontin, C. 24 October 2024. "Half a billion bottles returned." Available at: <https://www.budapesttimes.hu/hungary/half-a-billion-bottles-returned/>

Legislative framework

Name of legislation

Act II of 2021 regarding the modification of energy and waste related laws, Act LIII of 1995 on the General Rules of Environmental Protection and the Act CLXXXV of 2012 on Waste

Government Decree 450/2023. (X.4.)

Legislation enacted

2021

Appointment of system operator

July 2022

System start

1 January 2024

Key updates

None

Regulatory authority

Ministry of Energy or Environmental Management and Enforcement Agency (MOHU)

Legislated targets

None

Scope

Material type

Plastic, metal, glass

Beverage type

All ready-to-drink or concentrated beverages

Size:

100ml to 3L (0.03 to 0.79 gal)

Excluded¹

Milk and milk-based beverages, bottles of special shapes and sizes that cannot be returned by RVMs, products of small-scale producers (defined as those placing up to 5,000 units/year on the market)

Note: In addition to establishing a mandatory DRS, the regulation also recognises the possibility of distributing products with a voluntary deposit. This means that a manufacturer can choose to apply the system to its packaging, which otherwise would not be subject to the DRS, provided that certain conditions are met.

Is there a DRS for refillables?

Yes (7% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer/Distributor

Deposit value

› **Flat rate:** HUF 50 (€0.13, USD\$0.14)

Handling fee (2024)

› **Variable rate:**

› Manual (including HORECA): HUF 5 + VAT (€0.01, USD\$0.01)

› RVM: HUF 7.5 + VAT (€0.02, USD\$0.02)

Producer fee (2024):

› **Connection fees:**

› Plastic: HUF 18/kg (€0.05, USD\$0.05)

› Metal: HUF 23/kg (€0.06, USD\$0.06)

› Glass: HUF 1/kg (€0.003, USD\$0.003)

› **Service fees:**

› Plastic: HUF 219/kg (€0.56, USD\$0.61)

› Metal: HUF 186/kg (€0.47, USD\$0.52)

› Single-use bottles (except bottles of wine products subject to payment of a flat-rate): HUF 77/kg (€0.20, USD\$0.22)

› Glass (wine products subject to the payment of a flat-rate, except for sparkling wine): HUF 25/kg (€0.06, USD\$0.07)

› Glass (wine products subject to the payment of a flat-rate, including sparkling wine): HUF 24 (€0.06, USD\$0.07)



System structure & administration

Clearing system

Centralised

System operator

MOHU (MOL Hulladékgazdálkodási Zrt)

System finance

Unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-retail: Grocery retailers >400m² (4,306 ft²) must have RVMs to take back containers. The hours of operation for collection points must be the same as the store's opening hours. Smaller stores, as well as farmers, non-profit organisations, and catering companies, can join the system voluntarily; these organisations can apply for RVMs or join as a manual return point.

Online take-back? No

Number of collection points

4,000 (3,000 automated and 1,000 manual)

Population per collection point

2,396

Method of return

Mostly automated

Barcode-based system? Yes

Container deposit markings

Containers must be marked with the deposit symbol, which indicates the deposit amount

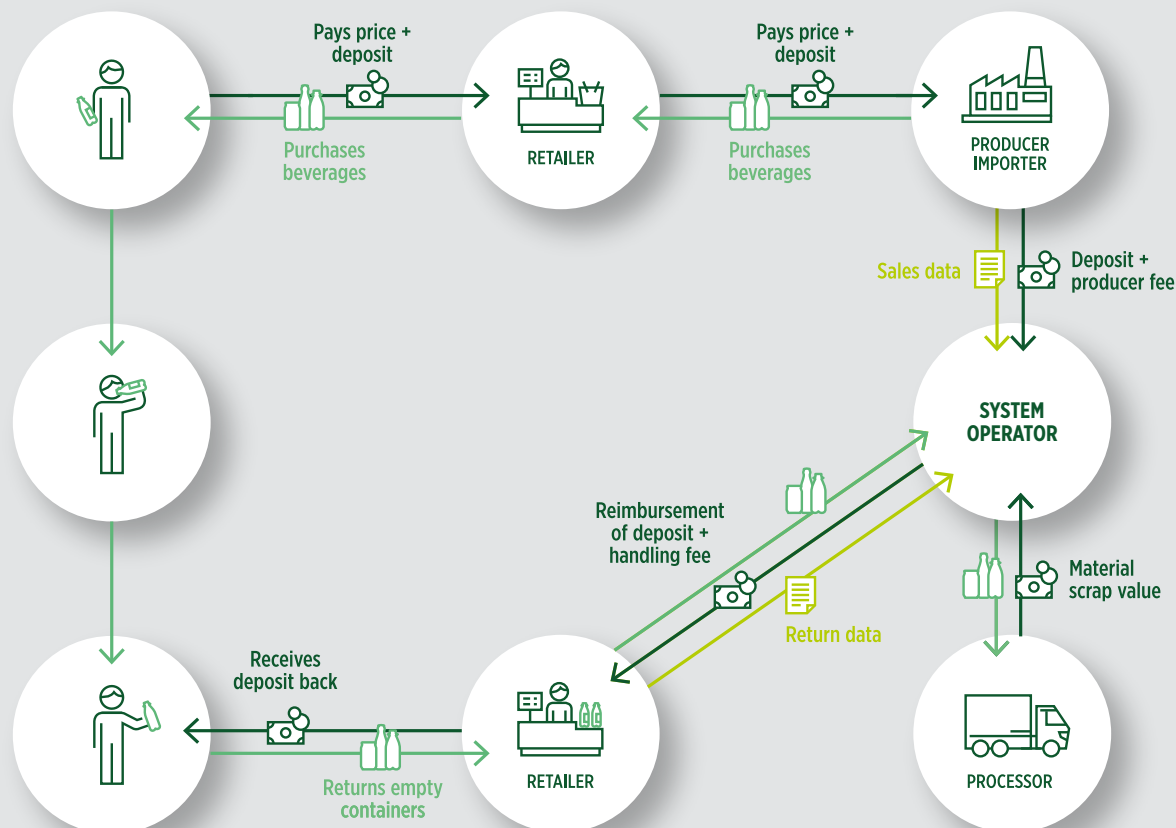
Refund payment options

Retail voucher (convertible to cash in-store or deducted from purchase amount), electronic funds transfer (credit to bank account), donation to charity

Return rate

Return rates are not available, however, as of 24 October 2024, half a billion bottles had been returned.

Money, material & data flow



¹ The regulation does not apply to specially shaped and sized bottles that are not returnable via RVM.



Iceland

Population: **0.4m**

Population density: **3.8/km²**

GDP per capita, PPP (international \$): **77,567.2**

System operator's website:



Sources

- 1) Bragadóttir, H., von Utfall Danielsson, C., Magnússon, R., Seppänen, S., Stefánsdóttir, A., and D. Sundén. 2014. "The Use of Economic Instruments in Nordic Environmental Policy 2010-2013."
- 2) Oosterhuis, F.H., Bartelings, H., Linderhof, V.G.M., van Beukering, P.J.H. March 2009. "Final report: Economic instruments and waste policies in the Netherlands – Inventory and options for extended use." Available at: https://www.academia.edu/61870729/Economic_instruments_and_waste_policies_in_the_Netherlands
- 3) Personal communication with Helgi Lárusson, Managing Director, Endurvinnslan, 26 February 2024 and 6 March 2024. <http://endurvinnslan.is/english/>
- 4) Skráp Sverningsen, L., Lærke Hansen, L., Munk Sørensen, M., von Bahr, E., Bragadóttir, H., Christian Uggeldahl, K., Søiland, H., Øyvind, L., Jørgen, S., and T. Hansen. 2019. "The Use of Economic Instruments in Nordic Environmental Policy 2014-2017."
- 5) Speck, S. 2006. "The Use of Economic Instruments in Nordic and Baltic Environmental Policy 2001-2005." Available at: https://www.google.ca/books/edition/The_Use_of_Economic_Instruments_in_Nordi/nnoJ9rPIQsUC?hl=en&bpv=1&dq=iceland+deposit+return+system+%2B+beverage+containers+%2B+ISK+5&pg=PA121&printsec=frontcover

Legislative framework

Name of legislation¹

Law No. 52/1989 (Law on Prevention of Environmental Pollution Caused by Disposable Packaging for Beverages) and Regulation 750/2017 (Regulation on the collection, recycling, and return fee for disposable beverage packaging)

Legislation enacted

1989

Appointment of system operator

May 1989

System started

August 1989

Key updates²

- › 2002 – deposit increase
- › 2010 – deposit increase
- › January 2021 – deposit increase
- › January 2023 – deposit increase

Regulatory authority

Ministry of Environment

Legislated targets

- › **Collection:**
- › Aluminium and PET: 90%
- › Glass: 85%

Scope

Material type

Plastic (predominantly PET), metal (aluminium), glass

Beverage type

Ready-to-drink alcohol and non-alcohol drinks

Size

All

Excluded

Milk and milk products, juice extract

Is there a DRS for refillables?

No (7% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

- › **Flat rate:**
- 20 ISK (€0.13, USD\$0.14)

Handling fee (2024)

- › **Flat rate:**
- 3 ISK (€0.02, USD\$0.02)

Producer fee (2024)

- › Aluminium: 0.4 ISK (€0.002, USD\$0.003)
- › Steel: 6.1 ISK (€0.04, USD\$0.04)
- › Large glass: 12.3 ISK (€0.08, USD\$0.09)
- › Small glass: 9.4 ISK (€0.06, USD\$0.07)
- › Coloured plastic: 4.1 ISK (€0.03, USD\$0.03)
- › Clear plastic: 1.6 ISK (€0.01, USD\$0.01)
- › Recycled PET: 0.6 ISK (€0.004, USD\$0.004)



System structure & administration

Clearing system

Centralised

System operator

Endurvinnslan (ownership is split between the government [Ministry of Finance], the government's alcohol and tobacco company [Vínbúðin], the Icelandic association of local authorities [Samband íslenskra sveitarfélaga], a metal treatment company [Rio Tinto], Icelandic scout association [Bandalag íslenskra skáta], three retailers [Kronan, Hagar, and Samkaup] and two Icelandic drink companies [Ölgerðin and Coca-Cola])

System finance

Material revenues, unredeemed deposits, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Depot

Barcode-based system?

Yes

Number of collection points

60+

Container deposit markings

None

Population per collection point

6,649

Refund payment options

Cash

Method of return

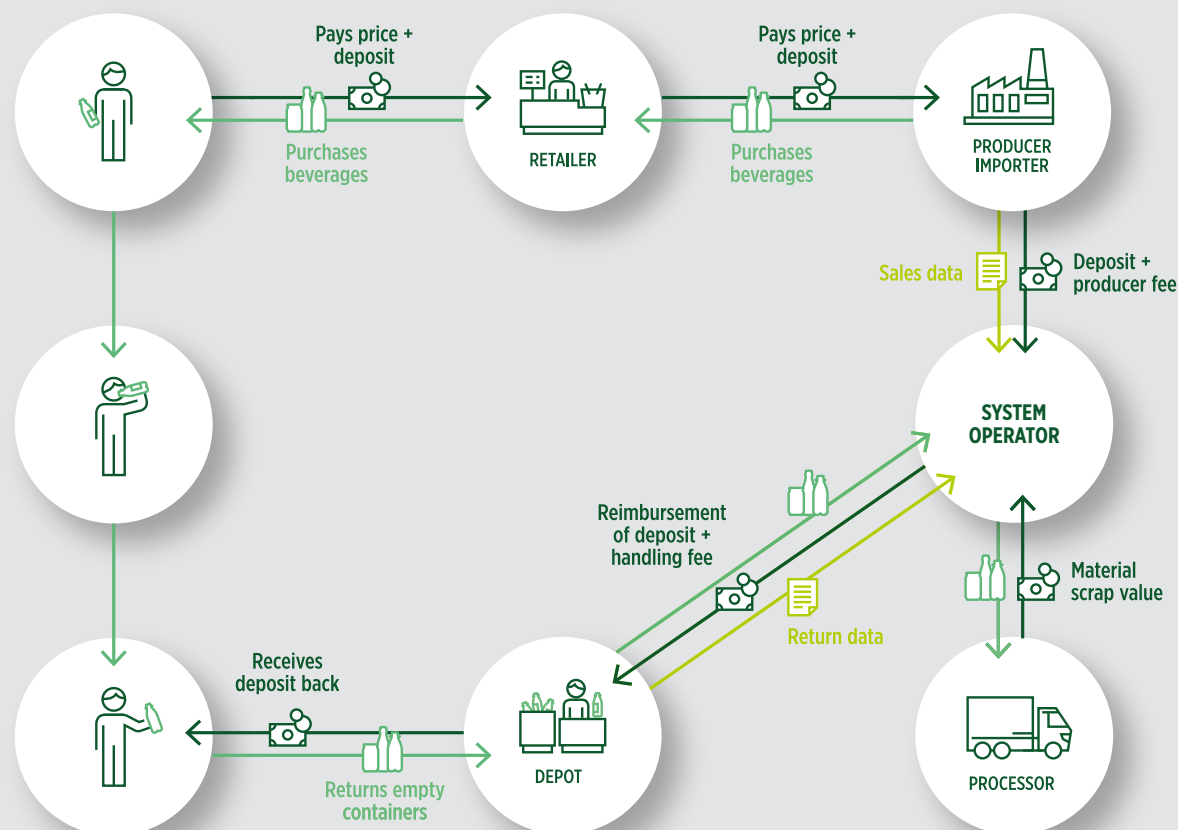
80% automated / 20% manual

Return rate (2023)

Plastic (PET)	Metal	Glass	Total
88.2%	90.1%	83.5%	88.5%

*Note: The return rates presented above reflect only containers returned through the DRS depot network and exclude those recovered through municipal kerbside programmes, such as the Green Dot system. The system operator estimates that an additional 4% of deposit containers are recovered via these other systems. Including these, the overall collection rate would reach 92.5%.

Money, material & data flow



¹ Regulation 750/2017 (Regulation on the collection, recycling and return fee for disposable beverage packaging) replaced Regulation 368/2000 (Regulation on collection, recycling and deposit on disposable packaging for drinks).

² When the deposit system started in 1989, the deposit value per container was 5 ISK (€0.03, USD\$0.04). During the period 2002-2005, deposit rates were between ISK 7.23 and ISK 10.63 (€0.05-€0.07, USD\$0.05-\$0.08), depending on material and size. Further information regarding timing of deposit increases over the years was unavailable.



Latvia

Population: **1.9m**

Population density: **29.7/km²**

GDP per capita, PPP (international \$): **42,501.0**

System operator's website:

Sources

- 1) Antaina, L. PowerPoint Presentation. September 25-26, 2023. International Conference and Study Tour. Available at: <https://www.reloopplatform.org/wp-content/uploads/2023/09/Reuse-Recycling-through-DRS-event-presentations.pdf>
- 2) Depozīta Iepakojuma Operators. "For producers and importers." Available at: <https://depozitapunkts.lv/bizness-iekotajiem-en>
- 3) Depozīta Iepakojuma Operators. "For retailers." Available at: <https://www.depozitapunkts.lv/business-for-sellers-en>
- 4) Depozīta Iepakojuma Operators. "Operating plan for the arrangement and implementation of the deposit system." Available at: <https://depozitapunkts.lv/par-mums-en>
- 5) Depozīta Iepakojuma Operators. 3 January 2022. "Handbook for Producers – version 03.01.2022." Available at:
- 6) Depozīta sistēmas darbības noteikumi. <https://likumi.lv/ta/id/316731-depozita-sistemas-darbibas-noteikumi> Depozīta Iepakojuma Operators. 27 December 2023. Par apstiprināto depozīta iepakojuma apsaimniekošanas maksu no 2024. gada 1. Marta. Available at: <https://www.depozitapunkts.lv/business-for-sellers-en>
- 7) Personal communication with Miks Stūrītis, Depozīta Iepakojuma Operators (DIO), 6 March 2024.
- 8) Stūrītis, M. "Deposit system and refillables in Latvia." PowerPoint Presentation. September 25-26, 2023. International Conference and Study Tour. Available at: <https://www.reloopplatform.org/wp-content/uploads/2023/09/Reuse-Recycling-through-DRS-event-presentations.pdf>

Legislative framework

Name of legislation

Packaging Act and the Cabinet Regulation No. 519
(Regulations Regarding the Operation of the Deposit System)

Legislation enacted

October 2019 (amended 11 August 2020)

Appointment of system operator

January 2021

System started

1 February 2022

Key updates¹

- › 1 January 2023 – expansion to include syrups, alcoholic cocktails (≤15% alcohol content), and all alcoholic drinks in PET bottles or cans; simplification of container size categories

Regulatory authority

The State Environmental Service of the Republic of Latvia,
Ministry of Environmental Protection and Regional
Development, the Public Utilities Commission

Legislated targets

› Collection:

- › By 31 December 2023: plastic (70%), metal (60%), aluminium (40%), glass (70%)
- › By 31 December 2024: plastic (73%), metal (65%), aluminium (45%), glass (73%)
- › By 31 December 2025: plastic (77%), metal (70%), aluminium (50%), glass (77%)
- › From 1 January 2026 to 31 December 2027: plastic (80%), metal (72%), aluminium (52%), glass (81%)

- › From 1 January 2028 to 31 December 2029: plastic (85%), metal (75%), aluminium (55%), glass (85%)
- › From 1 January 2030: plastic (90%), metal (80%), aluminium (60%), glass (90%)

› Recycling:

- › By end of 2023: plastic (50%), metal (60%), aluminium (40%), overall (60%)
- › By end of 2024: plastic (53%), metal (65%), aluminium (45%), glass (67%), overall (63%)
- › By end of 2025: plastic (55%), metal (70%), aluminium (50%), glass (70%), overall (65%)
- › From 1 January 2026 to 31 December 2027: plastic (57%), metal (72%), aluminium (52%), glass (71%), overall (66%)
- › From 1 January 2028 to 31 December 2029: plastic (58%), metal (75%), aluminium (55%), glass (73%), overall (68%)
- › From 1 January 2030: plastic (60%), metal (80%), aluminium (60%), glass (75%), overall (70%)

› Reuse:

- › By 31 December 2023: glass (5%)
- › By 31 December 2024: glass (6%)
- › By 31 December 2025: glass (7%)
- › From 1 January 2026 to 31 December 2027: glass (10%)
- › From 1 January 2028 to 31 December 2029: glass (12%)
- › From 1 January 2030: glass (15%)

Note: Producers and importers that join the DRS receive an exemption from the natural resources tax (NRT) for containers that are managed within the DRS. The NRT base rate is €1.25/kg for plastic PET bottles (regardless of colour), €1.10/kg for metal and €0.44/kg for glass packaging. If, for any reason, a producer or packager is found to be avoiding participation in the deposit system and the total weight of packaging introduced to the market within a year exceeds 150kg, the NRT will be enforced at a quadruple rate (4 times the base rate).

Scope

Material type

Plastic (PET), metal, (aluminium, steel), glass

Beverage type

Carbonated and non-carbonated non-alcohol drinks (e.g., drinking water, mineral water, lemonade, energy drinks, iced teas, juices, nectars, syrups), beer, other mixed ready-to-drink beverages with an alcohol content ≤15%)

Size

100ml to 3L (0.03 gal to 0.79 gal)

Excluded

Wine (including sparkling wine and fruit wine), hard liquor, milk and dairy products, aseptic containers

Is there a DRS for refillables?

Yes (15% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

› **Flat rate:** €0.10 (USD\$0.11) (not subject to VAT)

Handling fee (effective 1 March 2024):

Variable rate:

› Manual:

› PET: €0.0238 (USD\$0.026)

› Metal: €0.0227 (USD\$0.025)

› Glass: €0.0406 (USD\$0.045)

› RVM with compaction (depending on RVM model and capacity):

› Plastic: €0.0150 to €0.0156 (USD\$0.017)

› Metal: €0.0124 to €0.0137 (USD\$0.014-\$0.015)

› Glass: €0.0326 to €0.0361 (USD\$0.036-\$0.040)

› RVM without compaction:

› Plastic: €0.0345 (USD\$0.038)

› Metal: €0.0330 (USD\$0.036)

› Glass: €0.0611 (USD\$0.068)

*Without VAT

Producer fee (effective 1 May 2024)

› Clear PET: €0.0164 (USD\$0.018)

› Coloured PET: €0.0256 (USD\$0.028)

› Aluminium: €0

› Steel: €0

› Glass: €0.0332 (USD\$0.037)

System structure & administration

Clearing system

Centralised

System operator

SIA Depozīta Iepakojuma Operators (DIO) (private company bringing together local and Baltic beverage manufacturers and retailers, along with AS PET Baltija, the Baltics' largest PET recycler. Retailers are represented by the Latvian Retailer Association [Latvijas Mazumtirgotāju Biedrība])

System finance

Unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Retail: Retailers with an area of ≥ 60m² (646 ft²) in rural areas and ≥ 300m² (3,229 ft²) in cities (including Daugavpils, Jēkabpils, Jelgava, Jūrmala, Liepāja, Rēzekne, Rīga, Valmiera, Ventspils, Ogre) must set up a collection point for all deposit containers either at their location or within 150m (492ft).

Retailers with an area of <60m² are also welcome to join the system voluntarily. Additionally, the system operator provides free collection to public event organisers and HORECA establishments receiving >1,000 deposit containers on a regular basis.

Online take-back? No

Number of collection points

Over 1,400 (including ~400 manual return points and over 1,000 RVMs including 177 outdoor kiosks). There are also 590 HORECA return points.

Population per collection point

1,345

Method of return²

95% automated / 5% manual

Barcode-based system?

Yes

Container deposit markings:

Containers must have a Latvian deposit sign. If a manufacturer of imported beverages cannot adapt its labels to the requirements of the DRS, the importer must ensure that appropriate stickers (approved by the system operator) are made and affixed to the container. It is permitted for packaging to have deposit signs for multiple countries.

Refund payment options

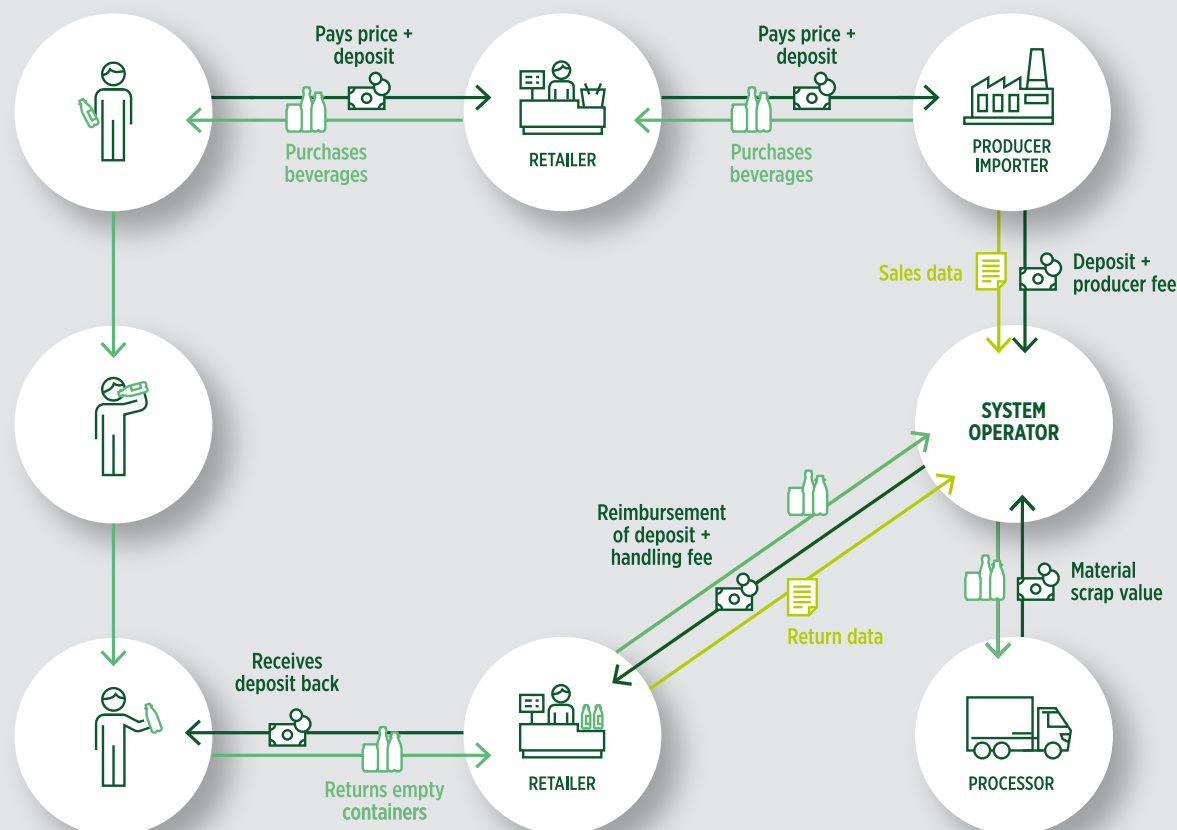
Cash (optional for retailers), retail voucher (can be used towards in-store purchases or entire chain of stores), charity donation



Return rate (2023)

Plastic (PET)	Metal	Glass	Total
82%	73%	73%	78%

Money, material & data flow



¹ As of January 2023, a uniform approach is adopted under the DRS, treating all materials equally in terms of volume. This means that all containers 100ml to 3L are now included, simplifying the system. Prior to this change, complexities existed, with different size limitations based on beverage type and container material. For instance, beer in glass containers was subject to the deposit only within the 100ml to 3L range, while beer in plastic containers was subject to the deposit only if within the 100ml to 1L range.

² The system operator provides all retailers that legally must accept deposit packaging and that expect to or actually receive at least 3,000 deposit containers/month with the possibility of delivering and installing RVMs for returning containers free of charge. The operator also undertakes to maintain the RVMs and repair them in the event of defects or malfunctions.



Lithuania

Population: **2.9m**

Population density: **45.2/km²**

GDP per capita, PPP (international \$): **51,877.0**

System operator's website:

Sources

- 1) Personal communication with Gintaras Varnas, Užstato sistemos administratorius, 5 March 2024.
- 2) Užstato sistemos administratorius (USAD). "Užstato už vienkartinės pakuotės sistemos finansavimo schemas 2023-2025 m. vykdymo metinė ataskaita už 2023 metus." Available at: <https://grazintiverta.lt/dokumentai/ataskaitos/144/2023-12>
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- 5) USAD. "Sąnaudų kompensavimo tarifai." Available at: <https://grazintiverta.lt/pardavejams/tarifai/43>
- 6) Varnas, G. "Lithuanian Deposit System – Environmental Champion in Eastern Europe." Available at: <https://www.reloopplatform.org/wp-content/uploads/2019/03/USAD.pdf>

Legislative framework

Name of legislation:

The Law on Packaging and Packaging Waste Management

Legislation enacted

May 2014

Appointment of system operator

August 2014

System started

1 February 2016

Key updates

None

Regulatory authority

Ministry of Environment

Legislated targets

› Collection (2021 and thereafter):

- › PET: 90%
- › Metal: 90%
- › Glass: 88%

Scope

Material type

Plastic (PET), metal (aluminium, steel), glass

Beverage type

Beer, beer cocktails, cider and other fermented drinks, mixed alcohol and non-alcohol drinks including water, soft drinks, juices, nectars, fruit wine and fruit-wine-based drinks, fruit-wine cocktails (only when sold in plastic and metal packaging)

Size

100ml to 3L (0.03 gal to 0.79 gal)

Excluded

None (the law does not define exclusions)

Is there a DRS for refillables?

Yes (14% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

› **Flat rate:** €0.10 (USD\$0.11)

Handling fee (2024)

Variable rate:

› Manual or RVM without compaction:

- › PET: €0.0245 (USD\$0.027)
- › Metal: €0.0204 (USD\$0.023)
- › Glass: €0.0260 (USD\$0.029)

› RVM with compaction:

- › PET: €0.0297 (USD\$0.033)
- › Metal: €0.0220 (USD\$0.024)
- › Glass: €0.0488 (USD\$0.054)

Producer fee (2024)

- › PET: €0.044 (USD\$0.049)
- › Metal (aluminium): €0.019 (USD\$0.021)
- › Metal (steel): €0.049 (USD\$0.054)
- › Glass: €0.055 (USD\$0.061)

*Fees are consistent whether the producer uses a national or international barcode



System structure & administration

Clearing system

Centralised

System operator

Užstatų sistemos administratorius (USAD) (not-for-profit organisation founded by the Lithuanian Association of Breweries, the Association of Lithuanian Trade Enterprises, and the Lithuanian Natural Mineral Water Manufacturers' Association, which together account for >80% of drink containers sold in Lithuania)

System finance

Material revenues, unredeemed deposits, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Retail: Retailers that sell eligible drinks must accept containers and return deposits, regardless of whether they sell the products in identical packaging. Collection must occur at the store or nearby sites that are no further than 150m (492 ft) away. Retailers ≤ 300m² (3,229 ft²) in bigger cities and ≤ 60m² (646 ft²) in smaller cities and rural areas are exempt. All other retailers can participate voluntarily.

Online take-back? No

Number of collection points

2,600 retail locations
700 HORECA collection points

Population per collection point

~1,110

Method of return

91% automated / 9% manual

Barcode-based system?

Yes

Container deposit markings

Containers must be marked with deposit system logo

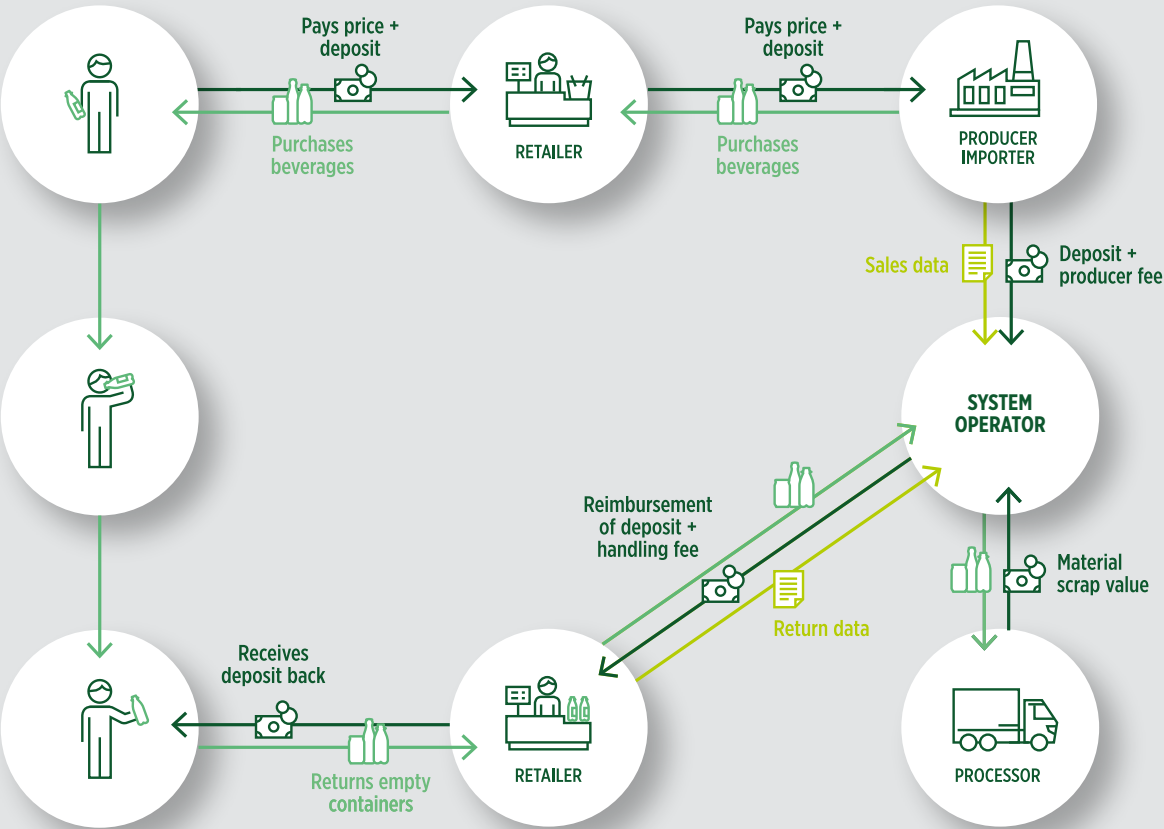
Refund payment options

Cash, retail voucher, donation to charity

Return rate (2023)

Plastic (PET)	Aluminium	Steel	Glass	Total
91.2%	94.1%	93.9%	88.8%	92.3%

Money, material & data flow



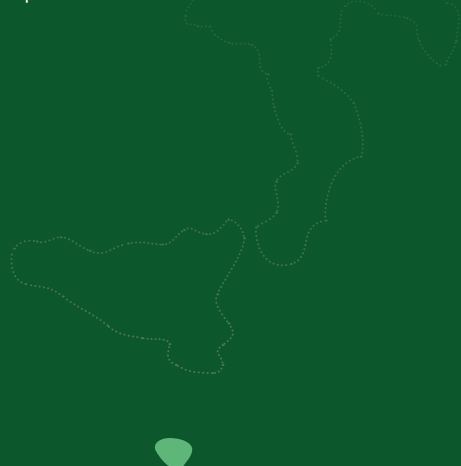
Malta

Population: **0.6m**

Population density: **1,692.7/km²**

GDP per capita, PPP (international \$): **62,445.7**

System operator's website:



Sources

- 1) BCRS Malta. "The Beverage Container Refund Scheme." Available at: <https://bcrmsmalta.mt>
- 2) BCRS Malta Ltd. "Beverage Container Refund Scheme." Available at: <https://www.smechamber.mt/wp-content/uploads/2021/07/BCRS-Malta-Presentation.pdf>
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Legislative framework

Name of legislation

Subsidiary Legislation 549.134, Beverage Containers Recycling Regulations (Legal Notice 311/2020, as amended by Legal Notices 257 of 2021 and 235 of 2022) under the Environment Protection Act

Legislation enacted

July 2020

Appointment of system operator

September 2020

System started

14 November 2022

Key updates

None

Regulatory authority

Circular Economy Malta (CEMalta)

Legislated targets¹

› Collection:

- › 2022: 70% (by weight)
- › 2023: 70% (by weight)
- › 2024: 80% (by weight)
- › 2025: 85% (by weight)
- › 2026 and thereafter: 90% (by weight)

› Recycling:

- › 2022: 65% (by weight)
- › 2023: 65% (by weight)
- › 2024: 75% (by weight)
- › 2025: 80% (by weight)
- › 2026 and thereafter: 85% (by weight)

Scope

Material type

Plastic (PET), metal (steel, aluminium), glass

Beverage type

Water and flavoured water, carbonated and non-carbonated soft drinks, ciders, beers, and other malt drinks, ready-to-drink coffee, flavoured alcohol drinks with an alcohol content up to 5%, dilutables

Size

100ml to 3L (0.3 gal to 0.8 gal)

Excluded

Dairy, juice and nectars, wines, spirits, drinks in cartons/HDPE containers/pouches

Is there a DRS for refillables?

Yes (12% refillable market share in 2024)

Deposits & fees²

Deposit initiator

Producer/Importer

Deposit value

› **Flat rate:** €0.10 (USD\$0.11)
(not subject to VAT)

Handling fee (2024)

› Variable rate:

- › Manual: €0.02 (USD\$0.02) (excluding VAT)
- › RVM: €0.0055 (USD\$0.006) (excluding VAT)

For RVMs installed at public hubs (not on retailers' premises), the system operator also pays the Government an encroachment fee.

Producer fee (2024)

› Containers with national barcode (excludes VAT):

- › PET (clear): €0.009 (USD\$0.01)
- › PET (light blue): €0.009 (USD\$0.01)
- › PET (other): €0.016 (USD\$0.02)
- › Glass (clear and other): €0.037 (USD\$0.04)
- › Steel: €0.016 (USD\$0.02)
- › Aluminium: €0.007 (USD\$0.01)



› Containers with international barcode:

- › PET (clear): €0.009 (USD\$0.01) + 5% surcharge
- › PET (light blue): €0.009 (USD\$0.01) + 5% surcharge
- › PET (other): €0.016 (USD\$0.02) + 5% surcharge
- › Glass (clear and other): €0.037 (USD\$0.04) + 5% surcharge
- › Steel: €0.016 (USD\$0.02) + 5% surcharge
- › Aluminium: €0.007 (USD\$0.01) + 5% surcharge

System structure & administration

Clearing system

Centralised

System operator

BCRS Malta Ltd. (Beverage Container Refund Scheme Malta) (privately-owned company incorporated by the Malta Beverage Producers Association, the Malta Beverage Importers Association and the Malta Beverage Retailers Association)

System finance

Unredeemed deposits, producer administration fees, material revenues

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Hybrid: All retailers $\geq 150\text{m}^2$ (1,615 ft²) must take back containers and refund deposits (there are no exemption). Retailers with RVMs must ensure they are available to the public from at least 8AM to 7PM, Monday to Saturday.

Containers can also be returned to unstaffed public recycling hubs with RVMs, of which there are at least one located in every municipality, or to staffed depots with bulk feed RVMs.

Businesses registered with the system operator can return containers to BCRS via public recycling hubs, large RVM depots using redemption cards issued by the system operator, or through a collection service using special bags and sealing devices provided by the system operator. HORECA establishments with on-premise consumption receive free pickup for the first 25 bags/month; additional pickups can be arranged at a cost through an online booking system.

Online take-back? No

Number of collection points

346 RVMs have been installed around Malta and Gozo (50% of these are public hubs and depots, 45% are installed on retailers' premises, while the remainder are installed as a backend operation in major hotels around Malta)

Population per collection point

~1,628

Method of return

89% automated / 11% manual

Barcode-based system?

Yes

Container deposit markings

While there are no specific marking requirements, there is a 'bottler BCRS logo' which producers may choose to stamp or affix to their containers

Refund payment options

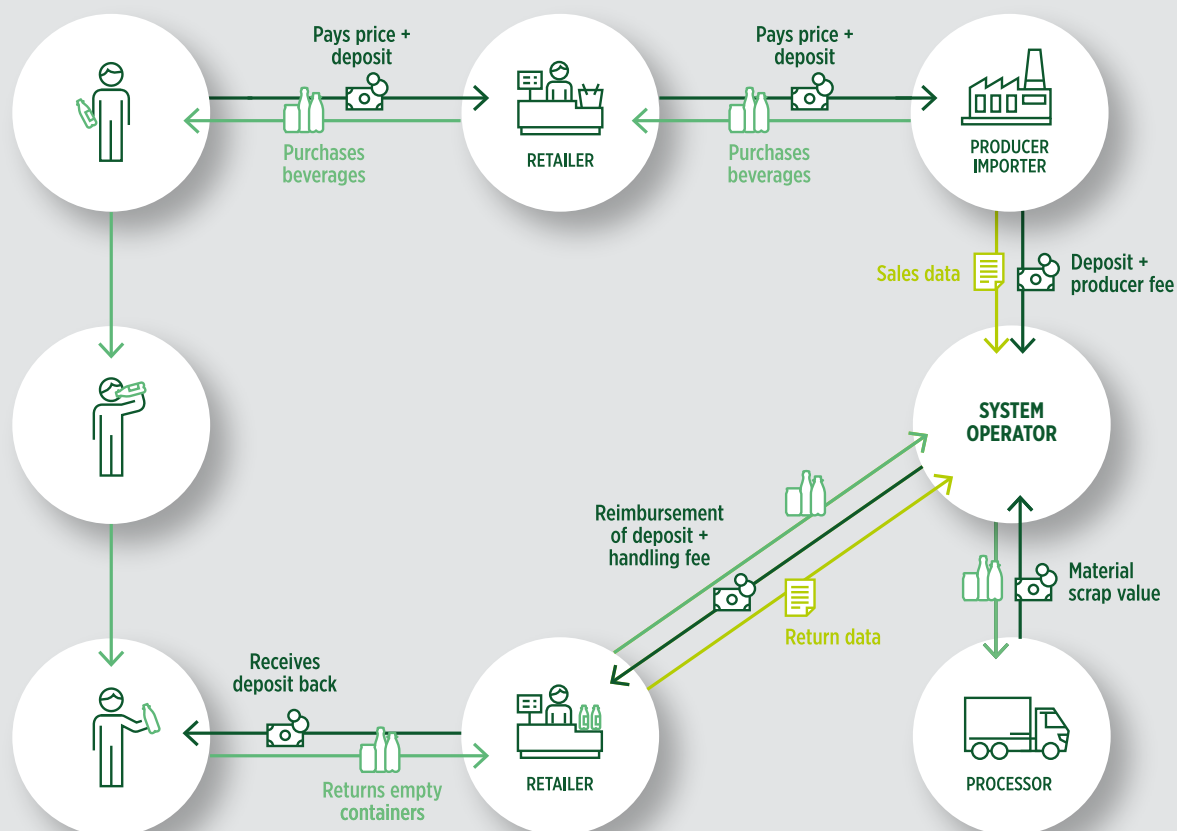
Store voucher (vouchers issued from RVMs at retailers are only redeemable at that retailer [or chain of retailers], while vouchers issued from RVMs at public recycling hubs and depots are redeemable at any registered retail outlet in Malta and Gozo where beverages are sold) and donation to charity. HORECA establishments, when returning containers through public recycling hubs and depots, have the additional option of receiving refunds directly into their bank accounts (this is done by scanning their BCRS B2B card at the RVM).



Return rate (2023)

Plastic (PET)	Metal	Glass	Total
81%	80%	75%	80%

Money, material & data flow



¹ Schedule 5 of the legislation stipulates the collection targets. The recycling targets are contained in BCRS Malta's license agreement with government.

² Producers and importers are also required to pay a one-time registration fee of €100 (excluding VAT) to the system operator. Retailers must pay a yearly company registration fee according to the outlet's retail space area: €100/year (excluding VAT) for retailers >500m² (5,382 ft²), €50/year (excl. VAT) for retailers between 250m² (2,691 ft²) and 500m² (5,382 ft²), and €25/year (excl. VAT) for retailers <250m² (2,691 ft²).



The Netherlands

Population: **17.9m**

Population density: **517.8/km²**

GDP per capita, PPP (international \$): **78,215.1**

System operator's website:

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Legislative framework

Name of legislation

Packaging Management Decree and the Afvalbeheerbijdrageovereenkomst Verpakkingen (the Waste Management Contribution Agreement for Packaging)

Legislation enacted

2003

Appointment of system operator

Current operator appointed in 2020

System started

2007

Key updates

- › 1 July 2021 – expansion to small (<1L) plastic bottles
- › 1 April 2023 – expansion to metal beverage cans ≤3L

Regulatory authority

Ministry of Infrastructure and Water Management

Legislated targets¹

› Separate collection:

- › Plastic: 90% (by weight) from 1 January 2022 (applies to all plastic beverage bottles, including those without a deposit, e.g., plastic juice bottles)
- › Metal: 90% (by weight) from 1 January 2024

› Post-consumer recycled content:

- › PET bottles: 30% from 2025

Scope

Material type²

Plastic (predominantly PET), metal (aluminium, steel)

Beverage type³

Plastic: water, soft drinks, juice (voluntary)

Metal: water, soft drinks, juice, dairy, beer (alcoholic and non-alcoholic), moderately alcohol drinks (e.g., cider and breezers)

Size

≤3L (0.79 gal)

Excluded³

Regardless of material type: Medical drinks, wine and fruit wine, spirits, products of producers/importers that have placed <500,000 units/year on the market

Plastic bottles: moderately alcohol drinks, dairy drinks, syrups

Is there a DRS for refillables?

Yes (31% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

› Variable rate:

- › Plastic <1L (0.26 gal): €0.15 (USD\$0.17) (excl. VAT)
- › Plastic 1-3L (0.26-0.79 gal): €0.25 (USD\$0.28) (excl. VAT)
- › Metal: €0.15 (USD\$0.17) (excl. VAT)



Handling fee (2024):› **Variable rate:****Retailers**› **Manual:**

- › Plastic <1L: €0.0250 (USD\$0.028)
- › Plastic 1-3L: €0.0150 (USD\$0.017)
- › Metal: €0.0292 (USD\$0.032)

› **RVM without compaction:**

- › Plastic <1L: €0.0295 (USD\$0.033)
- › Plastic 1-3L: €0.0211 (USD\$0.023)
- › Metal: €0.0114 (USD\$0.013)

› **RVM with compaction:**

- › Plastic <1L: €0.0386 (USD\$0.043)
- › Plastic 1-3L: €0.0290 (USD\$0.032)
- › Metal: €0.0087 (USD\$0.0096)

HORECA establishments› **Manual:**

- › Plastic <1L: €0.0222 (USD\$0.025)
- › Plastic 1-3L: €0.0122 (USD\$0.013)
- › Metal: €0.0219 (USD\$0.024)

› **RVM without compaction:**

- › Plastic <1L: €0.0293 (USD\$0.032)
- › Plastic 1-3L: €0.0202 (USD\$0.022)
- › Metal: €0.0088 (USD\$0.0097)

› **RVM with compaction:**

- › Plastic <1L: €0.0379 (USD\$0.042)
- › Plastic 1-3L: €0.0283 (USD\$0.031)
- › Metal: €0.0107 (USD\$0.012)

Producer fee (2024)⁴

Consists of three separate components (invoiced separately), including:

› **Implementation component** (covers the costs of

collection, processing and/or trading/selling incurred by Statiegeld Nederland):

- › Plastic <1L: €0.014/unit (USD\$0.015)
- › Plastic 1-3L: €0.016/unit (USD\$0.018)
- › Metal: €0.002/unit (USD\$0.002)

› **System component** (paid to Verpact to cover costs incurred for the implementation of the DRS):

- › Plastic <1L: €0.015/kg (USD\$0.017)
- › Plastic 1-3L: €0.015/kg (USD\$0.017)
- › Metal: €0.015/kg (USD\$0.017)

› **Single-use Plastic (SUP) component** (paid to Verpact to cover the SUP surcharge on the packagings referred to in the EU's SUP directive that producers and importers owe):

- › Plastic <1L: €0.0023/unit (USD\$0.0025) (if the bottle cap is not attached to the bottle a €0.0023/unit SUP contribution must also be paid for the cap)
- › Plastic 1-3L: €0.0023/unit (USD\$0.0025) (if the bottle cap is not attached to the bottle a €0.0023/unit SUP contribution must also be paid for the cap)
- › Metal: none

System structure & administration

Clearing system

Centralised

System operator⁵

Statiegeld Nederland (not-for-profit organisation established by soft drink and mineral water suppliers in collaboration with the food trade; operates under Verpact, the producer responsibility organisation [PRO] responsible for all companies that place packaging on the market, including deposit containers)

System finance

Unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operator

Material owner

System operator (producers have the opportunity to exercise a right of first refusal on a specified quantity of the material they have put on the market, utilising it for the production of new packaging)

Container return & refund points

Collection model

Return-to-Retail: Although there is no legal obligation for retailers to take back containers, many supermarkets offer this service voluntarily.

Online take-back? No, but some supermarkets choose to offer an online delivery service

Number of collection points⁶

~5,000 (mostly supermarkets)

Population per collection point

~3,562

Method of return

97% automated / 3% manual

Barcode-based system?

Yes

Container deposit markings

Containers must be marked with the system operator's deposit logo. The logo must be placed on the bottle or can and not on the outer packaging of multipacks.

Refund payment options

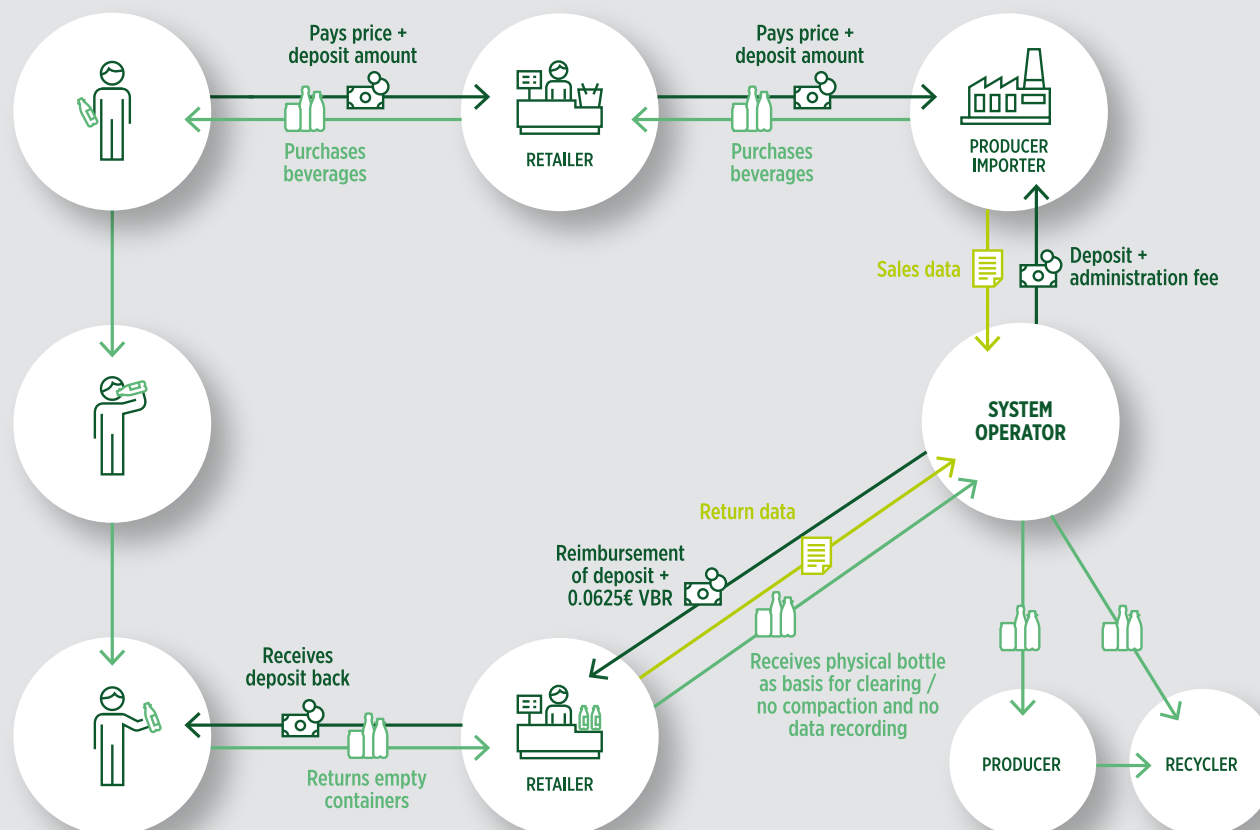
Cash, retail voucher, electronic funds transfer (deposit directly to bank account)



Return rate (2023)

Plastic (all sizes)	Plastic <1L	Plastic 1-3L	Metal*	Total
77%	70%	88%	50%	68%

Money, material & data flow



¹ Dutch law allows for these targets to be met with up to 10 percentage points of the contribution coming from alternative capture methods outside of the DRS, if this material is of comparable quality to separate collection.

² Historically, only plastic bottles larger than 1L had a deposit in the Netherlands. Despite repeated promises from supermarkets and beverage producers to reduce litter from plastic bottles and cans, they consistently failed to do so. In 2018, the government presented producers of small plastic bottles with an ultimatum: they either reduce the number of plastic bottles in the environment by at least 70% between 2017 and 2019, or their bottles would be subject to DRS. However, during this period, the number of plastic bottles in litter increased by 7%, and the number of cans increased by 16%, according to official monitoring results. Consequently, in April 2020, the Dutch cabinet decided to implement a deposit on small plastic bottles, effective 1 July 2021. Following parliamentary motions by MPs Jan Paternotte and Carla Dik-Faber in October 2019, the government set a similar trajectory for cans, with industry deadlines in late 2021. The DRS expanded to include beverage cans on 1 April 2023.

³ There is no legal obligation for producers of 100% juice in plastic bottles to join the system. However, juice producers can voluntarily participate in the system if the bottles meet the conditions for recycling.

⁴ Producers/importers of deposit containers owe Verpact (formerly Afvalfonds Verpakkingen) the 'Packaging Waste Management Contribution' (PWMC), which consists of a Deposit Component, a SUP Component, an Implementation Component and a System Component. The PWMC is calculated by multiplying the deposit amount, the SUP Component and the Implementation Component by the number of items of large and/or small deposit bottles and/or metal drink cans, as well as by multiplying the System Component by the weight of large and/or small deposit bottles and/or metal drink cans for which the Producer or Importer owes the contribution.

⁵ Statiegeld Nederland took over the operation of the deposit system from Stichting Retourverpakking Nederland in March 2021.

⁶ There are about 5,000 collection points (mostly supermarkets) at which people can get their deposit back. In addition, there are approximately 23,000 "voluntary take-back points" where people can deposit their empty bottles and cans in collection bins for subsequent collection by the organisation or shop. It's important to note that these collection points do not pay out deposit refunds.

Note: Reported return rates are subject to the limitations of data transparency on the part of the system operator. While the rates for plastic reflect only plastic bottles collected exclusively through the DRS network (calculated using data on page 2 of Verpact's annual report), the rate for metal includes beverage cans collected through both the DRS and other collection channels (e.g., kerbside recycling) as Verpact does not provide a detailed breakdown of metal can collection by each channel.



Norway

Population: 5.6m

Population density: 17.7/km²

GDP per capita, PPP (international \$): 104,459.8

System operator's website:

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Legislative framework

Name of legislation

Regulations relating to the recycling of waste (Waste Regulations) under the Product Control Act (Forskrift om gjenvinning og behandling av avfall [avfallsforskriften] – Kapittel 6 Returnssystemer for emballasje til drikkevarer)

Legislation enacted¹

December 1993

Establishment of system operator

November 1996

System started

1 May 1999

Key updates

› September 2018 – deposit increase

Regulatory authority

Norwegian Environment Agency

Legislated targets²

Collection: The system is expected to achieve a minimum 25% return rate (a condition for approval of take-back systems as per the legislation). To be exempted from the environmental tax on drinks packaging, the return rate for cans and plastic bottles must be 95%.

Scope

Material type

Plastic (predominantly PET), metal (aluminium, tinplate)

Beverage type

All (the regulation does not specify the types of drinks covered by DRS)

Size

125ml to 4.9L (0.03 to 1.29 gal)

Excluded

Glass bottles, milk products, fruit and vegetable juices, dietetic products, and products exclusively for infants

Is there a DRS for refillables?

Yes (6% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

› Variable rate:

- › Plastic, metal <0.5L (0.13 gal): NOK 2 (€0.17, USD\$0.19)
- › Plastic, metal ≥0.5L (0.13 gal): NOK 3 (€0.25, USD\$0.28)

Handling fee (2024)

Variable rate:

› RVM with compaction:

- › Plastic: NOK 0.247 (€0.02, USD\$0.02)
- › Metal: NOK 0.198 (€0.02, USD\$0.02)

› Manual or RVM without compaction:

- › Plastic: NOK 0.10 (€0.01, USD\$0.01)
- › Metal: NOK 0.05 (€0.004, USD\$0.005)

Producer fee (2024)

› Fees payable to system operator:

- › Aluminium: NOK -0.06 (-€0.01, USD\$0.01)
- › Steel: NOK 0.21 (€0.02, USD\$0.02)
- › Supplement for label or sleeve that covers ≥75% of the container: NOK 0.03 (€0.003, USD\$0.003)
- › Supplement for international barcode: NOK 0.06 (€0.01, USD\$0.01)



› Plastic:

- › PET: NOK 0.14 (€0.01, USD\$0.01)
- › HDPE: NOK 0.14 (€0.01, USD\$0.01)
- › Supplement for light blue transparent: NOK 0.08 (€0.01, USD\$0.01)
- › Supplement for another colour, or coloured sleeve that covers ≥75% of the container: NOK 0.15 (€0.01, USD\$0.01)
- › Supplement for international barcode: NOK 0.06 (€0.01, USD\$0.01)

Producers joining the Infinitum system are also required to pay a one-time company registration fee and a fee for each new packaged product introduced to the market.

› Fees payable to the state²:

- › Basic tax for members and non-members of Infinitum: NOK 1.38 (€0.12, USD\$0.13)

› Environmental tax:

- › Plastic (non-members of Infinitum): NOK 4.06 (€0.34, USD\$0.38)
- › Plastic (members of Infinitum): NOK 0.00
- › Metal (non-members of Infinitum): NOK 6.71 (€0.57, USD\$0.63)
- › Metal (members of Infinitum): NOK 0.00

System structure & administration

Clearing system

Centralised

System operator

Infinitum (non-profit organisation equally owned by beverage producers and Norwegian grocery producers through their relevant industry associations; ownership is split as follows: Virke Kiosk og Bensin [1.5%], Daglivareleverandørens Servicekontor [7.5%], NHO Mat & Drikke [7.5%], COOP Norge AS [15.0%], Dagligvarehandelens Miljøforum AS [33.5%], and Bryggeri-og Drikkevareforeningens Servicekontor AS [35.0%])

System finance

Material revenues, unredeemed deposits, producer fees

Unredeemed deposits

System operator

Material owner

System operator (producers have the opportunity to exercise a right of first refusal on a specified quantity and quality of the material they have put on the market, utilising it for the production of new packaging)

Container return & refund points

Collection model

Return-to-Retail: All retailers selling deposit-bearing beverages must accept container returns, with no exemptions for size or online sales. Consumers can also return containers via a home delivery service provided by retailers, using barcoded Infinitum bags that are embedded with a code to track the bag and its contents. Deposits on these containers are refunded to the consumer on their next online purchase of eligible containers.

Online take-back? Yes

Number of collection points

~3,700 automated and 11,300 manual

Population per collection point

~370

Method of return

94% automated / 6% manual

Barcode-based system?

Yes

Container deposit markings

Containers must be marked with a deposit logo which identifies the deposit value

Refund payment options

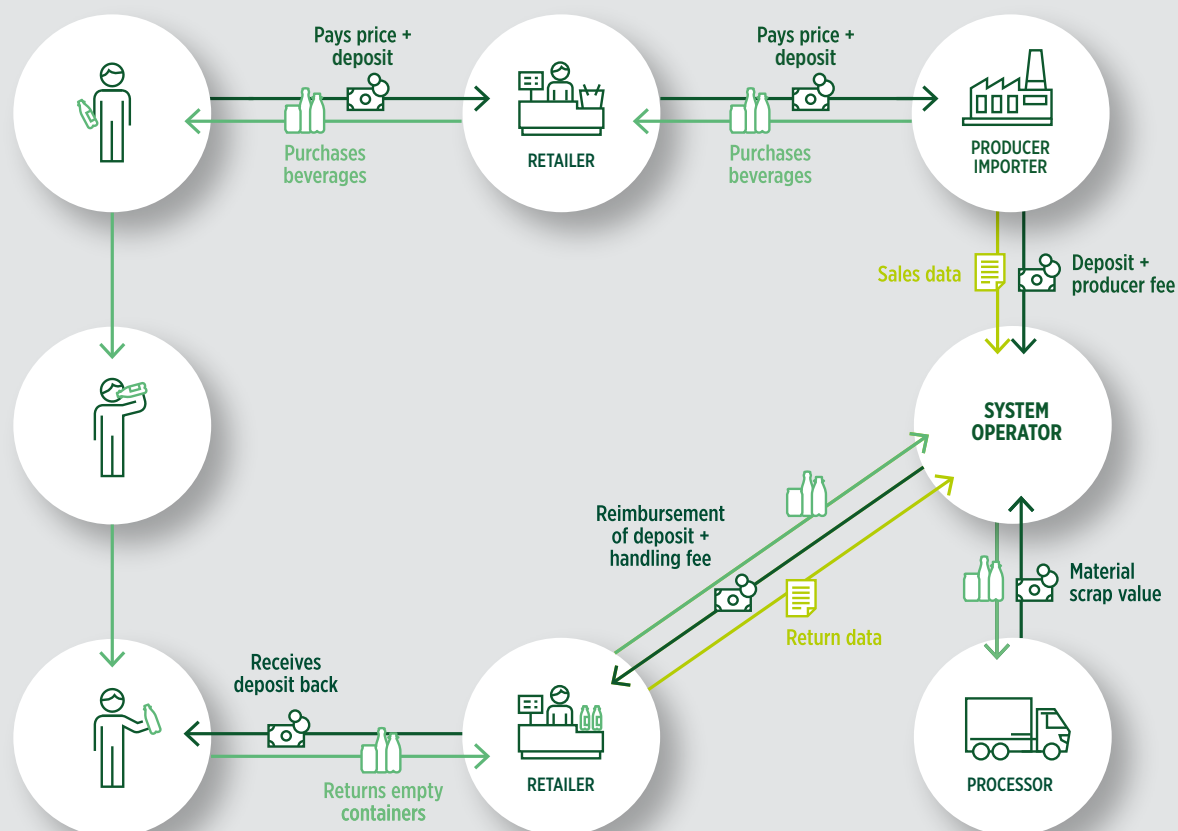
Cash, option to purchase a lottery ticket that benefits charity



Return rate (2023)

Plastic	Metal	Total
91%	92%	92%

Money, material & data flow



¹ The Product Control Act of 1976 set up return systems for beverage packaging, and was updated in 1999 to include the formal regulation of deposit and return systems. It was later incorporated into the Waste Regulations (2004) as Chapter 6.

² In Norway, a government-imposed environmental tax applies on all producers and importers placing plastic bottles and metal cans on the market. As of 2024, the rates are 4.06 NOK per plastic bottle and 6.71 NOK per metal can. Packaging covered by an approved DRS is subject to a reduced tax rate depending on the return rate. Containers with return rates between 25% and 95% face a tax that is inversely proportional to the return rate; the lower the return rate, the higher the tax. Containers with return rates beyond 95% are exempted from the tax altogether. Since 1994, an additional "basic tax" has been imposed on all single-use drinks packaging (regardless of the return rate). As of 2024, the basic tax rate is 1.38 NOK per unit.



Republic of Ireland

Population: **5.3m**

Population density: **75.2/km²**

GDP per capita, PPP (international \$): **127,623.4**

System operator's website:



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Legislative framework

Name of legislation

Separate Collection (Deposit Return Scheme) Regulations 2021, under the Waste Management Act 1996

Legislation enacted

20 November 2021

Appointment of system operator

July 2022

System started

1 February 2024

Key updates

None

Regulatory authority

Ministry of the Environment, Climate and Communications

Legislated targets

The regulations reference the EU Single-Use Plastics Directive, which requires Member States to achieve a 77% separate collection for recycling target for PET bottles by 2025, increasing to 90% by 2029

Scope

Material type

Plastic (PET), metal (aluminium, steel)

Beverage type

All (the regulations do not specify the types of beverages covered)

Size

150ml to 3L (0.04-0.79 gal)

Excluded

Glass bottles, milk or other dairy-based products

Is there a DRS for refillables?

No (5% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer

Deposit value¹

› Variable rate:

- › Containers 150ml – 500ml (0.04-0.13 gal): €0.15 (USD\$0.17) VAT-free
- › Containers 501ml – 3L (0.13-0.79 gal): €0.25 (USD\$0.28) VAT-free

Handling fee (2024):

› Variable rate:

- › Manual: €0.026 (USD\$0.029)
- › RVM: €0.022 (USD\$0.024)

› Retailers using RVMs may qualify for additional financial support if they meet certain criteria:

- › Year 1: €3,000 (USD\$3,326) (eligible if they process <250,000 returns in Year 1)
- › Year 2: €2,000 (USD\$2,217) (eligible if they process <250,000 returns in Year 2)
- › Year 3: €1,000 (USD\$1,109) (eligible if they process <250,000 returns in Year 3)



- › **Eligibility requirements for additional financial support:**
- › Proof of annual sales of at least 250,000 eligible containers
- › Proof of annual returns of <360,000 eligible containers

Producer fee (2024)

› **Containers with national barcode:**

- › PET bottle: €0.02 (USD\$0.02)
- › Metal: €0.0125 (USD\$0.014)

› **Product registration fees and international barcode surcharges, based on annual volume placed on market:**

- › 0-749,999 containers: €500 flat fee/year (USD\$554), €0.00 surcharge
- › 750,000-1,499,999 containers: €1,000 flat fee/year (USD\$1,109), €0.00 surcharge
- › 1.5m to 10m containers: €100 (USD\$111) per product, €0.0135 surcharge >10m containers: €100 (USD\$111) per product, €0.0312 surcharge (USD\$0.035)

System structure & administration

Clearing system

Centralised

System operator

Deposit Return Scheme Ireland CLG (trading as Re-turn)

System finance

Material revenues, unredeemed deposits, producer fees

Unredeemed deposits

System operator

Material owner

System operator (producers have right of first refusal to processed materials based on the quantity they place on the market)

Container return & refund points

Collection model

Return-to-Retail: Retailers that sell in-scope products (including HORECA) must take-back empty containers. A take-back exemption may be granted for drinks consumed in on-site hospitality environment, as well as to 'food-to-go' retailers with a footprint of $\leq 250\text{m}^2$ (2,691 ft²) retail space.

Online take-back? Yes, however, retailers can apply for a take-back exemption. If granted, they must display a QR code and the system operator's website address on the receipt or sales documentation.

Number of collection points

-2,823 (as of August 2024, there are >2,500 RVMs and 323 manual collection points)

Population per collection point

1,893

Method of return

Mix of automated and manual (retailers can choose to perform collection manually or via RVMs. All RVMs must meet the system operator's specification standards.

Barcode-based system?

Yes

Container deposit markings

Containers must be marked with the Re-turn symbol printed somewhere on their label

Refund payment options

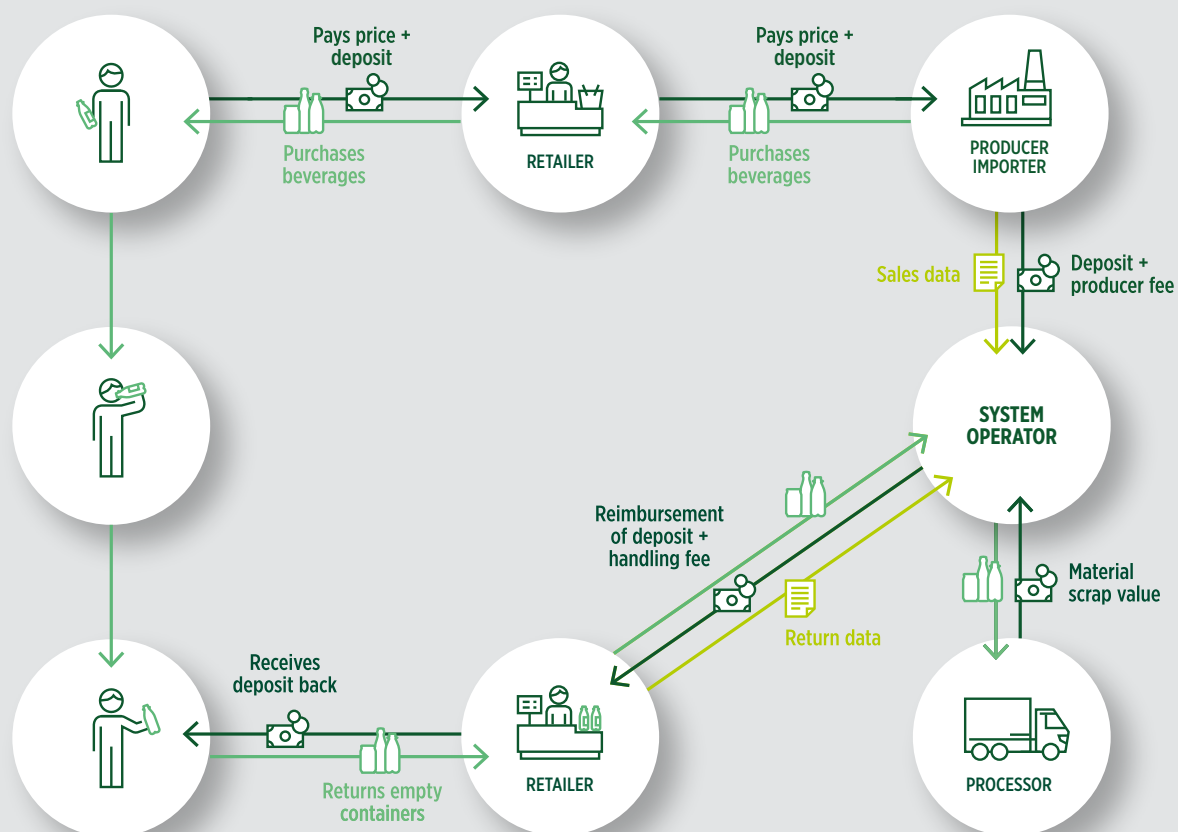
Cash, store voucher, electronic funds transfer, charity donation



Return rate

As of 24 October 2024, 635 million plastic bottles and aluminium cans were returned through the scheme. The collection rate for August 2024 was equivalent to 73% of all containers placed on the market that month.

Money, material & data flow



¹HORECA establishments are charged a deposit when purchasing in-scope products, but they are not required to pass this on to the consumer unless the product is taken off-site. The application of the deposit for on-premise consumption is left to the discretion of the sector.



Romania

Population: **19.1m**

Population density: **81.3/km²**

GDP per capita, PPP (international \$): **47,903.3**

System operator's website:

Sources

- 1) <https://legislatie.just.ro/Public/DetaliuDocument/247209>
- 2) "Evolution of the Deposit Return System in the first seven months after the implementation of the program." 25 July 2024. Available at: <https://www.romania-insider.com/returo-results-first-seven-months-implementation>
- 3) Personal communication with Bogdan Lupu, RetuRO Sistem Garanție Returnare S.A., 23 April 2024
- 4) RetuRO. "Episodul 3: Cerințe pentru codurile de bare, logo SGR și ambalaje." Available at: https://returosgr.ro/sites/default/files/2024-01/Sesiunile%20SGR%20Sesiunea%203_Cerințe%20pentru%20codul%20de%20bare%2C%20logo%20SGR%20si%20ambalaje_1.pdf
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- 6) Taylor, B. 1 December 2023. "Romania launches national deposit-return system." Recycling Today. Available at: <https://www.recyclingtoday.com/news/romania-beverage-bottle-can-recycling-deposit-return-sensoneo/>
- 7) Text of the Government Decision (available in Romanian only). Available at: <http://mmediu.ro/app/webroot/uploads/files/hotararea-nr-1074-2021-privind-stabilirea-sistemului-de-garanție-returnare-pentru-ambalaje-primare-nereutilizabile%281%29.pdf>

Legislative framework

Name of legislation

- › Government Emergency Ordinance No. 1074/2018 amending and supplementing Law No. 211/2021 on treatment of waste
- › Law No. 249/2015 on packaging and packaging waste
- › Government Emergency Ordinance No. 196/2005 on the Environment Fund
- › Government Resolution No. 1074/2021 establishing a deposit-return system for non-reusable primary packaging

Legislation enacted

July 2018, October 2021

Appointment of system operator

August 2022

System started

30 November 2023

Regulatory authority

Ministry of the Environment, Waters, and Forests

Legislated targets

- › **Collection:**
- › 2024: plastic (65%), metal (65%), glass (65%)
- › 2025: plastic (80%), metal (80%), glass (75%)
- › 2026 and thereafter: plastic (90%), metal (90%), glass (85%)

Scope

Material type

Plastic, metal, glass

Beverage type

Beer, beer mixes, alcohol beverage mixes, cider, other fermented drinks, juices, nectars, soft drinks, water (all types), wines, spirits

Size

100ml to 3L
(0.03 gal to 0.79 gal)

Excluded

Milk and other milk-based drinks

Is there a DRS for refillables?

No (9% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

› **Flat rate:** 0.50 RON (€0.10, USD\$0.11)

Handling fee (2024):

Variable rate:

› Manual:

- › Glass ≤ 500 ml: 0.1005 RON (€0.02, USD\$0.02)
- › Glass > 500ml: 0.1645 RON (€0.03, USD\$0.03)
- › Small plastic: 0.0596 RON (€0.01, USD\$0.01)
- › Big plastic: 0.0989 RON (€0.02, USD\$0.02)
- › Metal: 0.0482 RON (€0.01, USD\$0.01)

› RVM:

- › Glass ≤ 500 ml: 0.1820 RON (€0.04, USD\$0.04)
- › Glass > 500ml: 0.1889 RON (€0.04, USD\$0.04)
- › Small plastic: 0.1970 RON (€0.04, USD\$0.04)
- › Big plastic: 0.2486 RON (€0.05, USD\$0.05)
- › Metal: 0.1773 RON (€0.04, USD\$0.04)



› HORECA:

- › Glass ≤ 500 ml: 0.0544 RON (€0.01, USD\$0.01)
- › Glass > 500ml: 0.1089 RON (€0.02, USD\$0.02)
- › Small plastic: 0.0136 RON (€0.003, USD\$0.003)
- › Big plastic: 0.0432 RON (€0.01, USD\$0.01)
- › Metal: 0.0097 RON (€0.002, USD\$0.002)

Producer administration fee (2024)

- › Clear plastic: 0.0590 RON (€0.01, USD\$0.01)
- › Blue or green plastic: 0.0773 RON (€0.02, USD\$0.02)
- › Mixed colour plastic: 0.1029 RON (€0.02, USD\$0.02)
- › Barrier plastic: 0.1233 RON (€0.03, USD\$0.03)
- › Metal: 0.0077 RON (€0.002, USD\$0.002)
- › Glass ≤ 500 ml: 0.1472 RON (€0.03, USD\$0.03)
- › Glass > 500ml: 0.2304 RON (€0.05, USD\$0.05)

System structure & administration

Clearing system

Centralised

System operator

RetuRO Sistem Garantie Returnare S.A. (20% state-owned [via the Environment Ministry] and 80% privately owned [30% Association of Brewers of Romania for Environment; 30% Association of Soft Drinks Producers for Sustainability; 20% Association of Retailers for Environment])

System finance

Unredeemed deposits,
material revenues, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Retail: Retailers >200m² (2,153 ft²) that sell in-scope beverages must establish collection points. Smaller retailers (<200m²) can collaborate to set up joint collection points and/or partner with local municipalities or with inter-community development associations. In any case, collection points must be located within 150m (492 ft) of the retail space in urban areas and 500m in rural areas. HORECA establishments are not obliged to organise collection points but must take back containers sold for off-premise consumption (for on-premise consumption, the deposit is not charged).

Online take-back? No. Retailers selling in-scope beverages exclusively via online platforms or through vending machines are not required to establish collection points.

Number of collection points

~35,000 (As of August 2024, 70,000 retailers have registered to become collection points, with 35,000 already contracted and ready to start collection. It is anticipated that within a few years, 80,000 retailers will be part of the system)

Population per collection point

545

Barcode-based system?

Yes

Method of return

75%-90% automated / 10-25% manual
(as of July 2024, there were ~4,000 RVMs in operation)

Container deposit markings

Containers must be marked with the system operator's logo

Refund payment options

Cash, store voucher, electronic funds transfer
(upon request by the consumer, with consent of the retailer)

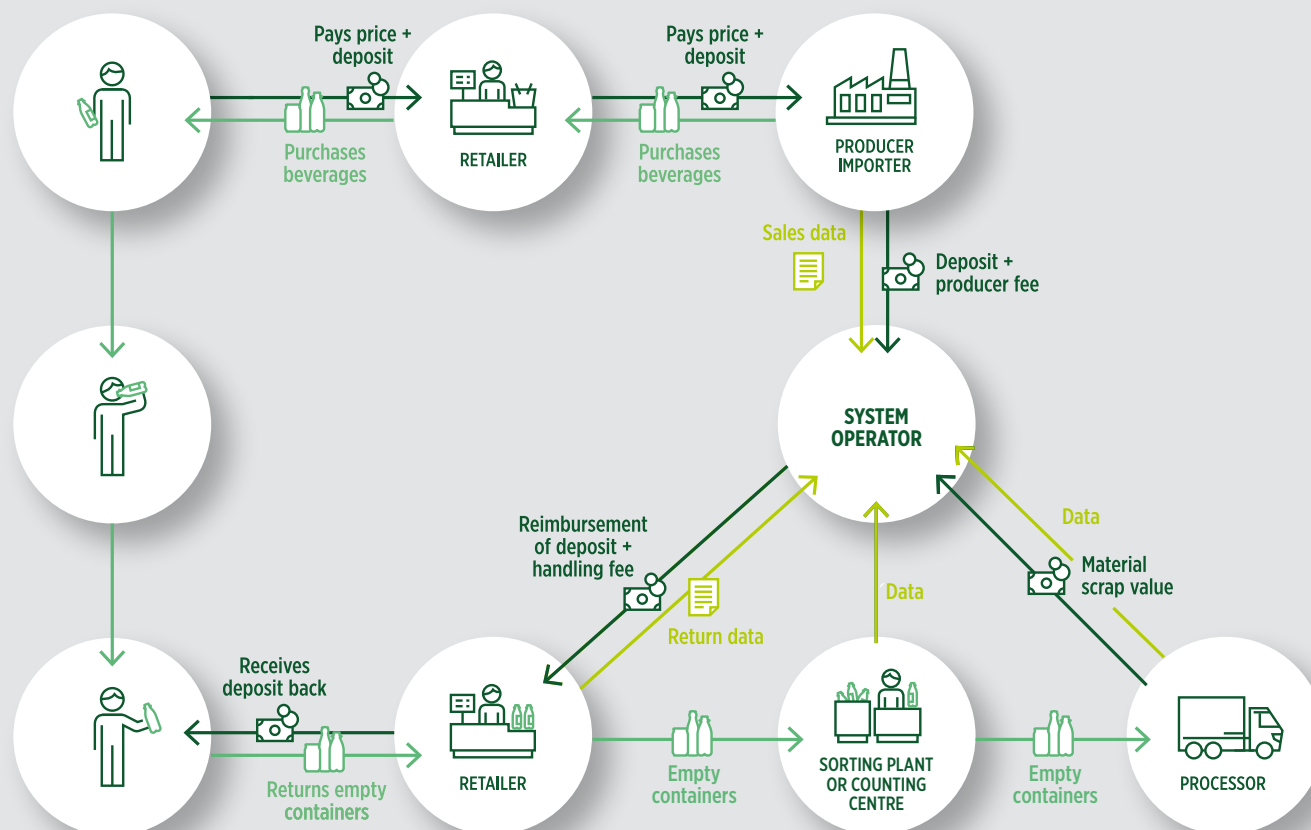


Return rate (January 2024-October 2024*)

Plastic (PET)	Metal	Glass	Total
52%	52%	50%	52%

*The return rates cover the period from January to the end of October 2024.

Money, material & data flow



Slovakia

Population: **5.4m**

Population density: **111.5/km²**

GDP per capita, PPP (international \$): **44,650.2**

System operator's website:

Sources

- 1) Personal communication with Borbála Agócssová, Správca zálohového systému, 2 April 2024
- 2) Správca zálohového systému. "Deposit return system in Slovakia." Available at: <https://www.spravcazaloh.sk/en/>
- 3) Správca zálohového systému n.o. "Výročná správa Správcu zálohového systému za rok 2023." Available at: https://slovenskozalohuje.sk/wp-content/uploads/2024/05/Spravca-zalohoveho-systemu_Vyrocnna-sprava-za-rok-2023.pdf
- 4) 302/2019 Z. z. Zákon o zálohovaní jednorazových obalov na nápoje | Aktuálne znenie (zakonypreludi.sk)
- 5) https://www.svps.sk/legislativa/kodex_01_01.asp
- 6) <https://www.teraz.sk/ekonomika/enviro-cena-napoj-a-bude-v-obchodoch-uv/601846-clanok.htm>

Legislative framework

Name of legislation

Act No. 302/2019 Coll. on the Deposit Return Scheme for Disposable Beverage Containers and on amendments to certain acts (the "Single-use Beverage Packaging Act")

Legislation enacted

September 2019

Appointment of system operator

February 2021

System started

1 January 2022

Key updates

None

Regulatory authority

Ministry of the Environment of the Slovak Republic

Legislated targets

› Collection:

- › 2022: 60%
- › 2023: 80%
- › 2024: 85%
- › 2025: 90%

Scope

Material type:

Plastic (PET, HDPE, PP, etc.), metal

Beverage type

The law does not specify which beverage products are included. Rather, the definition of 'beverage' is derived from the Food

Code which defines beverages as "liquid beverages containing >80% water and capable of satisfying the physiological need for water, including non-alcoholic and alcoholic varieties." This includes mineral water, sweetened beverages, fruit juices, iced teas, energy drinks, beer, wine, and mixed alcoholic beverages.

Size

100ml to 3L
(0.03 gal to 0.79 gal)

Excluded

Milk and milk-based drinks, syrups, alcohol drinks containing >15% alcohol (i.e., spirits)

Is there a DRS for refillables?

Yes (16% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

› **Flat rate:** €0.15 (USD\$0.17)

Handling fee (2024)

› Variable rate:

- › Manual: €0.029 (USD\$0.032)
- › RVM – variable depending on categorisation of collection point:
 - › Category A1 (average collection of ≥300,001 units/month): €0.0107 (USD\$0.012)
 - › Category A2 (average collection of 250,001 to 300,000 units/month): €0.0118 (USD\$0.013)
 - › Category A3 (average collection of 200,001 to 250,000 units/month): €0.0124 (USD\$0.014)
 - › Category A4 (average collection of 150,001 to 200,000 units/month): €0.0140 (USD\$0.016)
 - › Category A5 (average collection of 100,001 to 150,000 units/month): €0.0172 (USD\$0.019)



- › Category A6 (average collection of 50,001 to 100,000 units/month): €0.0213 (USD\$0.024)
- › Category B (average collection of 25,001 to 50,000 units/month): €0.0259 (USD\$0.029)
- › Category C (average collection of ≤25,000 units/month): €0.0417 (USD\$0.046)

*VAT excluded

Producer fee (2024)

Containers with national barcode (VAT excluded):

- › Clear PET: €0.0180 (USD\$0.020)
- › Blue PET: €0.0276 (USD\$0.031)
- › Green PET: €0.0279 (USD\$0.031)
- › Other light and dark mix PET: €0.0341 (USD\$0.038)
- › Opaque PET: €0.0354 (USD\$0.039)
- › Aluminium: €0.0001 (USD\$0.0001)
- › Steel: €0.0102 (USD\$0.011)

Containers with international barcode (VAT excluded):

- › Clear PET: €0.0380 (USD\$0.042)
- › Blue PET: €0.0476 (USD\$0.053)
- › Green PET: €0.0479 (USD\$0.053)
- › Other light and other dark mix PET: €0.0541 (USD\$0.060)
- › Opaque PET: €0.0554 (USD\$0.061)
- › Aluminium: €0.0201 (USD\$0.022)
- › Steel: €0.0302 (USD\$0.034)

Producers using materials that are hard-to-recycle (e.g., containers with sleeves, adhesives, etc.) and that do not meet the system operator's technical standards are subject to an additional fee of €0.0025/unit (USD\$0.0028).

System structure & administration

Clearing system

Centralised

System operator

Správca zálohového systému (SZS) (non-profit organisation established through a consortium of the Soft Drinks Association, the Malt and Breweries Association, Trade Union of Slovakia, and the Slovak Alliance of Modern Commerce; represents producers of non-alcoholic beverages, mineral waters, and beer, and representatives from the wholesale and retail sectors; represents almost 80% of all deposit packaging placed on the market in Slovakia, encompassing >3,000 retail stores)

System finance

Unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operator

Material owner

System operator (producers have the opportunity to exercise a right of first refusal on a specified quantity and quality of the material they have put on the market, utilising it for the production of new packaging)

Container return & refund points

Collection model

Return-to-Retail: Retailers >300m² (3,229 ft²) must take back eligible containers, regardless of whether they sell the products in identical packaging (smaller shops can join the system voluntarily). The system operator has also established alternative collection points in locations where a higher concentration of deposit containers is expected to accumulate due to high foot traffic. These include hotels, restaurants, aquaparks, sport centres, schools, and festivals or other cultural events.

Online take-back? No. There is no legal obligation for them to participate, but they can join voluntarily.

Number of collection points

3,269 (2,358 with automated collection, 911 with manual collection)

Population per collection point

1,659

Method of return

72% automated / 28% manual

Barcode-based system?

Yes

Container deposit markings

Containers must be marked with the letter Z surrounded by recycling arrows, and the text "ZALOHOVANE" (deposit)

Refund payment options

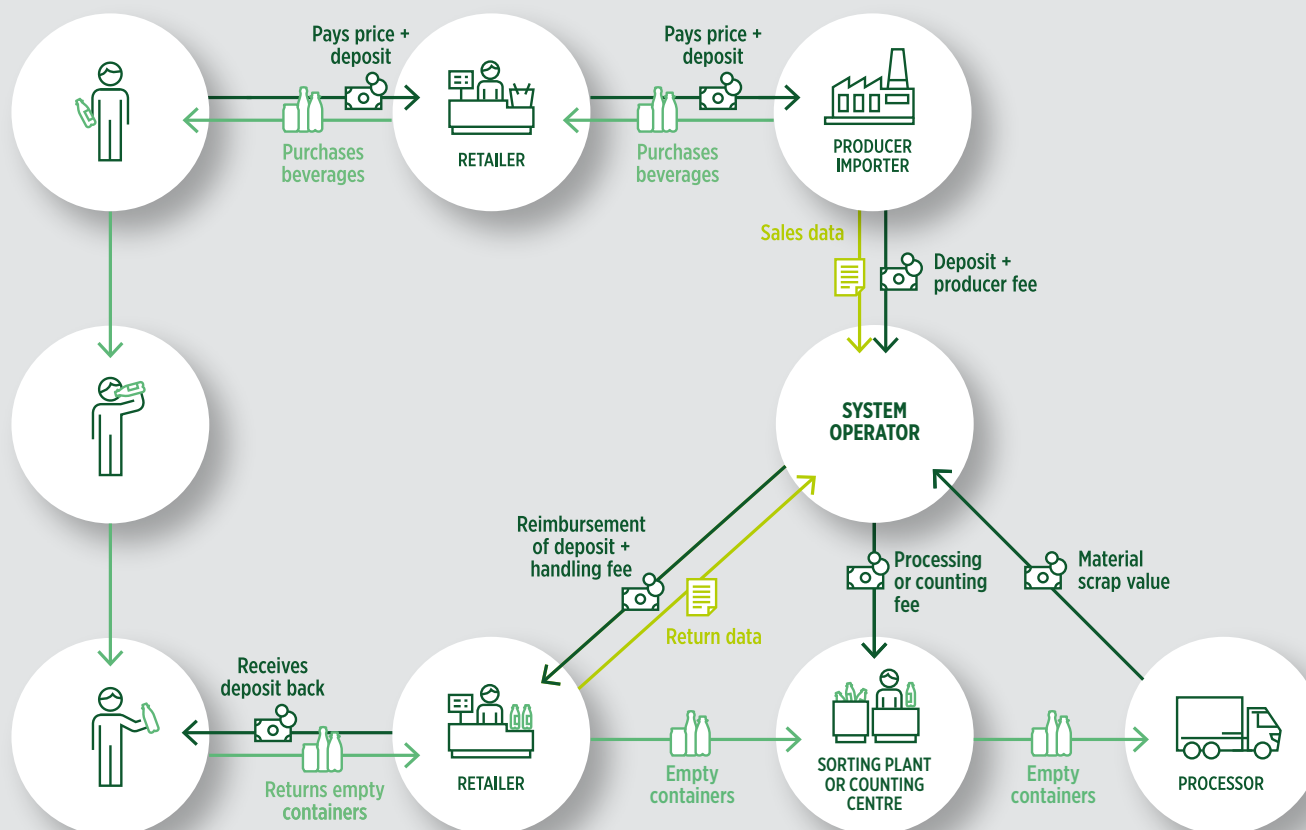
Mandatory collection points must pay refunds out in cash should the consumer choose this option instead of a discount on their purchase. Voluntary collection points are only required to provide a discount on the purchase applied at the same place where the packaging was returned.



Return rate (2023)

Plastic	Metal	Total
92%	93%	92%

Money, material & data flow



Sweden

Population: **10.6m**

Population density: **25.7/km²**

GDP per capita, PPP (international \$): **70,206.6**

System operator's website:

Sources

- 1) "Extended producer responsibility for packaging." Available at: <https://www.naturvardsverket.se/en/guidance/extended-producer-responsibility-epr/producer-responsibility-for-packaging/#E-1354794098>
- 2) Personal communication with Lil Berger, Returpack/Pantamera, 12 March 2024
- 3) Returpack. 28 December 2023. "Handling fee 2024." Available at: <https://assets.rp-pm-prod.pantamera.nu/48e2a6/globalassets/documents/handling-fee-2024.pdf>
- 4) Returpack. "Appendix 3. Deposit, Administration fee and Sorting fee per Aluminium can with alcohol content less than 3,5%." Available at: <https://assets.rp-pm-prod.pantamera.nu/496e4f/globalassets/documents/appendix-3---deposit-and-fees.pdf>
- 5) Returpack. "How much does it cost to be a part of the deposit recycling system?" Available at: <https://pantamera.nu/en/about-us/frequently-asked-questions--answers/breweries-producers--importers/how-much-does-it-cost-to-be-a-part-of-the-deposit-recycling-system/?q=sorting%20fee>
- 6) Returpack Svenska AB. "Sustainability Report 2023." Available at: https://assets.rp-pm-prod.pantamera.nu/49f9fa/globalassets/documents/returpack_hallbarhetsredovisning_eng2023.pdf
- 7) Returpack Svenska AB. "Deposit handling in public spaces." Available at: <https://pantamera.nu/en/company/deposit-handling-in-public-spaces/>

Legislative framework

Name of legislation¹

Ordinance on Producer Responsibility for Packaging (SFS 2022:1274)

Legislation enacted

May 1982

Appointment of system operator

1982

System started

March 1984

Key updates

- › 1987 – deposit increase for metal cans (from SEK 0.25 to SEK 0.50); increase in recycling target for metal cans from 75% to 90% (to be achieved by 1993)
- › 1994 – expansion to plastic (PET) bottles
- › 2010 – deposit increase for metal cans (from SEK 0.50 to SEK 1)
- › 2015 – optional registration of fruit syrup containers
- › 2018 – optional registration of juice containers
- › September 2021 – optional registration for dairy beverages in metal cans
- › January 2023 – expansion to include all fruit syrup and juice containers

Regulatory authority¹

Swedish Environmental Protection Agency

Legislated targets²

- › **Collection:**
 - › Plastic: 90%
 - › Metal: 90%
- › **Recycled content:**
 - › Plastic PET bottles: 25% recycled content from 2025
- › **Recycling**
 - › Plastic: 90%
 - › Metal: 90%

Scope

Material type

Plastic (PET), metal (aluminium, steel)

Beverage type³

All ready-to-drink beverages including beer, cider, soft drinks, bottled water, fruit syrup and juice products

Size

- › Plastic: 190ml to 3L (0.05 to 0.79 gal)
- › Metal: 150ml to 950ml (0.04 to 0.25 gal)

Excluded⁴

Beverages that contain ≥50% dairy products

Is there a DRS for refillables?

Yes (3% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

- › **Variable rate:**
 - › Metal: 1 SEK (€0.09, USD\$0.10) (VAT included)
 - › Plastic ≤1L (0.26 gal): 1 SEK (€0.09, USD\$0.10) (VAT included)
 - › Plastic >1L (0.26 gal): 2 SEK (€0.18, USD\$0.20) (VAT included)

Handling fee (2024)

Variable rate:

- › **Manual:**
 - › Metal: 0 SEK + 25% VAT
 - › Plastic ≤1L (0.26 gal): 0 SEK + 25% VAT
 - › Plastic >1L (0.26 gal): 0 SEK + 25% VAT



› RVM with compaction – pick-up with compact truck (bulk):

- › Metal: 0.184 SEK (€0.016, USD\$0.018) + 25% VAT
- › Plastic ≤1L (0.26 gal): 0.294 SEK (€0.026, USD\$0.029) + 25% VAT
- › Plastic >1L (0.26 gal): 0.375 SEK (€0.033, USD\$0.037) + 25% VAT

› RVM with compaction – pick-up by wholesaler/reseller:

- › Metal: 0.207 SEK (€0.018, USD\$0.020) + 25% VAT
- › Plastic ≤1L (0.26 gal): 0.384 SEK (€0.034, USD\$0.037) + 25% VAT
- › Plastic >1L (0.26 gal): 0.611 SEK (€0.054, USD\$0.060) + 25% VAT

In addition to per unit handling fees, stores with a compacting RVM receive a fixed fee of 20,000 SEK/year (€1,758, USD\$1,951) (excl. VAT).

Producer fee (effective 1 June 2024)⁵

- › Plastic ≤ 1L (0.26 gal): 0.20 SEK + 25% VAT (€0.02, USD\$0.02)
- › Plastic > 1L (0.26 gal): 0.48 SEK + 25% VAT (€0.04, USD\$0.05)
- › Aluminium: 0 SEK

Sorting fee (effective 1 June 2024)

- › Coloured plastic (any size): 0.05 SEK + 25% VAT (€0.004, USD\$0.005)
- › Steel: 0.25 SEK + 25% VAT (€0.02, USD\$0.02)

Other fees

Producers pay an annual membership fee of 10,000 SEK (€879, USD\$976) to the Swedish Environmental Protection Agency (SEPA) (this fee does not apply to producers who voluntarily join the system). Additionally, producers must pay an annual “inspection” or “supervisory” fee, which is based on the previous year’s sales volume:

- › 0-100,000 units: SEK 2,000 (€176, USD\$195)
- › 100,001-1m units: SEK 10,000 (€879, USD\$976)
- › 1,000,001-10m units: SEK 30,000 (€2,636, USD\$2,927)
- › >10m units: SEK 40,000 (€3,515, USD\$3,902)

The supervisory fee for voluntary members is SEK 1,250/year (€110, USD\$122) regardless of sales volume.

System structure & administration

Clearing system

Centralised

System operator

Returpack (operates under the name “Pantamera”; not-for-profit producer responsibility organisation [PRO] owned by the Swedish Brewers Association [50%], the Swedish Food Retailers Federation [25%], and the Swedish Grocery Stores Association [25%])

System finance

Material revenues, unredeemed deposits, producer fees, annual membership fees

Material owner

System operator (producers have the opportunity to exercise a right of first refusal on a specified quantity and quality of the material they have put on the market, utilising it for the production of new packaging)

Unredeemed deposits

System operator

Container return & refund points

Collection model

Hybrid: Retailers may voluntarily take-back containers, but are not legally required to (in 2023, ~92.5% of returned containers were collected by retailers). Consumers can also return containers to Pantamera Express points (larger RVMs), which allow them to empty entire bags of containers at once. Mobile collection stations (Pant-o-Bil) are used to collect containers at festivals. Additionally, hundreds of Swedish municipalities have installed “recycling tubes” next to garbage cans in city parks and other outdoor public spaces where consumers can leave their containers for others to return. In these cases, the consumer forfeits the deposit refund.

Online take-back? No, however Returpack collects containers sold by online retailers with one company at two locations.

Number of collection points

12,927, including 3,194 stores with RVMs (total of 4,359 RVMs, as some shops have multiple machines) and 71 Pantamera Express locations. Additionally, there are 9,662 ‘other collectors’ (i.e., festivals, events, associations/clubs, HORECA establishments, etc.). While it's possible that some of these ‘other collectors’ may pay out deposit refunds, this is not their usual practice.

Population per collection point

816

Barcode-based system?

Yes

Refund payment options

Cash, electronic funds transfer, donation to charity

Method of return

97% automated / 3% manual (in 2023, 5.5% of all containers returned were collected via Pantamera Express)

Container deposit markings

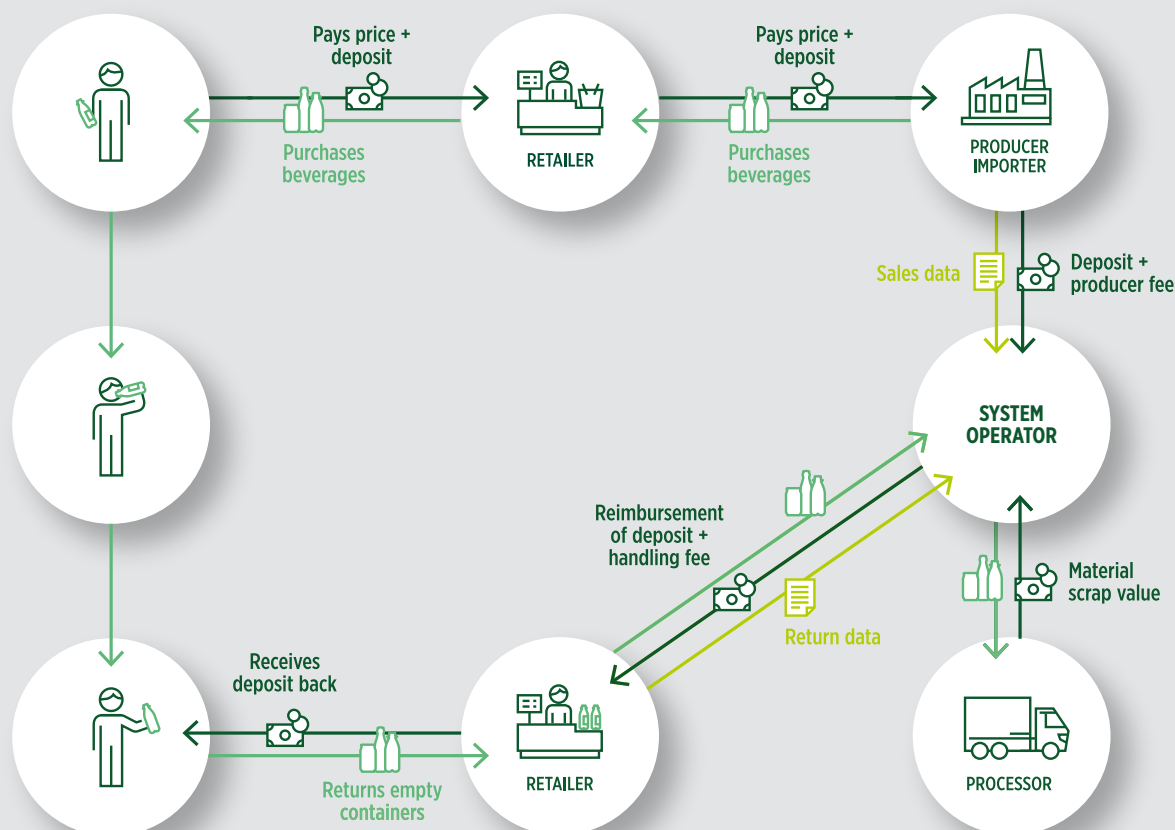
Containers must be marked with special deposit symbols, which indicate the deposit amount.



Return rate (2023)^{6,7}

Plastic	Metal	Total
86%	90%	89%

Money, material & data flow



¹ 2022 was the last year in which the operation of Sweden's deposit system was governed and regulated by the Ordinance on the return system for plastic bottles and metal cans (SFS 2005:220), and where the Swedish Board of Agriculture was Returpack's licensing and supervisory authority. As of 2023, a new regulation on producer responsibility for packaging applies, SFS 2022:1274 and the Swedish Environmental Protection Agency took over the supervision of Returpack's operations. Returpack is now the only approved DRS for beverage packaging.

² According to the new regulation SFS 2022:1274, the material recycling rate for plastic bottles and metal cans in a deposit system must reach at least 90% per year. The calculation point for plastic recycling has been moved further in the process to after sorting, grinding, and washing. Previously, it was after Returpack's sorting and baling of the material, covering measured material weights. The calculation points for metal collection and recycling remain unchanged. Consequently, Returpack will now report both material collection and recycling targets.

³ Since 2015 and 2018, respectively, producers of vegetable/fruit/berry juices and dilutable/concentrate drinks ("soft") had the option to voluntarily join the DRS. These products became mandatory in the system as of 1 January 2023.

⁴ Since 2021, producers of dairy products (in metal cans only) can voluntarily join the deposit system. Milk-based products will become mandatory from January 2029.

⁵ For plastic bottles and steel cans, the manufacturer or importer pays a fee for each container sold to Returpack. This fee covers costs related to administration, collection, and sorting. For plastic bottles, the fee varies depending on the size and colour of the container; clear, transparent bottles have lower fees than coloured bottles. There are no administrative or sorting fees for aluminium cans.

⁶ The return rate is calculated as the number of returned containers divided by the number of containers sold, based on sales reported by producers and importers. For metal cans, Returpack includes imported cans collected and recycled in the returned containers count.

⁷ Returpack notes that up to 15% of all cans and PET bottles in Sweden are sold through Norwegian cross-border trade due to lower prices in Sweden. Only about one-third of these containers are refunded in Sweden, with the rest managed in Norway. Since 2023, Returpack can account for products sold in Sweden but remaining in Norway, allowing for a more accurate return rate. According to the 2023 Sustainability Report, including these containers, the collection rate for containers sold in Sweden exceeds 90%.



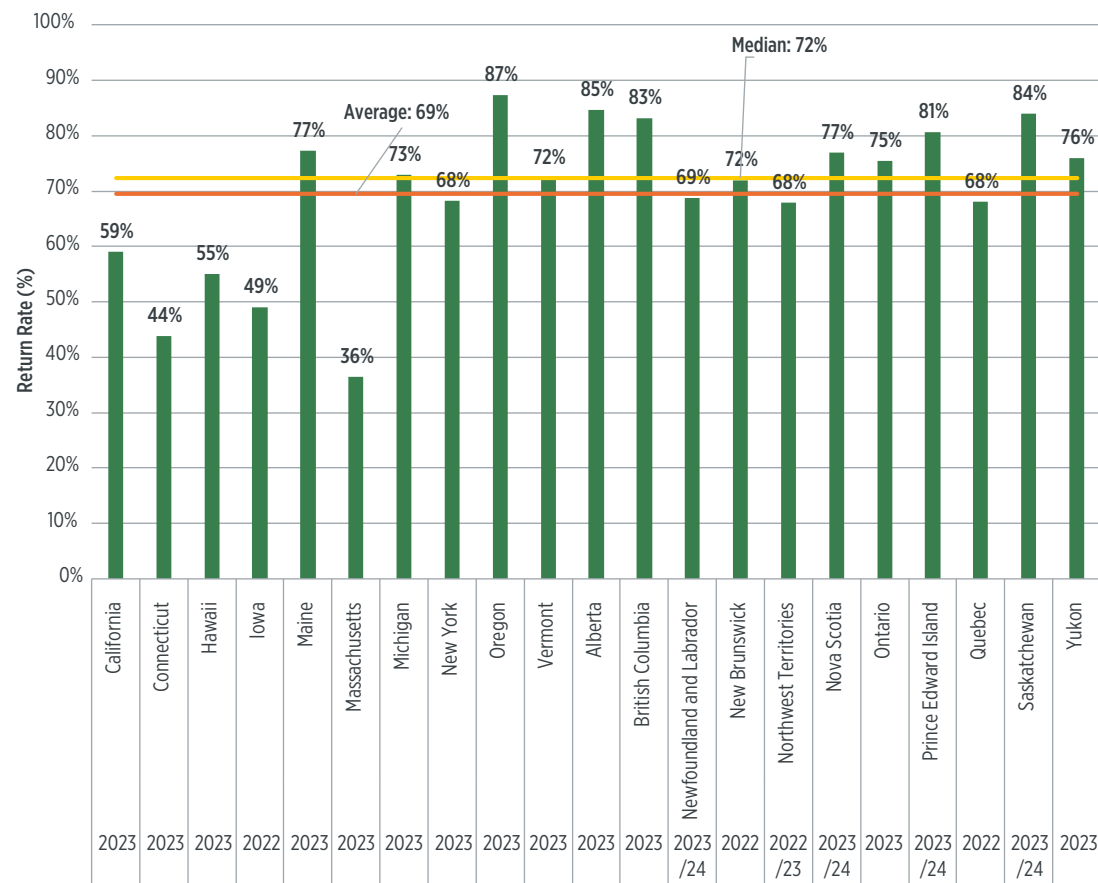
North America

Region snapshot



North America

Latest Return Rates in Deposit Return Systems for Single-Use Beverage Containers in North America



	Population (million)	Population Density (population/km²)	Legislation Enacted	System Started
United States				
California	39.0m	96.6	1986	1987
Connecticut	3.6m	288.4	1978	1980
Hawaii	1.4m	86.3	2002	2005
Iowa	3.2m	22.2	1978	1979
Maine	1.4m	17.5	1976	1978
Massachusetts	7.0m	346.6	1981	1983
Michigan	10.0m	68.5	1976	1978
New York	19.6	160.3	1982	1983
Oregon	4.2m	17.0	1971	1972
Vermont	0.6m	27.1	1972	1973
Canada				
Alberta	4.8m	7.6	1972	1972
British Columbia	5.6m	6.1	1970	1970
Newfoundland & Labrador	0.5m	1.5	1996	1997
New Brunswick	0.8m	11.9	1991	1992
Northwest Territories	0.04m	0.0	2003	2005
Nova Scotia	1.1m	20.3	1995	1996
Ontario	16.0m	17.9	2006	2007
Prince Edward Island	0.2m	31.2	1988	2008
Quebec	9.0m	7.0	1972	1984
Saskatchewan	1.2m	2.1	1978	1988
Yukon	0.05m	0.1	1991	1992
Total*	129.6m			

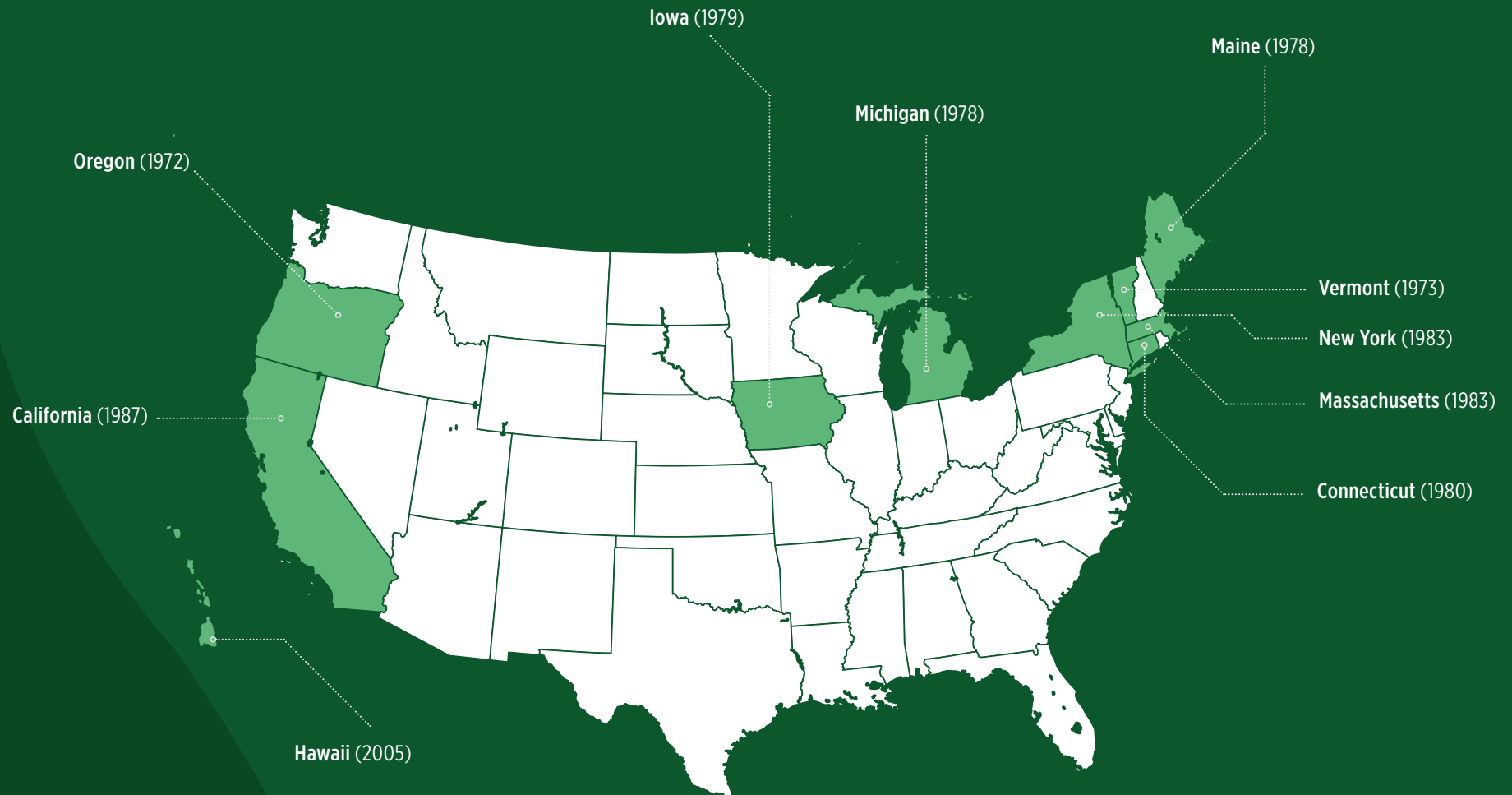
*Due to rounding, the sum of provincial and state populations may not exactly match the total population.

Source for Canadian population figures: Statistics Canada. 19 June 2024. "Population estimates, quarterly." Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000901>

Source for US population figures: United States Census Bureau. "State Population Totals and Components of Change: 2020-2023." Table entitled "Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia and Puerto Rico: April 1, 2020 to July 1, 2023 (NST-EST2023-POP)." Available at: https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-total.html#par_textimage_1574439295

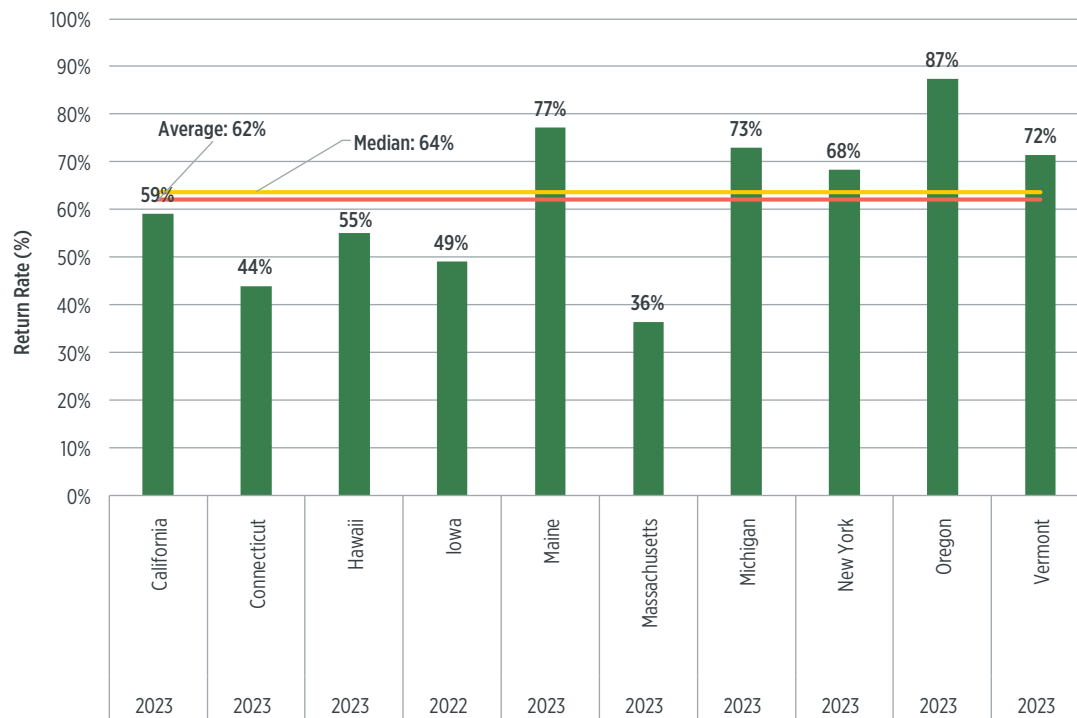


United States of America



United States of America

Latest Return Rates in Deposit Return Systems for Single-Use Beverage Containers in the U.S.



	Population (million)	Population Density (population/km²)	Legislation Enacted	System Started
United States				
California	39.0m	96.6	1986	1987
Connecticut	3.6m	288.4	1978	1980
Hawaii	1.4m	86.3	2002	2005
Iowa	3.2m	22.2	1978	1979
Maine	1.4m	17.5	1976	1978
Massachusetts	7.0m	346.6	1981	1983
Michigan	10.0m	68.5	1976	1978
New York	19.6	160.3	1982	1983
Oregon	4.2m	17.0	1971	1972
Vermont	0.6m	27.1	1972	1973
Total*	90.1m			

*Note: Due to rounding, the sum of state populations may not add up to the total.



California

Population: **39.0m**

Population density: **96.6/km²**

National (United States) GDP per capita,
PPP (international \$): **81,695.2**

System administrator's website:

Sources

- 1) CalRecycle. "Beverage Container Redemption Innovation Grant Program." Available at: <https://calrecycle.ca.gov/bevcontainer/grants/riq/>
- 2) CalRecycle. 2 May 2024. "Biannual Report of Beverage Container Sales, Returns, Redemption, and Recycling Rates." <https://www2.calrecycle.ca.gov/Docs/Web/119868>
- 3) CalRecycle. Plastic Minimum Content Standards (AB 793). <https://www.calrecycle.ca.gov/bevcontainer/bevdismant/plasticcontent/>
- 4) CalRecycle. "Notice: Handling Fee Changes, Effective July 1, 2024." Available at: <https://calrecycle.ca.gov/BevContainer/Notices/>
- 5) CalRecycle. 15 December 2023. "Notice: 2024 Processing Fees for Beverage Manufacturers." Available at: <https://calrecycle.ca.gov/BevContainer/Notices/>
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- 7) CalRecycle. "Beverage Container Recycling Centres." Available at: <https://www2.calrecycle.ca.gov/BevContainer/RecyclingCentres/>
- 8) CalRecycle. 12 December 2023. "Beverage Container Recycling Program Changes for Manufacturers – v1.
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- 10) Container Recycling Institute. Bottle Bill Resource Guide. "California." Available at: <https://www.bottlebill.org/index.php/current-and-proposed-laws/usa/california>
- 11) Container Recycling Institute. January 2024. "Estimates of Deposit Beverage Containers Captured through Curbside and Dropoff Programs in States with Deposit Programs." Available at: <https://wasteadvantagemag.com/estimates-of-deposit-beverage-containers-captured-through-curbside-and-dropoff-programs/>
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Legislative framework

Name of legislation

California Beverage Container Recycling and Litter Reduction Act

Legislation enacted

28 September 1986

Appointment of system operator

1987 (California's Department of Conservation administered the programme from 1987-2009; responsibility was transferred to CalRecycle as of January 2010)

System started

1 September 1987

Key updates

- › 1989 – deposit increase
- › 1993 – deposit increase
- › 1999 – expansion to include more beverages
- › 2000 – expansion to include nearly all types of non-carbonated beverages
- › 2004 – deposit increase
- › 2007 – deposit increase
- › 2022 – authorises new Dealer Cooperatives to bring unserved convenience zones (CZ) into compliance
- › 2022 – reduces the number of CZ exemptions
- › 2022 – appropriates significant funding to develop redemption infrastructure and creates new grant, loan, and payment programmes
- › 2023 – expansion of CZs to 1 mile
- › 2024 – expansion to include wine and distilled spirits (including unique packaging types: bladders, boxes, and pouches) and 100% fruit and vegetable beverages in large container formats
- › 2024 – increased processing payments and introduced an additional payment to rural recycling centres for handling glass containers

- › 2025 – ends Option B exemption for Beverage Dealers to pay CalRecycle USD\$100/day (€91/day) to comply with their take-back obligation; requiring Dealers to take back in-store or participate in a Dealer Cooperative to manage their take-back requirement

Regulatory authority

California Department of Resources Recycling and Recovery (CalRecycle; branch of the California Environmental Protection Agency)

Legislated targets¹

› Recycling:

- › 80% for aluminium, glass, plastic, and bi-metal

› Post-consumer recycled content for plastic deposit

containers (except large fruit and vegetable juice containers and wine and distilled spirits in boxes, bladders, and pouches [see note below*]):

- › 2022-2024: 15%
- › 2025-2029: 25%
- › 2030: 50%

- › *For wine and distilled spirits contained in a box, bladder, or pouch, or similar beverage container subject to the plastic minimum content standard requirement, SB 1013 provides manufacturers an additional two years to comply with the minimum-content standard, as follows:

- › 2024-2026: 15%
- › 2027-2031: 25%
- › 2032: 50%

- › SB 353 exempts large fruit and vegetable juice plastic containers from the minimum content requirement of 25% and 50% until 1 January 2026 and 1 January 2030, respectively. However manufacturers are still required to report the recycled plastic content in these containers.



Scope

Material type

Plastic, metal (aluminium, bi-metal), glass, bag-in-box/pouches/
paperboard cartons (for wine and distilled spirits only)

Beverage type

Sealed, ready-to-serve beverages with alcohol content $\geq 7\%$
by volume (beer and malt drinks, wine, wine coolers, spirits,
distilled spirit coolers) and all non-alcohol beverages
(carbonated and non-carbonated fruit drinks/water/soft
beverages, sports drinks, coffee and tea beverages, 100%
fruit juice, vegetable juice)

Size Excluded

All Milk, medical food, infant formula, juice boxes, juice
pouches, wine and distilled spirits in plastic, metal,
or glass containers

Is there a DRS for refillables?

No (<1% refillable market share across U.S. in 2024; state share
not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

California Refund Value (CRV)

Variable rate:

- Containers <24oz (710ml, 0.19 gal): USD\$0.05 (€0.05)
- Containers ≥ 24 oz (710ml, 0.19 gal): USD\$0.10 (€0.09)
- Bag-in-box, paperboard cartons, plastic or multi-layer
pouches containing wine, distilled spirits, wine
coolers, or distilled spirit coolers: USD\$0.25 (€0.23)

Note: Redemption centres may issue the CRV refund by weight
when consumers redeem >50 containers of the same type.
CalRecycle calculates the number of containers per pound to
ensure the weight-based refund matches the value by container.
Minimum refund values per pound, by material
type, are:

- Aluminium: USD\$1.68 (€1.51)
- Glass: USD\$0.105 (€0.095)
- PET plastic (clear): USD\$1.32 (€0.19)
- HDPE plastic (opaque): USD\$0.59 (€0.53)
- Bi-metal: USD\$0.40 (€0.36)

Handling fee (effective 1 July 2024)

- Flat rate:** USD\$0.00607 (€0.0055) (paid to redemption centres
in qualified “Convenience Zones”)

Processing fees (2024)

- Aluminium: none
- Glass: USD\$0.00576/unit (€0.0052)
- PET: USD\$0.00110/unit (€0.0009)
- HDPE: USD\$0.00697/unit (€0.0063)
- LDPE: USD\$0.01794/unit (€0.016)
- PP: USD\$0.05952/unit (€0.054)
- PS: USD\$0.00406/unit (€0.00363)
- Bi-metal: USD\$0.05088/unit (€0.046)
- Vinyl: USD\$0.05300/unit (€0.047)
- Box, bladder, or pouch, or similar container containing wine or
distilled spirits: equivalent to the fee applied to HDPE (in effect
until 1 January 2026)
- Other: USD\$0.14628/unit (€0.13)

Processing payments (2024)²

- Aluminium: none
- Glass: USD\$0.10623/lb (€0.096)
- PET: USD\$0.27601/lb (€0.25)
- HDPE: USD\$0.37850/lb (€0.34)
- LDPE: USD\$1.12624/lb (€1.01)
- PP: USD\$0.99806/lb (€0.90)
- PS: USD\$0.62558/lb (€0.56)
- Bi-metal: USD\$0.62618/lb (€0.56)
- Vinyl: USD\$0.79095/lb (€0.71)
- Other: USD\$0.68526/lb (€0.62)

System structure & administration

Clearing system

Centralised

System administrator

CalRecycle's Division of Recycling
Integrated Information System
(DORIIS)

System finance

Unredeemed deposits, processing fees

Unredeemed deposits

System administrator (funds are held in the California Beverage
Container Recycling Fund, which are allocated for programme
administration, supporting redemption centres, and providing
grants³ for new beverage container recycling and litter reduction
initiatives)

Material owner

Redemption centres and kerbside (and other) programme
operators

¹Manufacturers that sell ≤ 16 million plastic beverage containers in a calendar year are exempt from the post-consumer minimum content requirement for that year but not from reporting requirements. Manufacturers face penalties for not reporting and not meeting minimum-content standards. Minimum content requirement penalties charge USD\$0.20/lb for the difference between the required and actual plastic content amount.

²CalRecycle establishes an annual processing payment and a processing fee for any beverage container type that has a scrap value less than the cost of recycling. CalRecycle makes processing payments to processors, who then pay recyclers the entire processing payment. Beverage manufacturers pay processing fees to CalRecycle. In October 2023, California Governor Gavin Newsom signed SB 353, which among other things, directs CalRecycle to update the formula it uses for processing payments to redemption centres. To calculate values, the system currently uses a 12-month average of scrap values from the prior year, with a minimum three-month lag. Under the new formula, processing payments will be based on average scrap values from the prior three months.

³One example of a grant funded through the Beverage Container Recycling Fund is the Beverage Container Redemption Innovation Grant Program (RIG), established by AB 179. The programme is designed to support start-up costs for recycling initiatives, specifically targeting recycling centres, mobile recycling, reverse vending machines, and bag drop programmes. Existing recycling centres are also eligible for funding to establish satellite mobile recycling sites to expand outreach efforts. In August 2024, CalRecycle awarded nearly USD\$70 million in innovation grants to recyclers, community organisations, and supermarkets. This funding is expected to support the creation of over 250 new recycling sites across 30 counties. CalRecycle also announced additional funding planned for the coming year, including USD\$138 million for further redemption innovation grants, \$50 million for beverage container quality infrastructure grants, and \$25 million for reusable beverage container recycling infrastructure grants.



Container return & refund points

Collection model

Hybrid: Retailers (i.e., grocery stores, convenience stores, gas stations) generating ≥USD\$2 million/year (€1.8 million/year) must take back containers on site (in-store or in the parking lot) unless there is a state-certified redemption centre within 1 mile of a supermarket, or a 5 miles in rural areas. This area is referred to as a ‘convenience zone’ (CZ). Retailers in a CZ without a certified redemption centre may, after a 60-day grace period, pay a daily fee (USD\$100 [€91]) to CalRecycle in lieu of redeeming containers (starting 1 January 2025, this option will no longer be available and retailers in areas without redemption centres must either redeem containers in-store or join new dealer (retailer) cooperatives. They will also be required to submit a plan to CalRecycle on how they will buy back containers, assess fees on dealers, report to CalRecycle, and meet standards for convenient redemption and material recycling.)

Consumers can also donate containers to drop-off sites or kerbside recycling programmes, in which case they forfeit the deposit refund.

Online take-back? Unknown

Number of collection points

1,286 redemption centres
(number of retailers unknown)

Population per collection point

~30,300

Method of return

Manual

Barcode-based system?

No

Container deposit markings

Containers must have one of the following five messages displayed on their label/container:

- “California Redemption Value,”
- “CA Redemption Value,”
- “California Cash Refund,”
- “CA Cash Refund,” or “CA CRV”

Refund payment options

Cash, store voucher, electronic funds transfer (e.g., PayPal)

Return rate (2023)*

Plastic (PET)	Plastic (HDPE)	Aluminium	Glass	Total
61%	36%	66%	43%	59%

*The return rates above (calculated by the Container Recycling Institute based on CalRecycle data) represent the percentage of containers that are returned via the DRS network (i.e., retailers and redemption centres) only. If deposit containers recovered via California’s kerbside and drop-off programmes are included, the total return rate is 71%. A breakdown of material-specific return rates that include containers recovered via all collection channels is presented below.

Containers collected via kerbside and dropoff programmes

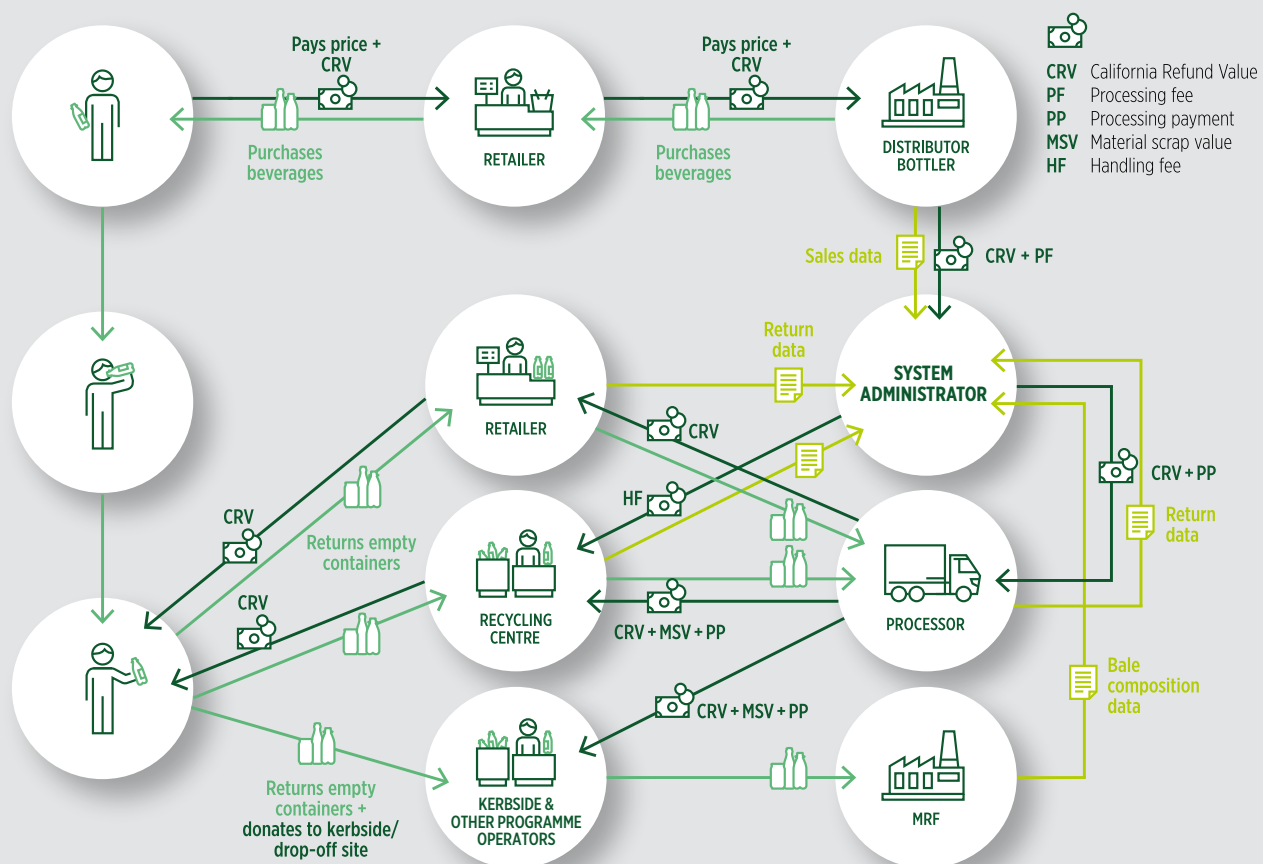
Plastic (PET)	Plastic (HDPE)	Aluminium	Glass	Total
10%	20%	8%	20%	12%

Total containers collected (via DRS network + kerbside and dropoff programmes):

Plastic (PET)	Plastic (HDPE)	Aluminium	Glass	Total
71%	56%	74%	63%	71%



Money, material & data flow



Connecticut

Population: **3.6m**

Population density: **288.4/km²**

National (United States) GDP per capita,
PPP (international \$): **81,695.2**

Regulator's website:

Sources

- 1) An Act Concerning Solid Waste Management. <https://www.cga.ct.gov/2021/SUM/PDF/2021SUM00058-R02SB-01037-SUM.PDF>
- 2) An Act Concerning Funding for School Lunches and a Center for Sustainable Aviation, Special Education Funding, Certain Bottle Deposits, Certain State Positions and the Posting of State Job Openings and Bond Covenant Restrictions and the Budget Reserve Fund. Available at: <https://www.cga.ct.gov/2023/ACT/PA/PDF/2023PA-00001-R00HB-06671-PA.PDF>
- 3) Connecticut Department of Energy and Environmental Protection. "The Connecticut Bottle Bill." Available at: <https://portal.ct.gov/DEEP/Reduce-Reuse-Recycle/Bottles/Connecticut-Bottle-Bill>
- 4) Container Recycling Institute. January 2024. "Estimates of Deposit Beverage Containers Captured Through Curbside and Dropoff Programs in States with Deposit Programs." Available at: <https://wasteadvantagemag.com/estimates-of-deposit-beverage-containers-captured-through-curbside-and-dropoff-programs/>
- 5) Miller, K. 11 August 2023. "Unclaimed Bottle Deposits." Research report prepared for the Office of Legislative Research. Available at: <https://www.cga.ct.gov/2023/rpt/pdf/2023-R-0191.pdf>
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- 7) Personal communication with Chris Nelson, Supervising Environmental Analyst, CT Department of Energy & Environmental Protection, 23 April 2024
- 8) Personal communication with Laura Pointek, Environmental Analyst, Connecticut Department of Energy and Environmental Protection, 29 April 2024
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Legislative framework

Name of legislation

Beverage Container Deposit and Redemption Regulations under the Beverage Container Deposit and Redemption Law, and the Act Concerning Solid Waste Management

Legislation enacted

April 1978

Appointment of system operator

Not applicable

System started

1 January 1980

Key updates

- › 1983 – variable handling fee implemented
- › 1986 – handling fee increase for beer
- › 2009 – expansion to water bottles, unredeemed deposits returned to State
- › 2021 – handling fee increase, RVM mandate, voluntary authorisation to form central system operator
- › 2021 – new law allowing for deposit initiators to keep a percentage of unredeemed deposits beginning FY 2023
- › January 2023 – expansion to other non-carbonated beverages, hard cider; elimination of the exemption on HDPE containers; introduction of >2.5L exemption threshold for non-carbonated drinks; introduction of >3L exemption for carbonated drinks; new exemption for all containers <150ml
- › February 2023 – introduction of exemption of any product that includes wine or spirits, "food for special dietary use" or "medical food" (this effectively exempted liquor-based hard seltzers and liquor-based hard ciders)
- › January 2024 – deposit increase

Regulatory authority:

Connecticut Department of Energy and Environmental Protection (DEEP)

Legislated targets

Redemption: 80%

Scope

Material type

Plastic, metal (aluminium, steel), glass, carton

Beverage type

Sealed, ready-to-drink carbonated beverages (i.e., beer and other malt beverages, malt-based hard seltzer, malt-based hard cider, mineral waters, soda water, and other carbonated soft drinks) and non-carbonated beverages (any water [including flavoured water], plant or nutritionally enhanced water, juice, juice drinks, tea, coffee, kombucha, plant-infused drink, sports or energy drink)

Size

- › Carbonated beverages: 150ml to 3L (0.04-0.79 gal)
- › Non-carbonated beverages: 150ml to 2.5L (0.04-0.66 gal)

Excluded

Wine, liquor, drinks that include wine or liquor, milk/dairy, pouches, plant-based milks, miniatures (containers <150ml) meal replacements, mixers

Is there a DRS for refillables?

No (<1% refillable market share across U.S. in 2024; state share not available)



Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

› **Flat rate:** USD\$0.10 (€0.09)

Handling fee (2024)

› **Variable rate:**

› Beer, hard cider, other malt beverages: USD\$0.025 (€0.023)

› Other beverages: USD\$0.035 (€0.032)

System structure & administration

Clearing system

Decentralised

System operator

Producer/Distributor/Importer (each deposit initiator manages their compliance individually; deposit initiators missed a legal deadline to form a central system operator)

System finance

Material revenues (while there are no statutorily defined producer fees, deposit initiators cover their own pickup, processing and administration costs)

Unredeemed deposits

› **Historically, 100% of unredeemed deposits were escheated to the state. However, legislation passed in 2021 incrementally decreases the amount the State gets to keep starting in FY 2023 and allows deposit initiators to retain a larger share if the redemption rate reaches certain targets:**

- › July 2023 – Dec 2023: 0% to state, 100% to deposit initiators
- › Jan 2024 – June 2024: 65% to state, 35% to deposit initiators
- › July 2024 – June 2025: 50% to state, 50% to deposit initiators
- › July 2025 – June 2026: if the redemption rate for the preceding fiscal year (July 2024-June 2025) is:
 - $\geq 60\%$: deposit initiators retain 75%, state retains 25%
 - $< 60\%$: deposit initiators retain 55%, state retains 45%
- › July 2026 – June 2027: if the redemption rate for the preceding fiscal year (July 2025-June 2026) is:
 - $\geq 65\%$: deposit initiators retain 95%, state retains 5%
 - $> 60\%$ to $< 65\%$: deposit initiators retain 75%, state retains 25%
 - $\leq 60\%$: deposit initiators retain 55%, state retains 45%
- › July 2027 – June 2028 and thereafter: if the redemption rate for the preceding fiscal year (July 2026-June 2027) is
 - $\geq 75\%$: deposit initiators retain 95%, state retains 5%
 - $> 65\%$ to $< 75\%$: deposit initiators retain 90%, state retains 10%
 - $> 60\%$ to $< 65\%$: deposit initiators retain 75%, state retains 25%
 - $\leq 60\%$: deposit initiators retain 55%, state retains 45%

Material owner

Deposit initiators

Container return & refund points

Collection model

Hybrid: Retailers must take back containers of the same brands, sizes, and types they sell, with return hours matching store operating hours. They may limit redemption to 240 containers/person. Containers can also be returned to stand-alone redemption centres, which can set their own rules for types and brands of containers they accept. Redemption centres that are part of retail centres (e.g., grocery stores) must accept the brands/types of containers they sell and can choose to accept all deposit containers. Retailers within 1 mile (1.6km) of a redemption centre may opt out of accepting returns.

Online take-back? No

Number of collection points

28 redemption centres and ~4,250 beverage retailers

Population per collection point

~846

Method of return

Mix of automated and manual. Retailers $\geq 7,000$ ft² (650m²) that are part of a chain that operates 10+ stores in the state must provide at least two RVMs at their locations; as of June 2024, there are 669 automated retail locations. Stores that are exempt from the RVM requirement must have a dedicated area to redeem containers if they are $\geq 40,000$ ft² (3,716m²) and opt not to use RVMs. Stores that use RVMs must ensure the machines are available during the store's normal business hours.



Barcode-based system?

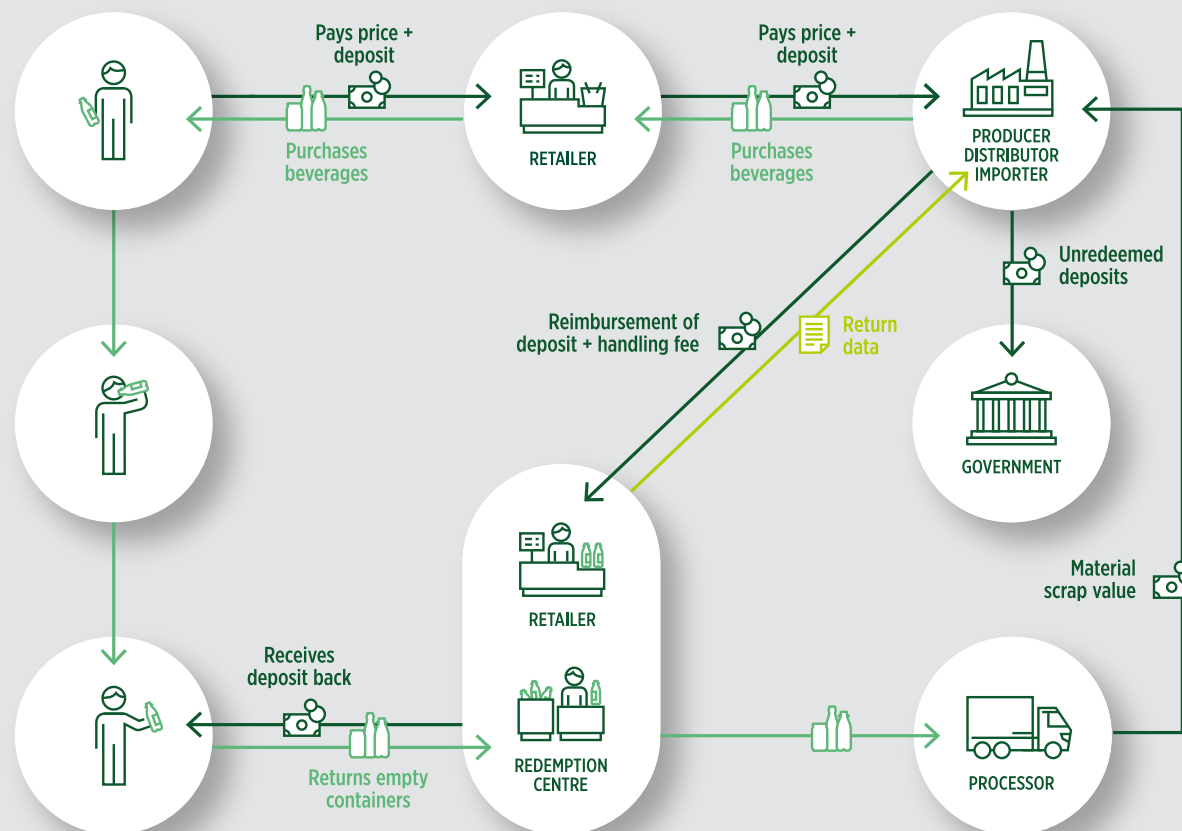
Yes

Container deposit markings

Containers must be marked with the message refund value or “return for refund” or “return for deposit” and the word “Connecticut” or “CT”

Refund payment options

Cash, electronic funds transfer, donation to charity

Return rate (2023)^{1,2}**Total****44%****Money, material & data flow**

¹ The Container Recycling Institute estimates that an additional 12.0% of containers are recycled via kerbside programmes.

² According to data released by the Connecticut Department of Environmental Protection, 194.5 million containers were redeemed during the first quarter of 2024, up 12.6% from a year before, as the state increased the deposit value from USD\$0.05 to \$0.10. This translated to a 53.5% redemption rate for Q1 2024, the highest of any quarter since the fourth quarter of 2018, and the highest first-quarter rate since 2017.



Hawaii

Population: **1.4m**

Population density: **86.3/km²**

National (United States) GDP per capita,
PPP (international \$): **81,695.2**

System operator's website:



Sources

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- 9) State of Hawaii Department of Health. December 2023. "Office of Solid Waste Management Annual Report to the Thirty-Second Legislature State of Hawai'i 2024." Available at: https://www.capitol.hawaii.gov/reportstoleg/reportuploads/AnnualReportonOfficeofSolidWasteManagement2023_12-29-2023-0.pdf

Legislative framework

Name of legislation

Act 176, Session Laws of Hawai'i 2002, codified in Chapter 342G, Part VIII, Hawai'i Revised Statutes

Legislation enacted

25 June 2002

Appointment of system operator

Unknown

System started

1 January 2005

Key updates

- › 2009 – expansion to include 2L containers
- › 2013 – expansion to include energy drinks and dietary supplements
- › 2015 – decrease to handling fee

Regulatory authority

Hawaii State Department of Health, Solid and Hazardous Waste Branch

Legislated targets

None

Scope

Material type

Plastic (PET, HDPE), metal (aluminium, bi-metal), glass

Beverage type

Beer, malt drinks, mixed spirits (<15% alcohol), mixed wine (<7% alcohol), all non-alcohol drinks (e.g., soft drinks, water, juice, tea, etc.)

Size

≤ 2L (0.53 gal)

Excluded

Milk and dairy products, wine, hard liquor (≥ 15% alcohol)

Is there a DRS for refillables?

No (<1% refillable market share across U.S. in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

› **Flat rate:** USD\$0.05 (€0.05)

Handling fee (effective 1 October 2024 to 30 September 2025)

› Variable rate:

- › Aluminium/bi-metal: USD\$0.034 (€0.031)
- › Glass: USD\$0.097 (€0.087)
- › Plastic: USD\$0.044 (€0.040)

Container fee (2024)¹

USD\$0.01 to \$0.015 (€0.009-€0.014) (fluctuates based on return rate achieved in previous fiscal year; set at USD\$0.01 if the return rate is <70%, and at USD\$0.015 if the return rate is ≥70%)



System structure & administration

Clearing system

Centralised

System operator

Hawaii State
Department of Health

System finance

Unredeemed deposits, material
revenues, producer fees

Unredeemed deposits

System operator

Material owner

Redemption centres

Container return & refund points

Collection model

Return-to-Redemption Centre: Containers can be returned to certified redemption centres operated by privately-owned, state-permitted solid waste facilities. Retailers are not obliged to take back containers unless they are located outside a 2-mile (3.2 km) radius from a redemption centre in high-density areas on the Island of O'ahu (no retailers fall into this category, therefore there are no R2R locations). Stores <5,000ft² (465m²) located in a rural area (Hawaii, Kaua'i, and Maui counties), or that only sell in-scope containers via vending machines are also exempt from the take-back obligation, but may choose to voluntarily provide redemption of the deposit as a 'value-add' service to customers.

Online take-back? No

Method of return

Manual

Number of collection points

53 (24 on O'ahu island; 15 on
Hawai'i island; 9 on Maui island;
5 on Kaua'i island)

Barcode-based system?

No

Container deposit markings

Containers need to indicate the
word "Hawaii" or the letters
"HI" along with the deposit
value (labelling can be
accomplished by applying a
"HI 5¢" sticker to the container)

Population per collection point

~27,078

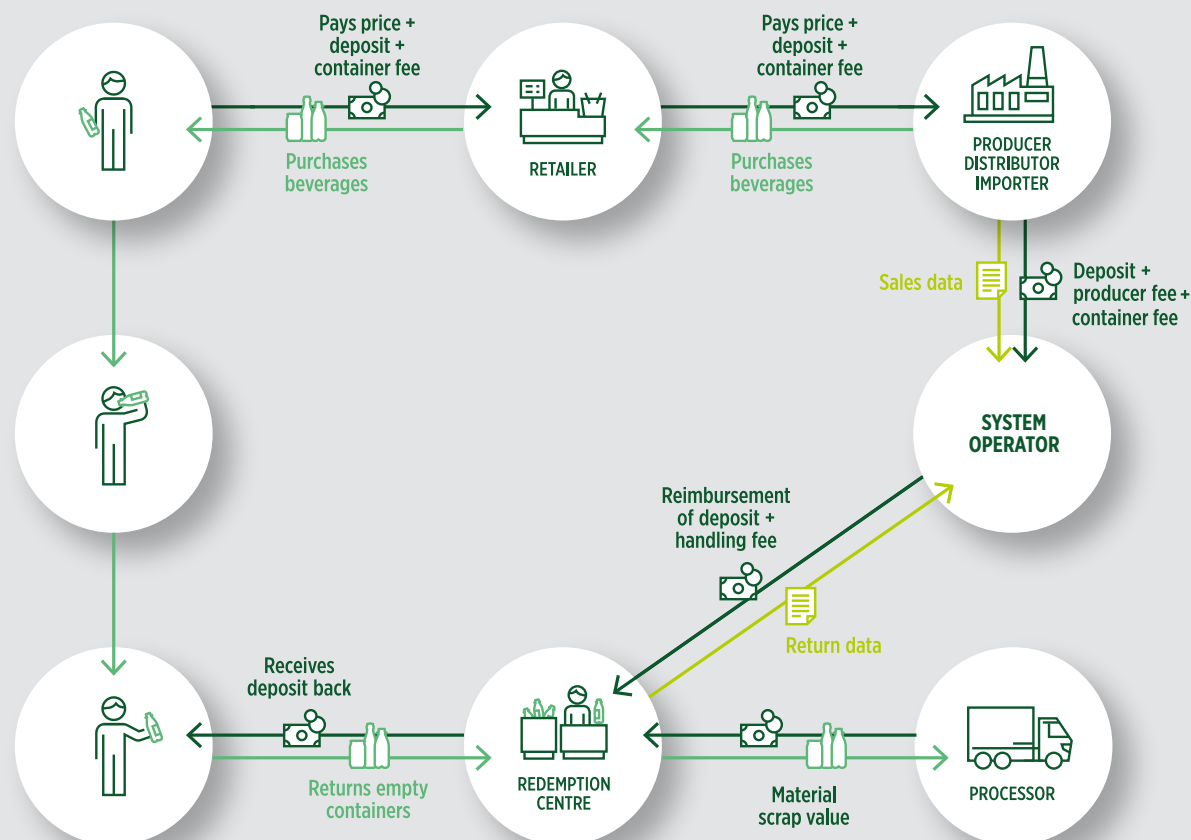
Refund payment options

Cash

Return rate (2022-23)²

Aluminium	Bi-metal	Plastic	Glass	Total
62%	70%	48%	50%	55%

Money, material & data flow



¹In addition to the refundable deposit, the programme establishes a non-refundable container fee that manufacturers and distributors must pay to the Department of Health, which helps cover the programme's operational costs. This fee is reviewed annually, as required by law. The law does not specify how retailers should pass it on to consumers, leaving that decision up to the retailers.

²The return rates above (calculated by the Container Recycling Institute based on state-reported data) include deposit containers returned via the DRS network (i.e., redemption centres) only. To calculate these rates, CRI deducted small percentages from reported recycling rates to account for deposit containers collected through the Honolulu kerbside programme, as follows: aluminium (0.9%), bi-metal (2.9%), glass (2.7%), and total (1.6%).



Iowa

Population: **3.2m**

Population density: **22.2/km²**

National (United States) GDP per capita,
PPP (international \$): **81,695.2**

Regulator's website:

Sources

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- 1) Container Recycling Institute. "Iowa." Available at: <https://www.bottlebill.org/index.php/current-and-proposed-laws/usa/iowa>
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- 1) Iowa Department of Natural Resources. "Changes to the Bottle Bill – Frequently Asked Questions." Available at: https://www.iowadnr.gov/Portals/IDNR/uploads/waste/bb_rulechangesfaq_redemptioncenters.pdf
- 1) Simpson, J. December 2021. "Beverage Container Deposit Laws and Iowa's Bottle Bill." Available at: <https://www.legis.iowa.gov/docs/publications/LG/1231240.pdf>

Legislative framework

Name of legislation

Iowa Code, Chapter 455C and Iowa Administrative Code Chapter 567,107 (Beverage Containers Control Law)

Legislation enacted

1 April 1978

Appointment of system operator

Not applicable

System started

1 May 1979

Key updates

- › 1 July 1979 – expanded to beer and soft drinks (initially covered wine and liquor only)
- › 1 January 2023 – increase to handling fee for redemption centres and retailers, introduction of retailer opt-out criteria

Regulatory authority

Iowa Department of Natural Resources (DNR)

Legislated targets

None

Scope

Material type

Plastic, metal, glass

Beverage type

Sealed, ready-to-serve beverages including beer, wine coolers, wine and liquor, carbonated drinks (including Kombucha), non-carbonated and non-carbonated mineral water

Size

All

Excluded

Non-carbonated, non-mineral water (bottled water), fruit and vegetable juices, fruit drinks, sports drinks, milk and milk products

Is there a DRS for refillables?

No (<1% refillable market share across U.S. in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

› **Flat rate:** USD\$0.05 (€0.05)

Handling fee (2024)

› **Variable rate:**

› Retailers and redemption centres: USD\$0.03 (€0.03)

› Dealer agents¹: USD\$0.01 (€0.01)

System structure & administration

Clearing system

Decentralised

System operator

Producer/Distributor/Importer

System finance

Unredeemed deposits, material revenues

Unredeemed deposits

Deposit initiators

Material owner

Deposit initiators



Container return & refund points

Collection model

Hybrid: Retailers must take back in-scope containers of the same kinds, sizes, and brands they sell. Due to changes in legislation passed in 2022, retailers can opt out of this requirement if they meet the following criteria:

- › have an agreement for a mobile redemption system, or
- › must be in a county with >30,000 people and within 10 miles (16.1 km) of a redemption centre, or
- › must be in a county with <30,000 people and within 15 miles (24.1 km) of a redemption centre, or
- › have a food establishment license, a US-FDA certified food protection manager, and sell food that is time-/temperature controlled for safety (regardless of its distance from the closest approved redemption centre).

Some redemption centres offer bag drop services, allowing consumers to sign up for an account, drop off bags of containers, and then get paid electronically.

Online take-back? No

Number of collection points²

104 redemption centres and an estimated 287 retailers

Refund payment options

Cash, electronic funds transfer

Barcode-based system?

Yes

Population per collection point

~8,202

Method of return

Unknown (of the large grocery retailers that still participate, most have RVMs. Redemption centres typically redeem containers manually but some have bulk automated redemption technology or bag drop)

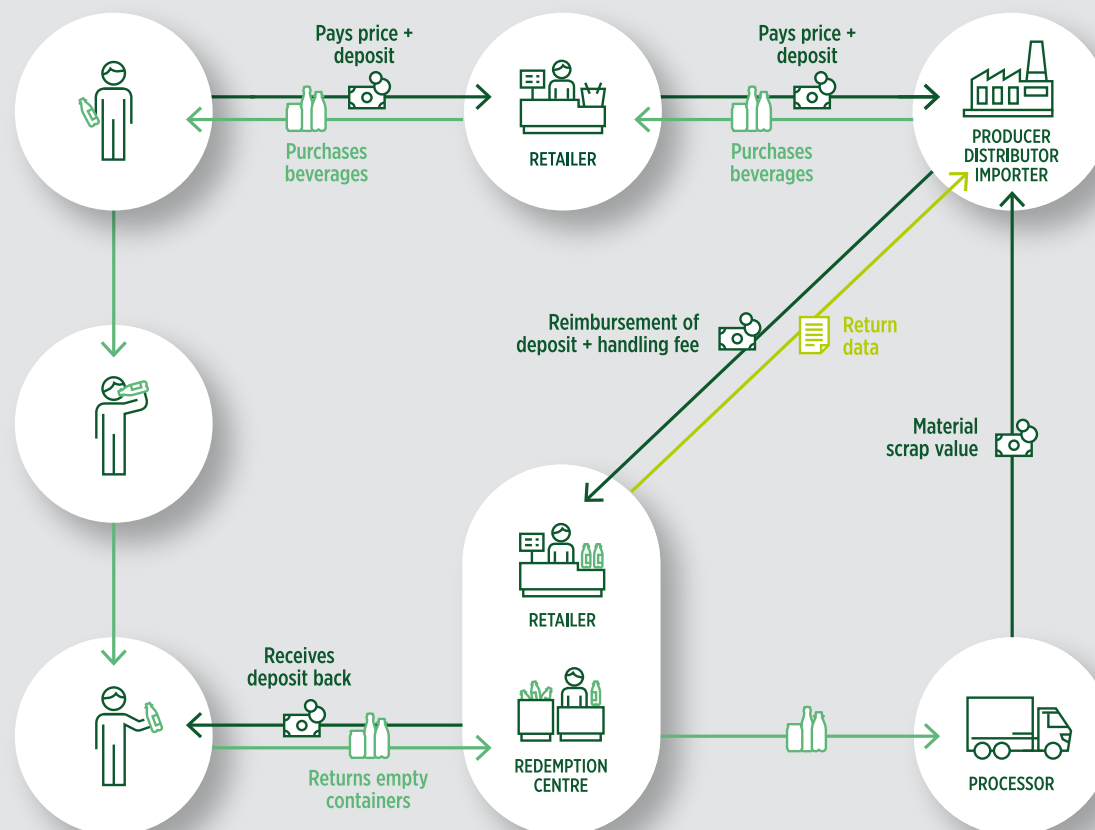
Container deposit markings

Containers must indicate the deposit value, either by embossing or by a stamp, label, or other method securely affixed to the container

Return rate (2022)³

Plastic (PET)	Aluminium	Glass	Total
56%	42%	76%	49%

Money, material & data flow



¹The law defines a dealer agent as "a person who solicits or picks up empty beverage containers for the purpose of returning the empty beverage containers to a distributor or manufacturer."

²According to a study by Cleaner Iowa, there are 29 counties without a redemption centre, and of the >1,000 Iowa businesses surveyed, only 8.7% are redeeming containers. In addition, only eight of 143 businesses contacted that are still required by law to redeem containers are doing so. 18.4% of grocery stores and 5.5% of convenience stores take-back empty containers.

³Unlike other U.S. states with deposit systems, Iowa does not require beverage distributors to report sales or returns data to the state, making a straightforward calculation of the actual return rate impossible. The rates shown above, which include containers recycled through both the DRS network (redeemed) as well as containers recycled via kerbside or recycling drop-off programmes, were calculated by the Container Recycling Institute (CRI) as part of a study for the Iowa Department of Natural Resources. To arrive at the "recovery rate" for deposit containers, CRI calculated the percentage of deposit container units landfilled statewide compared to the total deposit containers sold statewide in 2022. CRI then subtracted the landfilled deposit container percentage from one hundred percent.



Maine

Population: **1.4m**

Population density: **17.5/km²**

National (United States) GDP per capita,
PPP (international \$): **81,695.2**

Regulator's website:

Sources

- 1) Container Recycling Institute. "Maine." Available at: <https://www.bottlebill.org/index.php/current-and-proposed-laws/usa/maine>
- 2) Container Recycling Institute. January 2024. "Estimates of Deposit Beverage Containers Captured Through Curbside and Dropoff Programs in States with Deposit Programs." Available at: <https://wasteadvantagemag.com/estimates-of-deposit-beverage-containers-captured-through-curbside-and-dropoff-programs/>
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- 4) Natural Resources Council of Maine. 31 July 2023. "Behind the Scenes: How Maine Modernized the Bottle Bill." Available at: <https://www.nrcm.org/blog/how-maine-modernized-bottle-bill/>
- 5) Office of Program Evaluation & Government Accountability of the Maine State Legislature. May 2018. "Final Report: Maine's Beverage Container Redemption Program – Lack of Data Hinders Evaluation of Program and Alternatives; Program Design Not Fully Aligned with Intended Goals; Compliance, Program Administration, and Commingling Issues Noted." Available at: <https://legislature.maine.gov/doc/2316>
- 6) Quinn, M. 10 August 2023. "Maine bottle bill update reworks sorting and unclaimed deposits with eye to reuse." Waste Dive. Available at: <https://www.wastedive.com/news/maine-bottle-bill-deposits-redemption-center-distributors/690499/>
- 7) Smalley, M. 10 May 2023. "Maine passes emergency bill to help redemption centers." Recycling Today. Available at: <https://www.recyclingtoday.com/news/maine-emergency-bottle-bill-handling-fee-increase/#:~:text=The%20emergency%20measure%20increases%20the,1>
- 8) State of Maine. "Chapter 482 Public Law – An Act to Modernize Maine's Beverage Container Redemption Law." Available at: <https://legislature.maine.gov/legis/bills/getPDF.asp?paper=HP1225&item=5&snum=131>
- 9) State of Maine. "Chapter 529 Public Law – An Act Regarding Responsibility for Activities Intended to Increase the Use of Refillable and Reusable Beverage Containers." Available at: <https://legislature.maine.gov/legis/bills/getPDF.asp?paper=HP1358&item=3&snum=131>

Legislative framework

Name of legislation

Maine Returnable Beverage Container Law, Title 38, Chapter 33 of Maine Revised Statutes and an Act to Modernize Maine's Beverage Container Redemption Law

Legislation enacted

November 1976

Appointment of system operator

Not applicable

System started

1 January 1978

Key updates

- › 1980 – handling fee increase
- › 1990 – expansion to wine, liquor, water, and non-alcohol carbonated or non-carbonated drinks; handling fee increase
- › 2003 – handling fee increase
- › 2009 – handling fee increase
- › 2017 – expansion to 'nips' (wine and spirits ≤50mL)
- › 2019 – handling fee increase
- › May 2023 - handling fee increase
- › September 2023 – handling fee increase
- › October 2024 - end of requirement for redemption centres to sort by brand (requirement to commingle) and new requirement for producers to form a "commingling cooperative" to coordinate container pickup, reporting, investment in RVMs and refillables, etc.
- › January 2025 – new rules to adjust handling fee on biannual basis to keep up with rate of inflation

Regulatory authority

Maine Department of Environmental Protection (DEP)

Legislated targets

› Redemption:

- › 75% by January 2027
- › 80% by January 2032
- › 85% by January 2037

- › **Convenience:** On or after July 2025, the state will set a convenience standard that the "commingling cooperative" needs to meet. The standard must be "adequate to serve the needs of consumers in both rural and urban areas throughout the State" and must consider "geographical limitations, population densities and reasonable days and hours of operation for redemption centres."



Scope

Material type

Plastic, metal, glass

Beverage type

Sealed beer, ale or other drink produced by fermenting malt, spirits (including ‘nips’ [50ml (0.01 gal) liquor bottles]), wine, hard cider, wine coolers, soft drinks, non-carbonated water, non-alcohol carbonated or non-carbonated drinks in liquid form and intended for human consumption

Size

≤4L (1.1 gal)

Excluded

Unflavoured milk and milk substitutes, certain containers composed of a combination of aluminium and plastic/paper filled with non-alcohol drinks, Maine-produced juices and cider, infant formula, nutritional supplements, products frozen at sale or intended for consumption in a frozen state, paper or cardboard containers

Is there a DRS for refillables?

No (<1% refillable market share across U.S. in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

› Variable rate:

› Wine and spirits >50ml (0.01 gal): USD\$0.15 (€0.14)

› Other beverages (incl. wine and spirits ≤50mL): USD\$0.05 (€0.045)

Handling fee (2024)

› Flat rate: USD\$0.06 (€0.054)

System structure & administration

Clearing system

Semi-centralised. Each “commingling cooperative” of brand owners is required to collectively organise container collection as well as share cost and collection data with each other. They are also responsible for fairly apportioning costs to their deposit initiator members. There are 5 comingling cooperatives (soft drink, wine/beer, water [Nestle/Blue Triton/Polar], TOMRA, Maine Recycling).

System operator

› Until July 2025: Producer/Distributor/Importer

› After July 2025: “Commingling cooperative” of brands

System finance

Material revenues, unredeemed deposits, producer fees to cover management costs for the “commingling cooperative” (not set in statute)

Unredeemed deposits

› Until 15 July 2025: Producers/Distributors/Importers. Through the “commingling cooperatives,” they are required to spend unredeemed deposits on improvements to the system, including USD \$500,000/year on RVMs, and \$500,000 for refillable beverage infrastructure.

› After 15 July 2025: Commingling cooperative, and therefore the state

Material owner

Deposit initiator



Container return & refund points

Collection model

Hybrid: Retailers must take-back in-scope containers of the same kind, size, and brand they sell, unless they have a DEP-approved 'member dealer agreement' with the nearest redemption centre (measured by road miles).

Online take-back? No

Number of collection points

~321 redemption centres and an estimated 2,100+ retailers

Population per collection point

~577

Method of return

Mostly manual

Barcode-based system?

Yes

Container deposit markings

Containers must indicate the deposit value and the word "Maine" or abbreviation "ME"

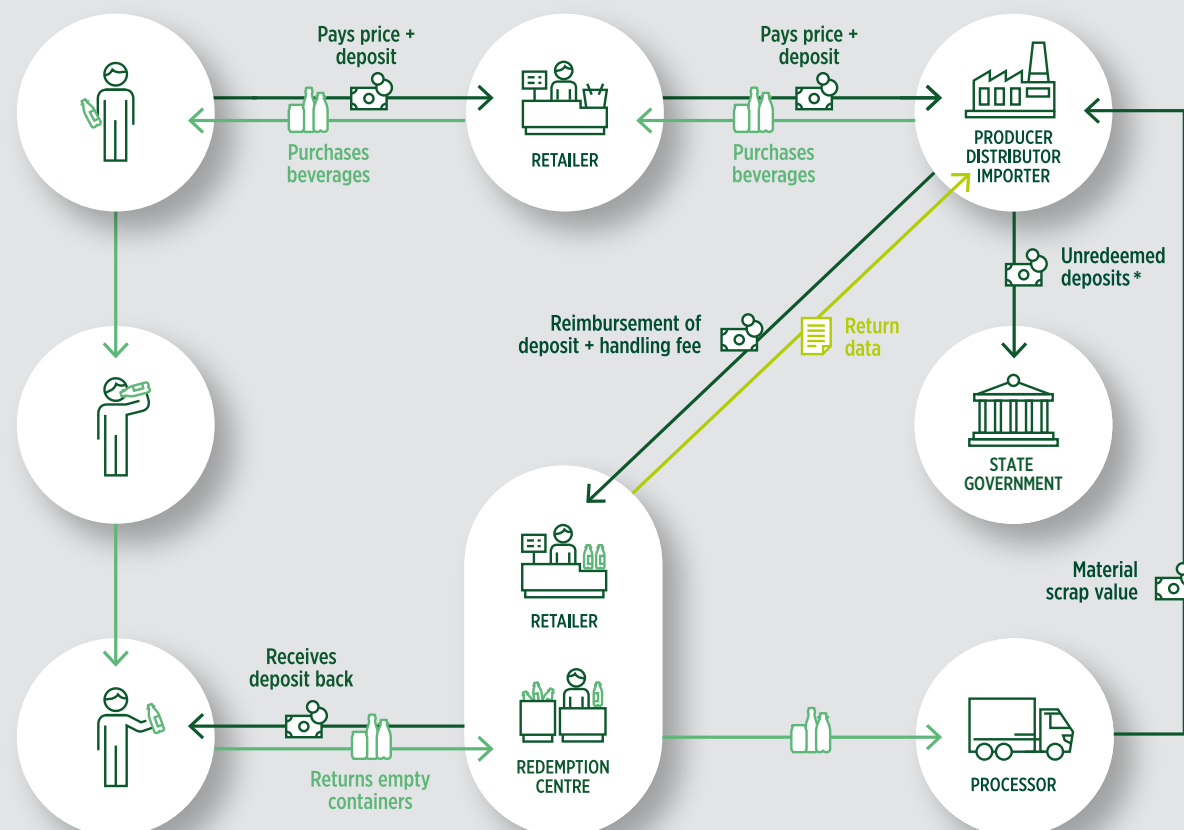
Refund payment options

Cash, electronic funds transfer

Return rate (2023)²

Plastic	Metal	Glass	Total
72%	80%	80%	77% ³

Money, material & data flow



*Before July 15, 2025: Unredeemed deposits are the property of the members of the comingling group
After July 15, 2025: Unredeemed deposits are the property of the comingling cooperative, and therefore the state

¹Under the new law passed in 2023, a "comingling cooperative" of brand owners will be required to make annual payments of a) USD\$500,000 to a special Cost and Carbon Efficient Technology Grant Fund administered by the Department of Environmental Protection (DEP) designed for compacting RVMs for their fraud prevention and GHG emissions reduction benefits and RVM installation costs, and b) USD\$500,000 for grants for a refillable beverage feasibility study and infrastructure, including reuse and refill strategies. An annual fee of \$600,000 to DEP is meant to offset administration costs.

²These rates are calculated using data from only half of the state's distributors, so the final figure may be subject to change.

³The Container Recycling Institute estimates that an additional 9.25% of containers are recycled via kerbside programmes.



Massachusetts

Population: **7.0m**

Population density: **346.6/km²**

National (United States) GDP per capita,
PPP (international \$): **81,695.2**

Regulator's website:

Sources

- 1) Commonwealth of Massachusetts, Executive Office of Energy & Environmental Affairs. "Guide to the 1983 Bottle Bill for Consumers." Available at: <https://www.mass.gov/doc/guide-to-the-1983-bottle-bill-for-consumers/download>
- 2) Container Recycling Institute. "Massachusetts." Available at: <https://www.bottlebill.org/index.php/current-and-proposed-laws/usa/massachusetts>
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- 4) Personal communication with Sean Sylver, Massachusetts Department of Environmental Protection, 2 April 2024

Legislative framework

Name of legislation

Massachusetts General Law, Chapter 94, Sections 321-327
"Beverage Container Recovery Law"

Legislation enacted

1981

Appointment of system operator

Not applicable

System started

January 1983

Key updates

- › 1990 – escheat provision added
- › 2013 – handling fee increase

Regulatory authority

Massachusetts Department of Environmental Protection,
Massachusetts Department of Revenue, and Massachusetts
Office of Attorney General

Legislated targets

None

Scope

Material type

Plastic, metal (aluminium, bi-metal), glass

Beverage type

Sealed beer, malt, carbonated soft drinks, mineral water

Size

<7.6L (2 gal)

Excluded

Non-carbonated drinks other than mineral water (e.g., non-carbonated, non-alcohol water), wine, dairy products, liquor, natural fruit juices, non-carbonated alcohol drinks other than beer and malt

Is there a DRS for refillables?

No (<1% refillable market share across U.S. in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value¹

› **Flat rate:** USD\$0.05 (€0.05)

Handling fee (2024)

› Variable rate

- › **Retailers:** USD\$0.0225 (€0.020) (receive free pick-up of containers by deposit initiators)
- › **Redemption centres:** USD\$0.0325 (€0.029) (must deliver redeemed containers to central processing facility)



System structure & administration

Clearing system

Decentralised

System operator

Producer/Distributor/Importer

System finance

Material revenues, processing fees (in cases where redemption centres deduct processing fees from deposit refunds)

Unredeemed deposits

Escheated to the State (General Fund)

Material owner

Deposit initiator

Container return & refund points

Collection model

Hybrid: Retailers must take back in-scope containers of the same brands, types, and sizes they sell. There are no exemptions or opt-out provisions.

Online take-back? No²

Number of collection points

40 redemption centres and an estimated 7,200+ retailers

Population per collection point

~965

Container deposit markings

Containers must be marked with a label that indicates the deposit value

Method of return

55% automated / 45% manual

Refund payment options

Cash

Barcode-based system?

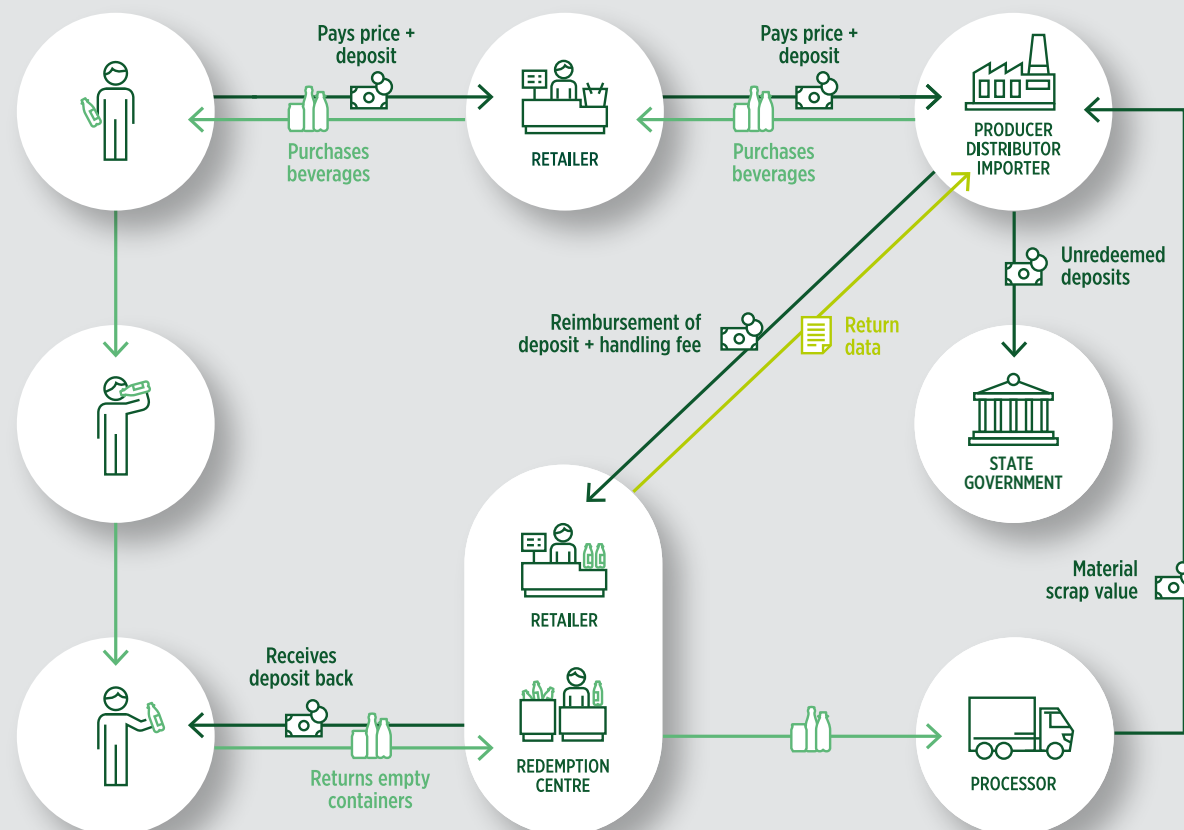
Yes

Return rate (2023)³

Total

36%

Money, material & data flow



¹Retailers must redeem containers at full deposit value, while redemption centres are allowed to deduct processing fees from refunds.

²The legislation lacks explicit mention of online retailers, leaving no distinction between them and traditional retailers (referred to as 'dealers' under the law). This absence implies that online retailers are likely not obligated to accept container returns or provide refunds.

³For US states that achieve a return rate between 35%-39%, the Container Recycling Institute estimates that an additional 12.5% of containers are recycled via kerbside programmes.



Michigan

Population: **10.0m**

Population density: **68.5/km²**

National (United States) GDP per capita,
PPP (international \$): **81,695.2**

Regulator's website:

Sources

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- 2) Container Recycling Institute. 11 March 2024. "CRI Supports Michigan House Bill 5421." Available at: <https://www.container-recycling.org/images/2024/CRI%20Supports%20Michigan%20HB%205421%2003112024%20v4.pdf>
- 3) Container Recycling Institute. January 2024. Available at: "Estimates of Deposit Beverage Containers Captured Through Curbside and Dropoff Programs in States with Deposit Programs." <https://wasteadvantagemag.com/estimates-of-deposit-beverage-containers-captured-through-curbside-and-dropoff-programs/>
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- 5) Personal communication with Howard Heideman, Michigan Department of Treasury, 28 May 2024.
- 6) State of Michigan Department of Treasury. "Notice Regarding Treatment of Kombucha Products Under Michigan's Bottle Deposit Law." Available at: https://www.michigan.gov/documents/taxes/Notice_-_Kombuch_Products_Under_Bottle_Deposit_Law_673754_7.pdf

Legislative framework

Name of legislation

Beverage Containers Initiated Law of 1976, Michigan Compiled Laws (MCL) Sections 445.571 through 445.576

Legislation enacted

2 November 1976

Appointment of system operator

Not applicable

System started

3 December 1978

Key updates

- › 1989 – expansion to wine coolers canned cocktails; retailers entitled to 25% of unredeemed deposits
- › 2019 – expansion to kombucha

Regulatory authority

Michigan Department of Treasury

Legislated targets

None

Scope

Material type

Plastic, metal (aluminium/tinplate), glass, liquid paperboard, or combination of these materials

Beverage type

Sealed beer/ale, soft drinks, carbonated and mineral water, wine coolers, canned cocktails, malt drink of whatever alcohol content

Size

<3.78L (1 gal)

Excluded

Non-carbonated drinks other than mineral water (e.g., juice, coffee, tea, non-carbonated water), milk, sport drinks, wine, liquor, foil pouches

Is there a DRS for refillables?

No (<1% refillable market share across U.S. in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

› **Flat rate:** USD\$0.10 (€0.09)

Handling fee (2024)

None (to cover handling costs, large retailers receive 25% of unredeemed deposits, in proportion to the number of containers they redeem)

System structure & administration

Clearing system

Decentralised (majority of clearing handled by Michigan Soft Drink Association and Michigan Beer & Wine Wholesalers Association)

System operator

Producer/Distributor/Importer

System finance

Material revenues

Unredeemed deposits

Escheated to the State – The first USD \$1 million is deposited into the Bottle Bill Enforcement Fund, which is used by the Michigan State Police for enforcement of the legislation. This fund continues to collect \$1 million/year until a maximum of \$3 million. Once the



fund reaches \$3 million, deposits are suspended until the fund balance falls below \$2 million. After the disbursement of the first \$1 million to the Bottle Bill Enforcement Fund, the remaining amount is dispersed as follows:

- › 25% returned to retailers
- › 75% deposited into the state's Cleanup and Redevelopment Trust Fund. Of this, 80% is deposited into the Cleanup and Redevelopment Fund, 10% into the Community Pollution Prevention Fund, and 10% remains in the Trust Fund (continues to collect 10% per year until a maximum of USD\$200 million is met)

Material owner

Deposit initiators

Container return & refund points

Collection model

Return-to-Retail: Retailers must take back containers of the same kinds, sizes, and brands they sell. By law, they can refund up to USD\$25 per person per day, though they may choose to accept additional containers. There are no opt-out provisions.

Online take-back? No

Number of collection points

11,000+

Population per collection point

~912

Method of return

Mostly automated

Barcode-based system?

Yes

Container deposit markings

Containers must indicate the deposit value and the name of the state, either by embossing or by a stamp, label, or other method securely affixed to the container

Refund payment options

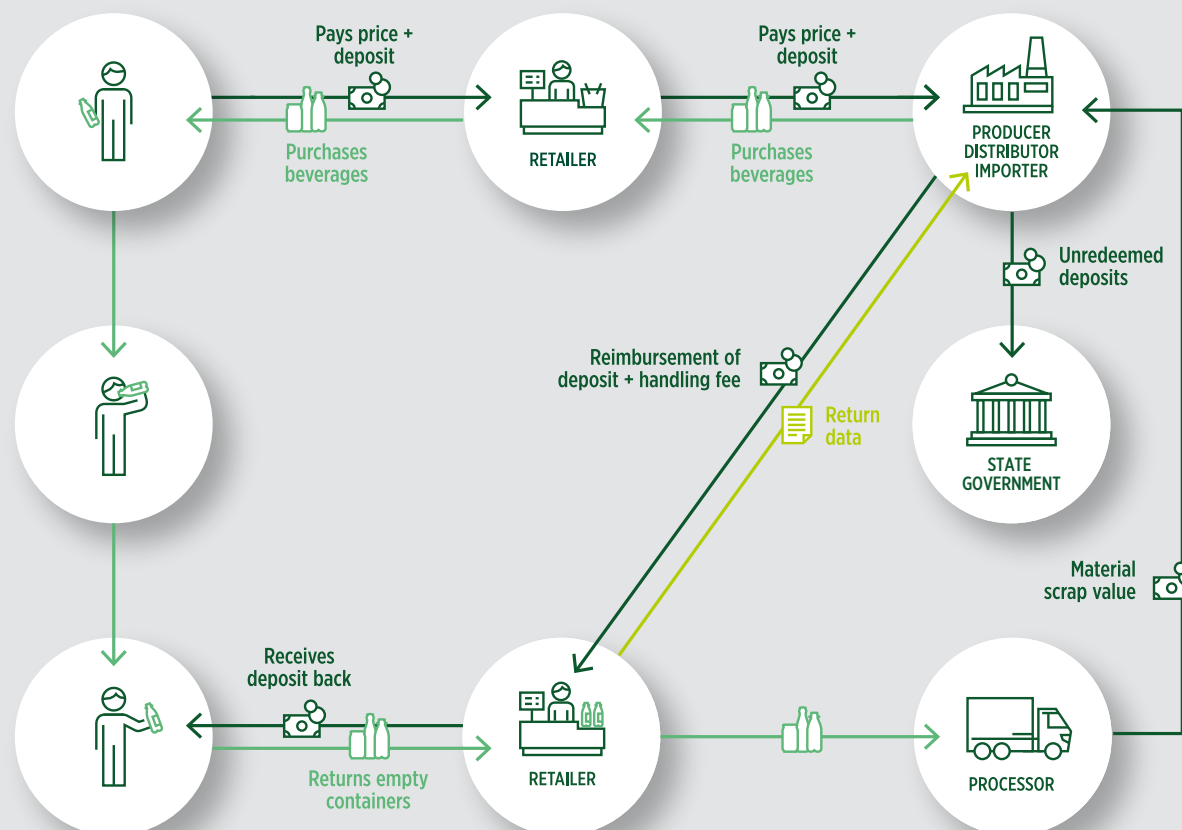
Cash

Return rate (2023)^{1,2}

Total

73%

Money, material & data flow



¹Michigan's return rates post-pandemic have been unnaturally low. Prior to 2020, the state's return rate was in the high 80s (89% in 2019), the highest of all US deposit return programmes. However, near the onset of the COVID-19 pandemic, the Governor suspended the retailer takeback requirement, which meant a complete shutdown of the programme, leaving consumers with no options to return their empty containers. Although the state re-established the programme over time, Michigan experienced the largest drop in redemption rates in the country from 2019 to 2020 (16%). In June 2021, the Michigan Department of Treasury issued a notice to retailers with return facilities of their obligation to accept containers. Despite this, the performance of Michigan's deposit programme has not recovered to its pre-pandemic levels.

²For US states that achieve a return rate between 70%-74%, the Container Recycling Institute estimates that an additional 9.5% of deposit containers are recycled via kerbside programmes.



New York

Population: **19.6m**

Population density: **160.3/km²**

National (United States) GDP per capita,
PPP (international \$): **81,695.2**

Regulator's website:

Sources

- 1) Container Recycling Institute. "Bottle Bill Resource Guide: New York." Available at: <https://www.bottlebill.org/index.php/current-and-proposed-laws/usa/new-york>
- 2) Container Recycling Institute. January 2024. "Estimates of Deposit Beverage Containers Captured Through Curbside and Dropoff Programs in States with Deposit Programs." Available at: <https://wasteadvantagemag.com/estimates-of-deposit-beverage-containers-captured-through-curbside-and-dropoff-programs/>
- 3) New York State Department of Environmental Conservation. "Frequently Asked Questions About The Bottle Bill." Available at: <https://dec.ny.gov/environmental-protection/recycling-composting/bottle-bill/faq>
- 4) New York State Department of Environmental Conservation. "New York's Bottle Bill: Returnable Container Act (RCA)."
- 5) [https://govt.westlaw.com/nycrr/Document/I4eac4ef2cd1711dda432a117e6e0f345?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)&bhcp=1](https://govt.westlaw.com/nycrr/Document/I4eac4ef2cd1711dda432a117e6e0f345?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)&bhcp=1)

Legislative framework

Name of legislation

Bottle Bill Regulations (6 NYCRR Part 367 – Returnable Beverage Containers), under the New York State Returnable Container Act (Article 27, Title 10 of the Environmental Conservation Law [ECL], Sections 27-1001 to 27-1019)

Legislation enacted

15 June 1982

Appointment of system operator

Not applicable

System started

1 July 1983

Key updates

- › 1983 – handling fee increase
- › 1998 – handling fee increase
- › 2009 – expansion to bottled water, handling fee increase, change in ownership of unredeemed deposits

Regulatory authority

New York State Department of Environmental Conservation (NY DEC)

Legislated targets

None

Scope

Material type

Plastic, metal (aluminium, steel), glass

Beverage type

Sealed carbonated soft drinks, soda water, carbonated energy drinks, beer and other malt drinks, mineral water (carbonated and non-carbonated), wine products [but not wine itself], water that does not contain sugar (including flavoured or nutritionally enhanced water)

Size

<3.78L (1 gal)

Excluded

Milk products, wine, liquor, tea, sports drinks, juice, drink boxes, water containing sugar

Is there a DRS for refillables?

No (<1% refillable market share across U.S. in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

› **Flat rate:** USD\$0.05 (€0.05)

Handling fee (2024)

› **Flat rate:** USD\$0.035 (€0.032) (by law, beverage distributors must pay retailers and redemption centres a handling fee of at least 20% of the refund value of each container returned)

System structure & administration

Clearing system

Decentralised

System operator

Producer/Distributor/Importer

System finance

Material revenues, portion (20%) of unredeemed deposits

Unredeemed deposits

20% retained by deposit initiators and 80% escheated to the New York State Department of Taxation and Finance (part of the funds go to the state's Environmental Protection Fund)

Material owner

Deposit initiators

Container return & refund points

Collection model

Hybrid: Retailers must take back containers of the same brands and types that they sell and pay refunds during normal business hours. Stores open <24 hours are exempt from accepting returns in the first and last hour of business. Retailers <7,000ft² (650m²) may limit redemption to 72 containers/person/day if they have a written agreement with a redemption centre within 0.5 miles (0.8km).

Online take-back? No

Number of collection points

Approximately 750 redemption centres and 20,000 retailers

Population per collection point

~943

Method of return

57% automated / 43% manual

Container deposit markings

Containers must be marked or embossed with the text "New York" or "NY" and the deposit value. New York can be listed with other deposit states. Alternative labelling is acceptably only for beverages not manufactured in the US.

Barcode-based system?

Yes

Refund payment options

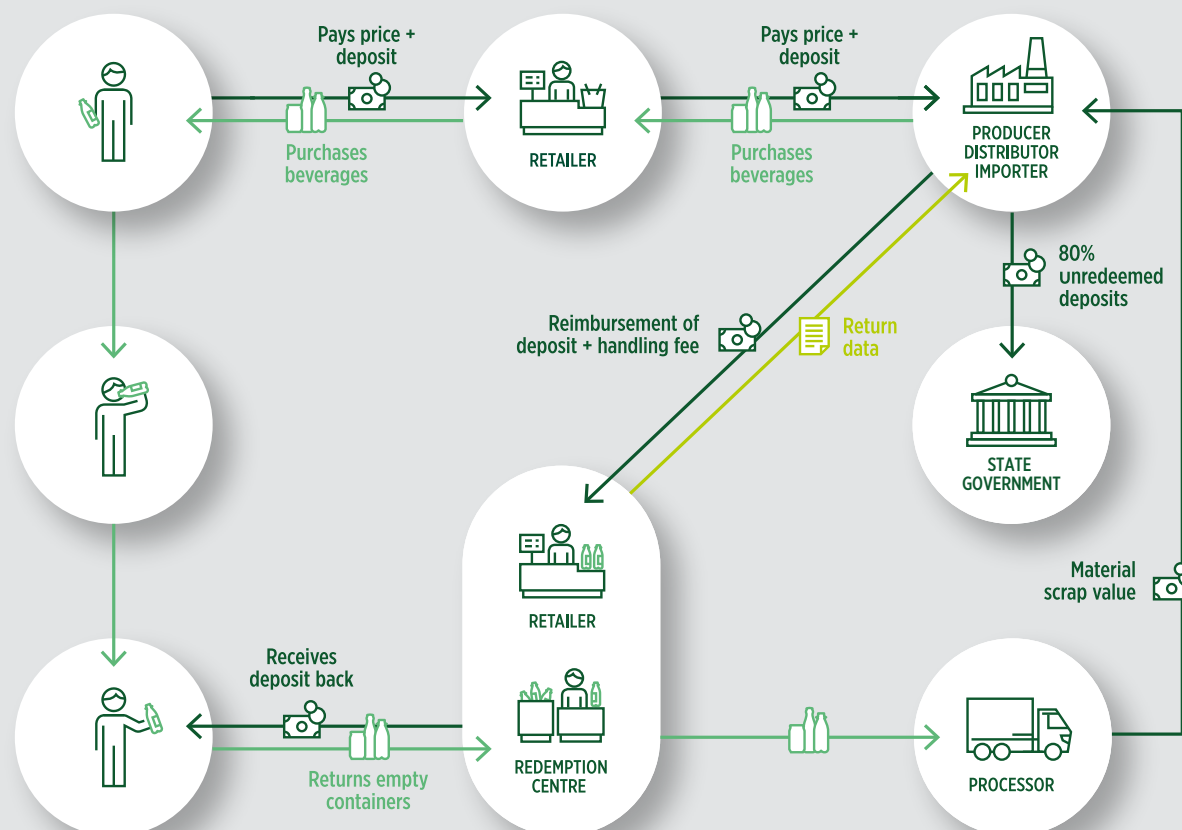
Cash, electronic funds transfer

Return rate (2023)¹

Total

68%

Money, material & data flow



¹ For US states that achieve a return rate between 65%-69%, the Container Recycling Institute estimates that an additional 9.75% of deposit containers are recycled via kerbside programmes.



Oregon

Population: **4.2m**

Population density: **17.0/km²**

National (United States) GDP per capita,
PPP (international \$): **81,695.2**

System operator's website:

Sources

- 1) Container Recycling Institute. January 2024. "Estimates of Deposit Beverage Containers Captured Through Curbside and Dropoff Programs in States with Deposit Programs." Available at: <https://wasteadvantagemag.com/estimates-of-deposit-beverage-containers-captured-through-curbside-and-dropoff-programs/>
- 2) Oregon Beverage Recycling Cooperative. "2023 Annual Report." Available at: https://obrc.com/wp-content/uploads/2024/03/About_Reports_2023_Annual.pdf
- 3) Oregon Beverage Recycling Cooperative. "Q4 2023 Quarterly Report." Available at: https://obrc.com/wp-content/uploads/2023/07/About_Reports_2023_Q4.pdf
- 4) "Oregon's Bottle Bill - Redeemable Beverages." Rev. 01/23. Available at: https://www.oregon.gov/olcc/Docs/bottle_bill/Included_Beverages.pdf
- 5) "Oregon's Bottle Bill - Frequently Asked Questions." Rev. January 2023. Available at: https://www.oregon.gov/olcc/Docs/bottle_bill/bottle_bill_faqs.pdf
- 6) Secretary of State Oregon Audits Division. November 2020. "Oregon Has an Opportunity to Modernize Groundbreaking Bottle Bill on Its 50th Anniversary." Available at: <https://sos.oregon.gov/audits/Documents/2020-36.pdf>
- 7) Oregon Liquor and Cannabis Commission. "Oregon's Bottle Bill & Redemption Centres." Available at: https://www.oregon.gov/olcc/pages/bottle_bill.aspx
- 8) Oregon Liquor and Cannabis Commission. "2023 Beverage Container Return Data." Available at: https://www.oregon.gov/olcc/Docs/bottle_bill/2023-BeverageContainerReturnData.pdf
- 9) Oregon Liquor and Cannabis Commission. "Bottle Bill Update: Crawlies Redeemable January 1st." Available at: https://www.oregon.gov/olcc/Docs/bottle_bill/Bottle-Bill-Crawlies.pdf
- 10) Oregon Liquor and Cannabis Commission. "Bottle Bill Update: Distributor Requirements." Available at: https://www.oregon.gov/olcc/Docs/bottle_bill/Bottle-Bill-Distributor-Requirements.pdf
- 11) Oregon Liquor and Cannabis Commission. October 2022. "Retailer Guidelines for Selling Beverages Under Oregon's Bottle Bill." Available at: https://www.oregon.gov/olcc/Docs/bottle_bill/Bottle-Bill-Retailer-Guidelines.pdf

Legislative framework

Name of legislation

Oregon Revised Statutes (ORS),
Chapters 459A.700 – 459A.744

Legislation enacted

July 1971

Appointment of system operator

- › First regional cooperative formed by distributors, known as Container Recovery Incorporated (CRInc), formed in 1987
- › Oregon Beverage Recycling Cooperative (OBRC) formed in 2009

System started

October 1972

Key updates

- › 2007 – expansion to include non-carbonated water (including flavoured water)
- › 2011 – added provision to allow increase of deposit to USD\$0.10 if redemption rate falls below 80% for two years
- › 2012 – new law allowing for formal formation of a distributor cooperative
- › 2017 – deposit increase from USD\$0.05 to USD\$0.10
- › 2018 – expansion to include juice, sports drinks, teas, kombucha, hard seltzer, etc.
- › 2019 – new allowance for the establishment of dealer redemption centres
- › 2022 – new fee for distributors who are not members of OBRC
- › 2023 – expansion to 'crawlers' (large metal containers)
- › 2025 – expansion to wine in cans

Regulatory authority

Oregon Liquor and Cannabis Commission (OLCC)

Legislated targets¹

- › **Redemption:** 80%

Scope

Material type

Plastic, metal (aluminium, steel), glass

Beverage type²

- › **Containers 118ml to 1.5L (0.03 gal to 0.4 gal):** coffee/tea (even if they contain milk), energy and sports drinks, fruit and vegetable juice (even if not 100%), juice smoothies, coconut water, non-alcohol wine, hard cider if alcohol content $\leq 8.5\%$, marijuana drinks, protein shakes (unless marketed as a meal replacement), Kombucha, cocktail mixers
- › **Containers $\leq 3L$ (0.79 gal):** soda (carbonated/sparkling drinks), beer, water

Size

Dependent on content (see above)

Excluded²

Distilled liquor, wine, dairy or plant-based drinks where milk (or milk substitute) is the first ingredient, infant formula, meal-replacement drinks, concentrates, growlers

Is there a DRS for refillables?

Yes (<1% refillable market share across U.S. in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value³

› **Fixed rate:** USD\$0.10 (€0.09)

Retailer/distributor fee

Distributor EPR fees are not set in statute but help pay for any costs not covered by revenue from unredeemed deposits and material sales. Retailers $\geq 5,000\text{ft}^2$ (465m²) within 3.5 miles of a redemption centre can voluntarily choose to pay a "participation fee" to OBRC to help the organisation manage a nearby redemption centre in return for limiting or refusing redemption to consumers. The fee is designed to cover 50% of the cost of the nearby redemption centre with OBRC covering the remaining 50%.



System structure & administration

Clearing system⁴

Centralised

System operator⁴

Oregon Beverage Recycling Cooperative (OBRC) (cooperative owned by Oregon beverage distributors)

System finance

Unredeemed deposits, fees paid by OBRC members and participating retailers

Unredeemed deposits

Producer/Importer/Distributor or OBRC (if Producers/Importers/Distributors are members)

Material owner

System operator (100% of material revenues are distributed back to members proportional to the volume and type of material they sell)

The number of containers stores must accept each day depends on store size, whether the store is located within a convenience zone, and whether the store chooses to pay a participation fee:

- › Stores $\geq 5,000$ ft² in Zone 1 can refuse all returns if they pay to participate in that RC;
- › Stores $\geq 5,000$ ft² in Zone 2 of an RC can limit returns to 24 containers/person/day if they pay to participate in the RC
- › Stores $< 5,000$ ft² in either zone may limit returns to 24 containers/person/day
- › Stores $\geq 5,000$ ft² outside the zones cannot participate in a RC and must redeem 144 containers/person/day
- › Stores $< 5,000$ ft² cannot participate in a RC but can limit returns to 24 containers/person/day if they are in a RC zone and may limit returns to 50 containers/person/day if not in a RC zone

All full-service RCs are operated by OBRC and are staffed and open 7 days/week for a minimum of 10 hours/day during June, July, and August, and a minimum of 9 hours/day during other months.

In addition to full-service RCs, containers can be returned to BottleDrop[®] Express locations; these are facilities at a store that has drop doors for BottleDrop account holders to drop off Green (personal accounts) and Blue (fundraiser accounts) bags of containers as they do at a BottleDrop RC.

Containers can also be returned to Dealer RCs (DRCs), which are stores that have partnered with OBRC. They look like a BottleDrop Express, but have different operating hours and container return limits. DRCs may limit Green Bag returns to two bags/day, and must have their drop doors available for the return of Green and Blue bags from 8AM to 8PM if the stores are open during those hours.

In 2023, 79.5% of containers were returned through the BottleDrop network, 11.1% to large retailers, and 9.4% to small retailers.

Online take-back? Unknown

Number of collection points

Approximately 2,011, including 27 full-service redemption centres, 55 dealer redemption centres, 77 BottleDrop Express sites, and 1,852 retail return sites (671 RVMs).

Population per collection point

~2,105

Method of return⁵

90% automated / 10% manual

Barcode-based system?

Yes

Container deposit markings

Containers must include a label that identifies the state ("Oregon" or "OR") and the deposit value. There are no requirements as to specific placement on a container.

Refund payment options

Cash, store credit

Container return & refund points

Collection model

Hybrid: Retailers $\geq 5,000$ ft² (465m²) must take back containers of all brands and sizes for each kind of beverage they sell, even if they don't stock that specific brand or size. Retailers $< 5,000$ ft² (465m²) may refuse returns of containers they don't sell, but must accept any brand or size they do sell, regardless of where it was purchased. Redemption centres (RCs) must accept all deposit containers.

The law allows for up to two "convenience zones" surrounding an RC:

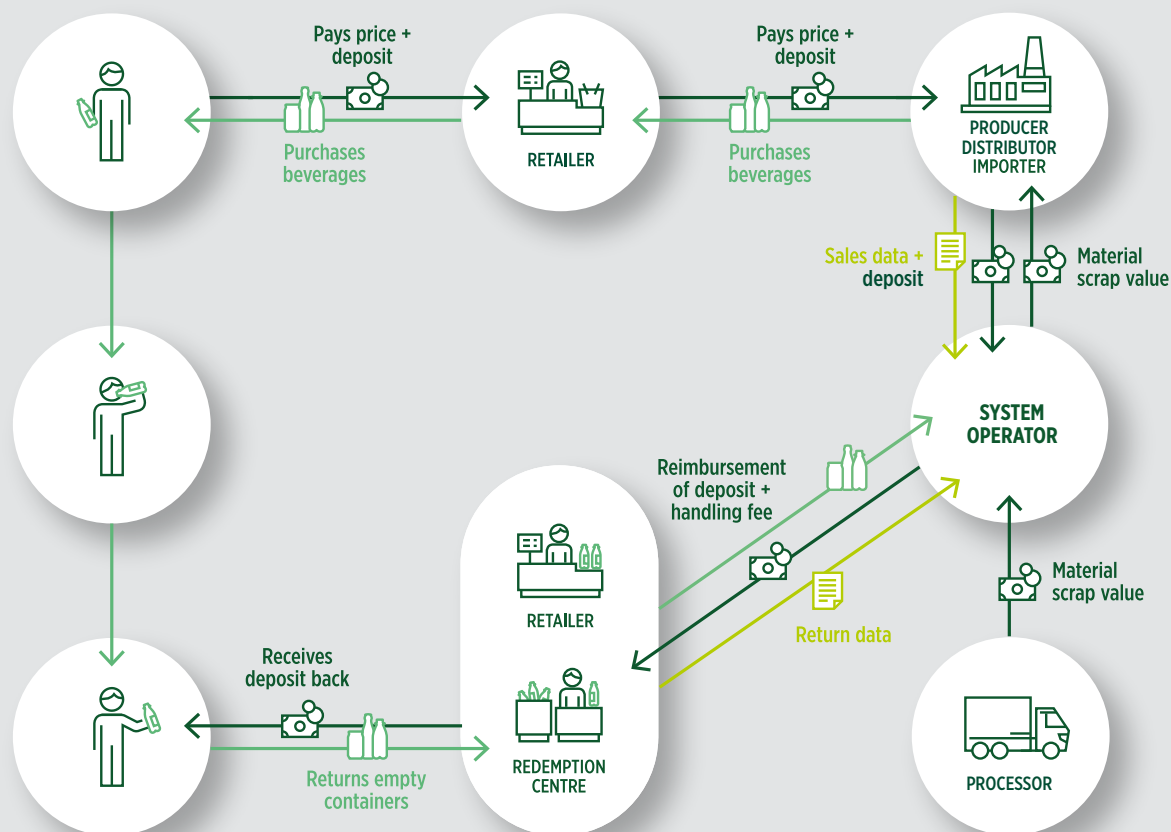
- › Zone 1 – the sector within a 2-mile radius of the full-service RC
- › Zone 2 – from the edge of Zone 1 to a 3.5-mile radius around the RC



Return rate (2023)^{6,7}

Plastic	Metal	Glass	Total
87%	89%	78%	87%

Money, material & data flow



¹ The law makes provisions for the deposit to be raised to USD\$0.10 if the redemption rate falls below 80% for two consecutive years (as determined any time after 1 January 2016). At the time of the law's passage, the redemption rate was 84%. The rate fell below 80% for two consecutive years, which triggered the increase to USD\$0.10 on 1 April 2017. Any year in which the redemption rate drops below the legislature's target of 80%, OBRC remits the value of unredeemed deposits beyond that point to the BottleDrop Fund to support non-profits across Oregon.

² Beginning 1 July 2025, wine in cans will carry a USD\$0.10 refundable deposit like other drinks.

³ While it's common practice for distributors to collect a deposit when they sell beverages to retailers and for retailers to charge a deposit when they sell beverages to consumers, Oregon's Bottle Bill statutes and administrative rules don't require a deposit to be charged. With that said, consumers are entitled to receive a USD\$0.10 refund when they return redeemable containers to stores or redemption centres, and distributors are legally required to pick up their empties from collection points and pay the stores and redemption centres that took back the containers USD\$0.10 per container.

⁴ The system operator is OBRC, with the exception of a few distributors (about 4%) that have decided not to join OBRC. These distributors manage their compliance individually. Note: During the 2022 legislative session, changes were made to the legislation impacting both distributors and the OBRC. These changes mean that:

^a By 1 January 2024, distributors selling <15,000 units/year must either become a member of OBRC or pay an annual fee of USD\$5,000 to the Oregon Liquor and Cannabis Commission (OLCC).

^b By 1 January 2024, distributors selling 15,000 to 500,000 units/year must either become a member of OBRC or pay an annual fee of USD\$25,000 to OLCC.

^c By 1 January 2023, distributors selling >500,000 units/year must either become a member of OBRC or pay an annual fee of USD\$3,000 per full-service redemption centre and provide comparable services to OBRC in the areas in which the distributors sell beverages.

⁵ Oregon's DRS allows people to drop off special bags filled with deposit-bearing containers and drop them off at any BottleDrop bag drop location in Oregon, rather than using single-feed or bulk RVMs, manual redemption, or automatic container counters.

⁶ OBRC members report their sales data to OBRC, which then reports total sales and redemption figures to the OLCC. Additionally, distributors that are not members of OBRC must report their sales and redemption data directly to OLCC. OLCC then compiles all of this data to calculate an overall redemption rate for the state.

⁷ For US states that achieve a return rate between 85%-89%, the Container Recycling Institute estimates that an additional 5.0% of containers are recycled via kerbside programmes.



Vermont

Population: **0.6m**

Population density: **27.1/km²**

National (United States) GDP per capita,
PPP (international \$): **81,695.2**

Regulator's website:

Sources

- 1) Container Recycling Institute. "Vermont." Available at: <https://www.bottlebill.org/index.php/current-and-proposed-laws/usa/vermont>
- 2) Container Recycling Institute. January 2024. "Estimates of Deposit Beverage Containers Captured Through Curbside and Dropoff Programs in States with Deposit Programs." Available at: <https://wasteadvantagemag.com/estimates-of-deposit-beverage-containers-captured-through-curbside-and-dropoff-programs/>
- 3) State of Vermont, Agency of Natural Resources, Department of Environmental Conservation. n.d. Letter to beverage distributors and manufacturers regarding deposit decrease on ready-to-drink spirits beverages effective July 1, 2022. Available at <https://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/ANR%20-%2020200623%20RTD%20Spirit%20Beverages%20Enforcement%20Discretion.pdf>
- 4) Vermont Legislature. "No. 177. An act relating to alcoholic beverages and the Department of Liquor and Lottery." Available at: <https://legislature.vermont.gov/Documents/2022/Docs/ACTS/ACT177/ACT177%20As%20Enacted.pdf>
- 5) Vermont Agency of Natural Resources, Department of Environmental Conservation. Waste Management and Prevention Division. January 2019. "Bottle Bill Fact Sheet - Retailers and Redemption Centers." <https://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/BottleBillFactSheet-Retailers.pdf>

Legislative framework

Name of legislation

Beverage Container and Redemption Law

Legislation enacted

April 1972

Appointment of system operator

Not applicable

System started

July 1973

Key updates

- › 1991 – expansion to include liquor >50ml
- › 2008 – change in handling fees
- › July 2022 – decrease in deposit value for ready-to-drink spirit beverages from USD\$0.15 to \$0.05

Regulatory authority

Agency of Natural Resources, Department of Environmental Conservation

Legislated targets

None

Scope

Material type

Plastic, metal (aluminium/tinplate), glass

Beverage type

Beer, wine coolers and other malt beverages, pre-mixed spirit cocktails, liquor and spirits, carbonated non-alcohol beverages (soft drinks, sparkling waters and juices, and carbonated sports and energy drinks)

Size

› **Dependent on beverage type:**

› Liquor: >50ml (0.01 gal)

› Other beverages: any size

Excluded

Wine, hard cider, non-carbonated non-alcohol beverages (water, milk, juices, sports and energy drinks)

Is there a DRS for refillables?

No (<1% refillable market share across U.S. in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

› **Variable rate:**

› Liquor and spirits >50ml (0.01 gal) containing >12% alcohol by volume: USD\$0.15 (€0.14)

› Other beverages: USD\$0.05 (€0.05)

Handling fee (2024)

› **Variable rate:**

› Brand-sorted containers: USD\$0.04 (€0.04)

› Commingled containers: USD\$0.035 (€0.032)



System structure & administration

Clearing system

Decentralised

System operator

Producer/Importer/Distributor

System finance

Material revenues

Material owner

Deposit initiators

Unredeemed deposits

Unredeemed deposits on liquor containers are retained by the Department of Liquor Control. For all other containers, unredeemed deposits are escheated to the State's Clean Water Fund.

Container return & refund points

Collection model

Hybrid: Retailers must take back containers of the brands they sell. They can request an exemption from the regulatory authority if they can show that an alternate redemption location exists that serves the public's need. Containers can also be returned to certified redemption centres, which are required to accept all deposit containers. Those that handle >250,000 containers/year are required to commingle according to an Agency-approved commingling agreement.

Online take-back? No

Number of collection points

1,000+ retailers and
52 redemption centres

Population per collection point

~615

Container deposit markings

Containers must contain a label specifying the state "Vermont" or "VT" and the deposit value. The label must be placed upon the container by embossing or imprinting of the normal product label or, in the case of a metal can, on the top of the container.

Method of return

Mostly manual

Barcode-based system?

Yes

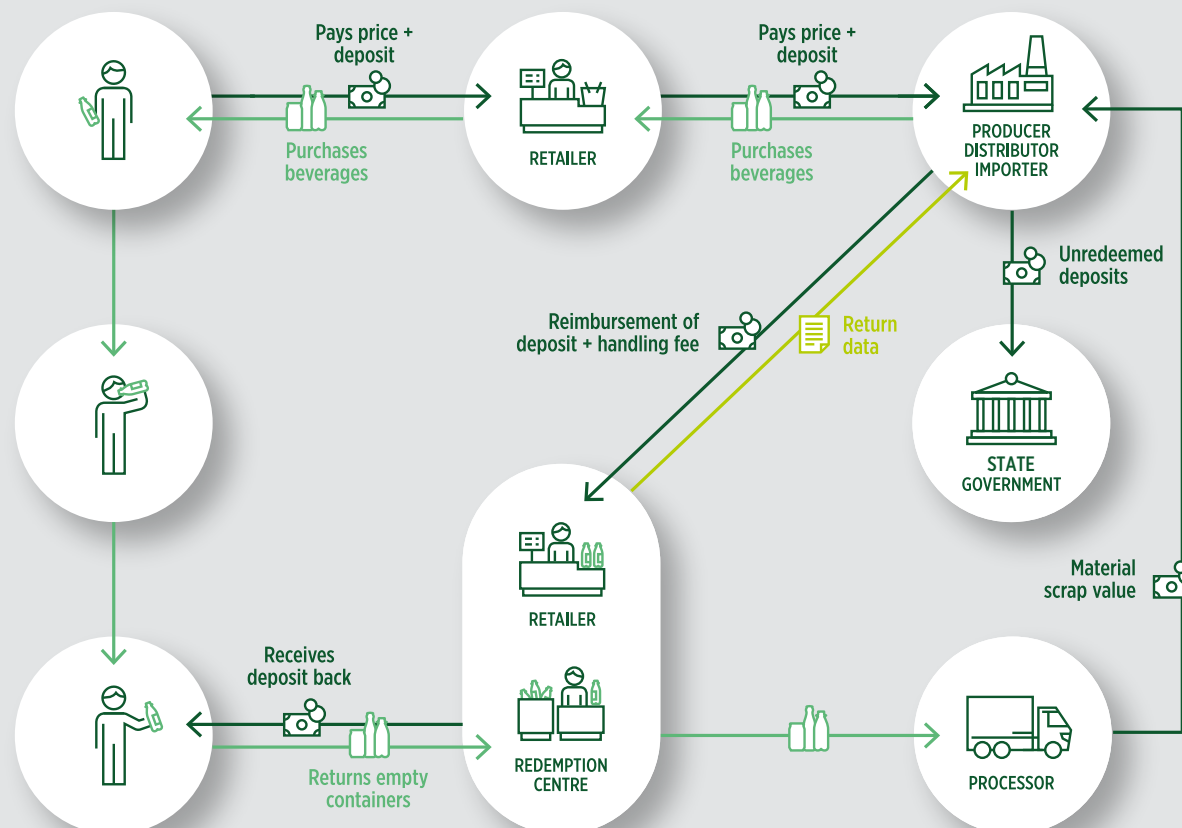
Refund payment options

Cash, other

Return rate (2023)¹

Non-liquor containers	Liquor containers	Total
72%	63%	72%

Money, material & data flow

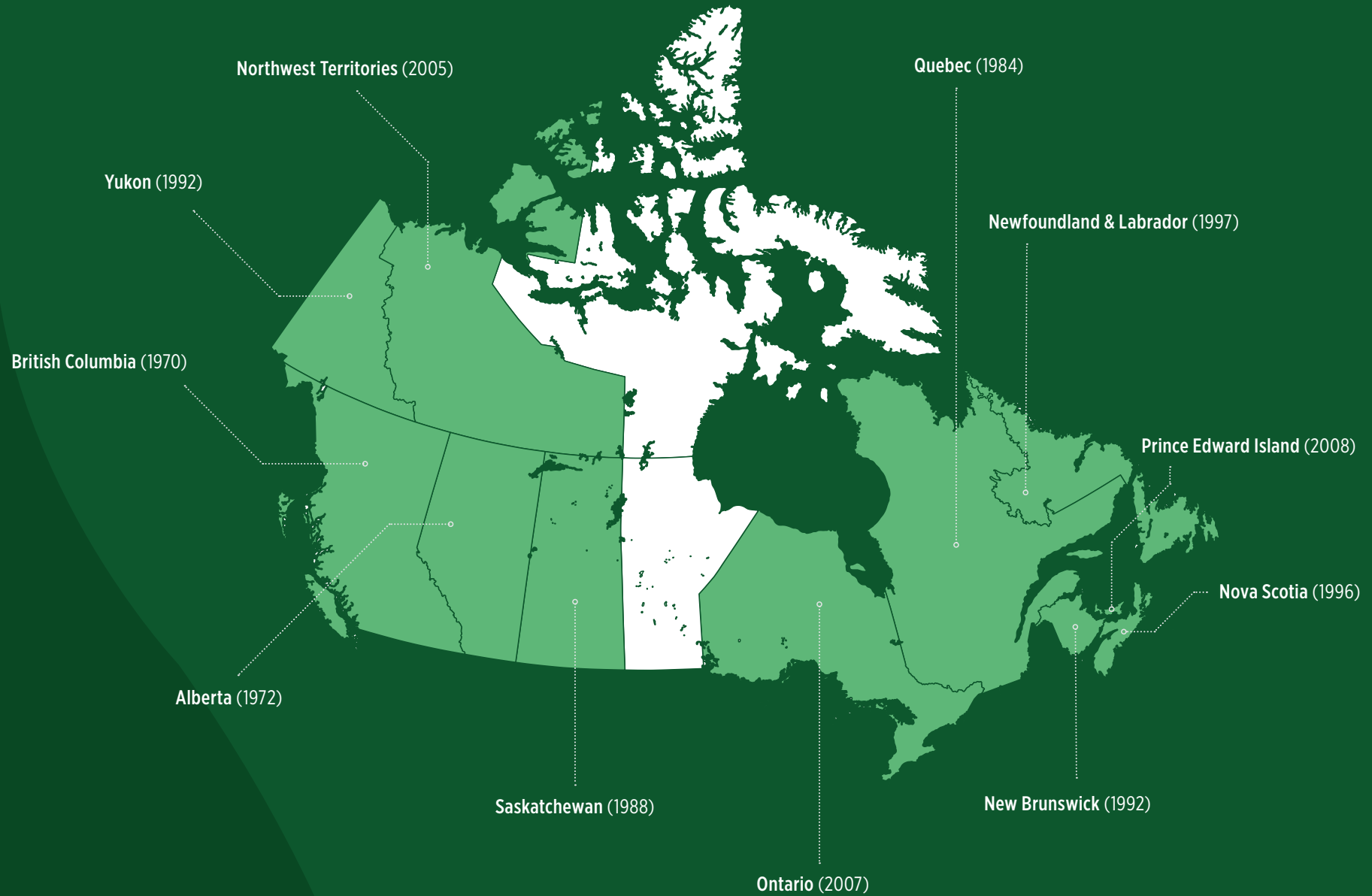


¹ For U.S. states that achieve a return rate between 70%-74%, the Container Recycling Institute estimates that an additional 9.5% of containers are recycled via kerbside programmes.



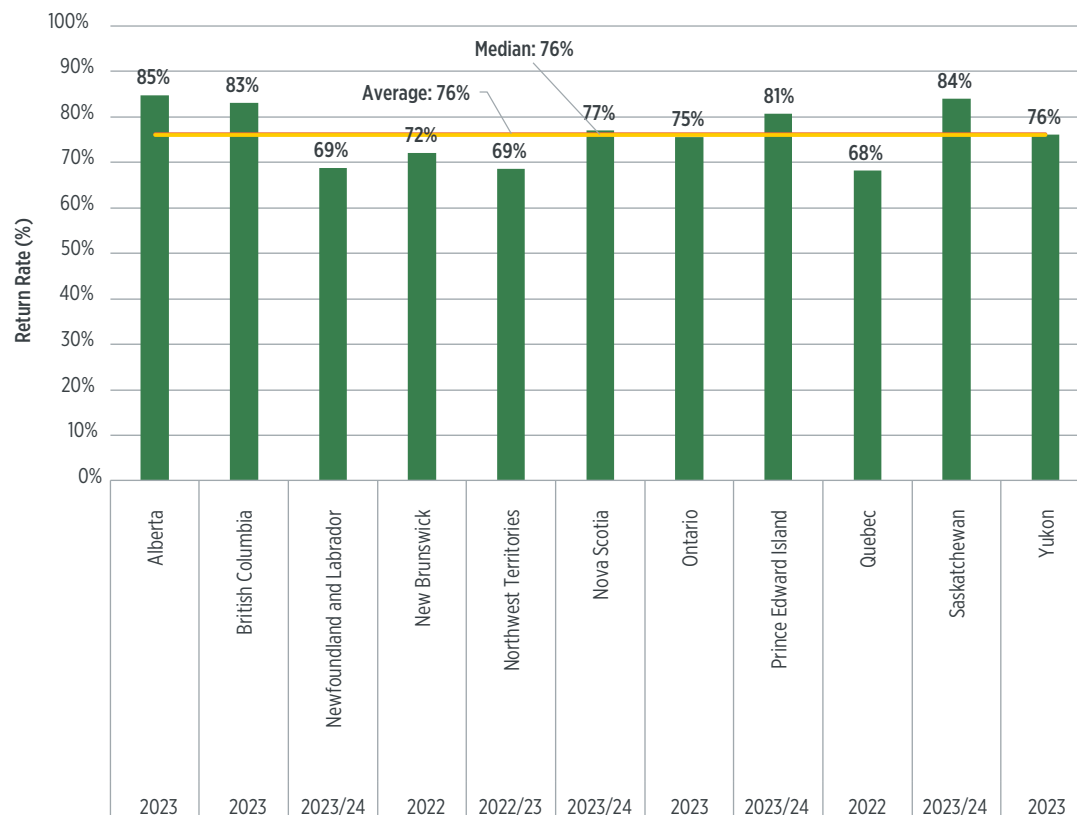
Canada

Country snapshot



Canada

Latest Return Rates in Deposit Return Systems for
Single-Use Beverage Containers in Canada



	Population (million)	Population Density (population/km ²)	Legislation Enacted	System Started
Canada				
Alberta	4.8m	7.6	1972	1972
British Columbia	5.6m	6.1	1970	1970
Newfoundland & Labrador	0.5m	1.5	1996	1997
New Brunswick	0.8m	11.9	1991	1992
Northwest Territories	0.04m	0.0	2003	2005
Nova Scotia	1.1m	20.3	1995	1996
Ontario	16.0m	17.9	2006	2007
Prince Edward Island	0.2m	31.2	1988	2008
Quebec	9.0m	7.0	1972	1984
Saskatchewan	1.2m	2.1	1978	1988
Yukon	0.05m	0.1	1991	1992
Total*	39.5m			

*Note: Due to rounding, the sum of provincial / territorial populations may not add up to the total.

Alberta

Population: 4.8m

Population density: 7.6/km²

National (Canada) GDP per capita,
PPP (international \$): 61,582.3

System operator's website:

Sources

- 1) Alberta Beverage Container Recycling Corporation. "Container Recycling Fee." Available at: <https://www.abcrc.com/assets/CRF-Brochure-2024.pdf>
- 2) Alberta Beverage Container Recycling Corporation. "Sustainability Report 2023: Building Momentum." Available at: <https://abcrc.com/sustainability/>
- 3) Beverage Container Management Board. "2023 Annual Report." Available at: https://www.bcmb.ab.ca/uploads/source/Annual_Reports/2024.06.18_BCMB.2023.Annual.Report.Final.web.pdf
- 4) Beverage Container Management Board. 2024-2026 Business Plan. BCMB Board Approved November 22, 2023. Available at: https://www.bcmb.ab.ca/uploads/source/Business_Plan/2023.11.22.2024-26.Business.Plan.Board.Approved.pdf
- 5) Beverage Container Management Board. 24 April 2024. "Handling Commission By-Law." Available at: https://www.bcmb.ab.ca/uploads/source/By-laws_Current/Handling_Commission_By-law/2024.04.24.Handling.Commission_Bylaw.BOARD.APPROVED.pdf
- 6) Personal communication with Guy West, Alberta Beverage Container Recycling Corporation, 28 March 2024
- 7) Province of Alberta. "Alberta Regulation 101/1997: Beverage Container Recycling Regulation." Available at: https://www.bcmb.ab.ca/uploads/source/Act_and_Regulation/2021.Beverage.Container.Recycling.Regulation.pdf

Legislative framework

Name of legislation

Beverage Container Recycling Regulation, under the Environmental Protection and Enhancement Act

Legislation enacted

2 June 1972

Appointment of system operator

ABCRC appointed February 1995 (unknown when initial system operator was appointed)

System started

1972

Key updates

- › 1989 – expansion to carbonated and/or flavored waters, fruit and vegetable juices, and prepared teas; deposit increase from CAD\$0.02 on all containers to CAD\$0.05 (containers ≤1L) and \$0.20 (containers >1L)
- › 1997 – expansion to aseptic and gable top cartons
- › 2001 – expansion to domestic beer containers
- › 2002 – container recycling fee added to in-scope drinks
- › 2008 – deposit increase to CAD\$0.10 (containers ≤1L) and CAD\$0.25 (containers >1L)
- › 2009 – expansion to milk (first jurisdiction in North America to include milk)

Regulatory authority

Beverage Container Management Board (BCMB) (arm's length, not-for-profit association with delegated government authority under the Ministry of Environment and Protected Areas)

Legislated targets

None

Scope

Material type

Plastic (PET, HDPE, other), metal (aluminium, bi-metal), glass, gable top, aseptic, bag-in-box, pouches

Beverage type

Sealed alcohol, cannabis, and non-alcohol drinks

Size

≤ 50L (13.2 gal)

Excluded

None

Is there a DRS for refillables?

Yes (5% refillable market share across Canada in 2024; provincial share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

› Variable rate:

- › Containers ≤1L (0.26 gal): CAD\$0.10 (USD\$0.07)
- › Containers >1L (0.26 gal): CAD\$0.25 (USD\$0.19)

Handling fee (effective 1 May 2024):

› Variable rate:

- › Aluminium ≤1L: CAD\$0.03341 (USD\$0.025)
- › Bag-in-box >1L: CAD\$0.41155 (USD\$0.30)
- › Bi-metal ≤1L: CAD\$0.08418 (USD\$0.062)
- › Bi-metal >1L: CAD\$0.18764 (USD\$0.14)
- › Specialty containers: CAD\$31.49 (USD\$23.31)



- › Drink pouch ≤1L: CAD\$0.07130 (USD\$0.053)
- › Gable top ≤1L: CAD\$0.07021 (USD\$0.052)
- › Gable top >1L: CAD\$0.13633 (USD\$0.10)
- › Glass ≤1L: CAD\$0.07903 (USD\$0.059)
- › Glass >1L: CAD\$0.15975 (USD\$0.12)
- › HDPE >1L: CAD\$0.16152 (USD\$0.12)
- › PET (clear & light blue tint) ≤1L: CAD\$0.04505 (USD\$0.033)
- › PET (clear & light blue tint) >1L: CAD \$0.13046 (USD\$0.097)
- › Other plastics ≤1L: CAD\$0.05189 (USD\$0.038)
- › Other plastics >1L: CAD\$0.15187 (USD\$0.11)
- › Liquor & wine ceramics: CAD\$1.10116 (USD\$0.82)
- › Plastic keg >1L: CAD\$2.32808 (USD\$1.72)
- › Small sleeve-in-a-box: CAD\$0.2296 (USD\$0.17)
- › Tetra Brik ≤1L: CAD\$0.05236 (USD\$0.039)
- › Tetra Brik >1L: CAD\$0.16671 (USD\$0.12)

In addition to the above, as of 1 July 2022, every Depot (except Class D Depots) receives an extra CAD\$0.015 (USD\$0.011) for each of the first 1.5m containers shipped annually to the Collection Service Agent.

Container recycling fee (effective February 2024)

- › Aluminium ≤1L: CAD\$0.01 (USD\$0.01)
- › Aluminium >1L: CAD\$0.08 (USD\$0.06)
- › Plastic ≤ 1L: CAD\$0.02 (USD\$0.02)
- › Plastic >1L: CAD\$0.05 (USD\$0.04)
- › Glass ≤ 1L: CAD\$0.07 (USD\$0.05)
- › Glass >1L: CAD\$0.07 (USD\$0.05)
- › Ceramic <1L: CAD\$0.11 (USD\$0.08)
- › Gable top ≤1L: CAD\$0.06 (USD\$0.04)
- › Gable top >1L: CAD\$0.12 (USD\$0.09)
- › Tetra brik ≤1L: CAD\$0.05 (USD\$0.04)
- › Tetra brik >1L: CAD\$0.12 (USD\$0.09)
- › Bi-metal ≤1L: CAD\$0.08 (USD\$0.06)
- › Bi-metal >1L: CAD\$0.08 (USD\$0.06)
- › Pouches/bag-in-a-box: CAD\$0.05 (USD\$0.04)

System structure & administration

Clearing system

Centralised

System operator

Alberta Beverage Container Recycling Corporation (ABCRC) (provincial product stewardship corporation operating with not-for-profit provisions as the appointed and approved collection system agent [CSA] for Alberta beverage manufacturers and distributors; shareholders include the Canadian Beverage Association, Western Dairy Council, Refresco Canada Inc., and the Alberta Beer Container Corporation)

System finance

Container recycling fees, unredeemed deposits, material revenues

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Depot

Number of collection points

221, including 134 in rural areas (municipalities with populations <10,000), 36 in urban areas (municipalities with populations ≥ 10,000), and 51 in the cities of Calgary and Edmonton

Population per collection point

~21,945

Method of return

Mostly manual

Barcode-based system?

No

Container deposit markings

It is not mandatory for containers to be marked or labelled with a "Return for Refund" or "Return for Refund Where Applicable" message. However, negative connotations of recycling are not permitted, and such containers would be denied registration in the system.

Refund payment options

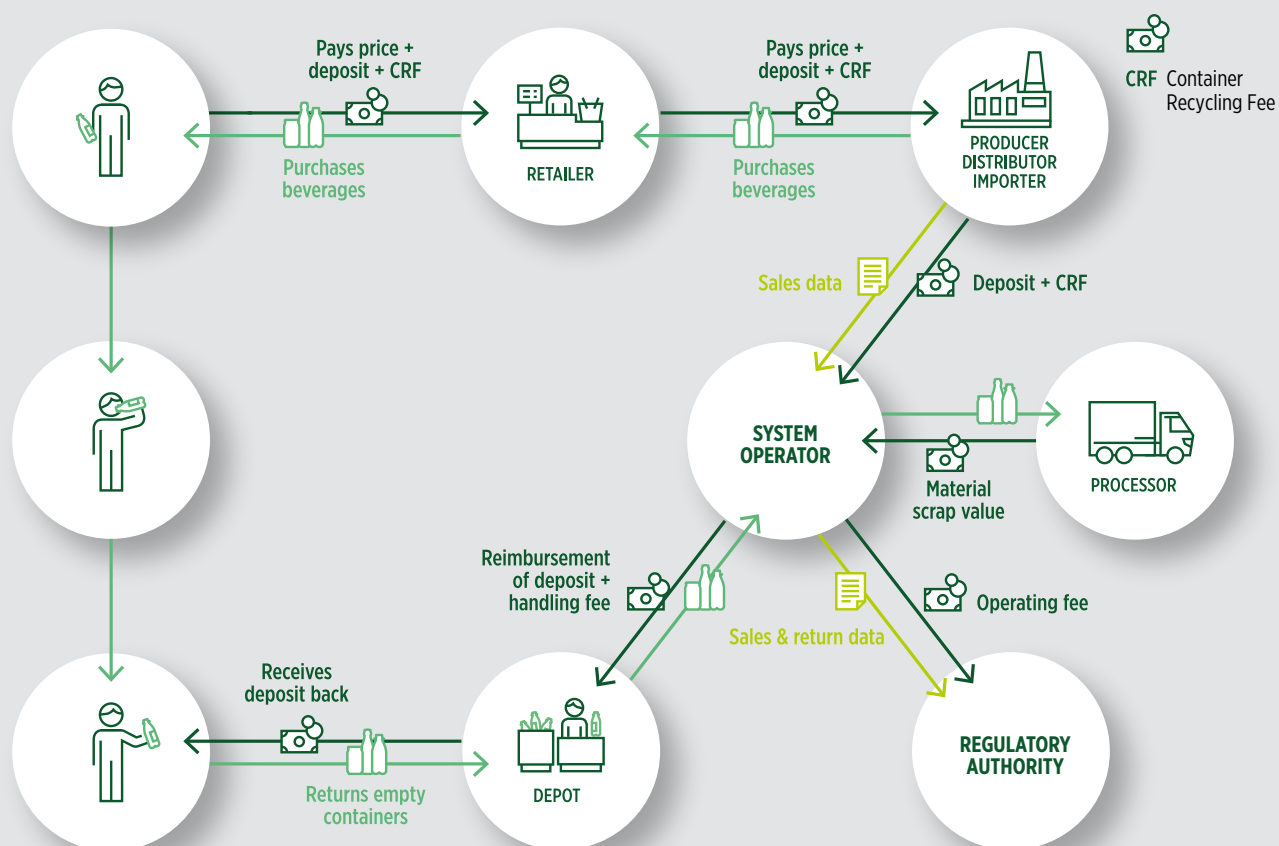
Cash, cheques (for large volume returns, e.g., bottle drives)



Return rate (2023)

Plastic	PET (clear)	HDPE (natural)	Aluminium	Bi-metal	Glass	Aseptic	Gable top	Pouches	Bag-in- box	Total
81%	77%	38%	89%	98%	90%	72%	73%	57%	52%	85%

Money, material & data flow



¹ Non-refillable beverage container stewardship began in 1971 under the Beverage Container Act (Alberta) of 1971, under which beverage containers were identified as either glass bottles or metal cans. The Litter Act (Alberta) of 1972 identified "containers, bottles, cans or parts thereof" as litter, and instituted penalties for littering offences in Alberta. In 1992, the Government of Alberta consolidated 18 pieces of legislation, including the Litter Act and the Beverage Container Act, into the Environmental Protection and Enhancement Act, which established the requirement for a common collection system for beverage containers. This, in turn, led to the formation of ABCRC, with its duty to operate a common collection system on behalf of beverage manufacturers in Alberta. In 1997, the Government passed Regulation 101/97, the Beverage Container Recycling Regulation, under the Environmental Protection and Enhancement Act. This regulation required a collection system agent (CSA) to run the common collection system for single-use beverage containers and a designated administrative organisation to act as the system regulator (replacing Alberta Environment). The new system became operational in December of that year, with the Beverage Container Management Board (BCMB) as the regulator, the Alberta Bottle Depot Association (ABDA) representing the depot network, and the manufacturers establishing ABCRC as their CSA.



British Columbia

Population: **5.6m**

Population density: **6.1/km²**

National (Canada) GDP per capita,
PPP (international \$): **61,582.3**

System operator's website:

Sources

- 1) BC Brewers Recycled Container Collection Council. "2023 Annual Report to the Director." Available at: https://envirobeerbc.ca/wp-content/uploads/2024/06/BC_StewardshipReport2023_V3.pdf
- 2) BC Brewers Recycled Container Collection Council. 2023. "Container Stewardship Plan." Available at: https://envirobeerbc.ca/wp-content/uploads/2023/07/1_BRCCC-Schedule-1-Stewardship-Plan-June-2023-final-merged.pdf
- 3) B.C. Reg. 449/2004. Available at: https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/449_2004
- 4) Encorp Pacific Canada. August 30, 2021. "Beverage Container Stewardship Plan, August 30, 2021 revised August 3, 2023." Available at: <https://www.return-it.ca/beverageplan2020/>
- 5) Encorp Pacific. "2024 Container Recycling Fees." Available at: <https://www.return-it.ca/beverage/industry/recyclingfee/?Se=38&AA=Download&AT=909&AD=185.Difl>
- 6) Encorp Pacific (Canada). "2023 Annual Report." Available at: https://ar.return-it.ca/ar2023/pdf/Return-It_2023_Annual_Report.pdf
- 7) Northwest Product Stewardship Council. July 2011. "British Columbia 2004 Recycling Regulation Amendment (BC Reg. 449/2004). Available at: <http://productstewardship.net/legislation/british-columbia/british-columbia-2004-recycling-regulation>
- 8) Personal communication with Cindy Coutts, CEO, Encorp Pacific, June and July 2024.
- 9) Return-It. "Beverage Products: Deposits, Recycling Fees, & Container Types." Available at: <https://www.return-it.ca/beverage/products/>
- 10) https://www.bclaws.gov.bc.ca/civix/document/id/oic/arc_oic/1750_1970

Legislative framework

Name of legislation

Recycling Regulation, Schedule 1, Beverage Container Product Category (BC Reg. 449/2004) under the Environmental Management Act

Legislation enacted¹

1970

Appointment of system operator

Encorp was established in March 1994; in October 1998, it was federally incorporated as a not-for-profit product stewardship corporation (prior to 1994, the system was operated by the brand owners and grocery stores)

It is unknown when BRCCC was appointed

System started

1970

Key updates

- 1996 – expansion to include water, wine and spirits
- 1998 – expansion to all ready-to-drink containers except for milk and milk substitutes
- 1999 – expansion to polycoat containers
- 2000 – introduction of container recycling fees (CRFs)
- 2004 – minimum recovery rate lowered from 85% (Beverage Container Stewardship Program Regulation) to 75%
- 2019 – deposit increase on containers ≤1L
- 2020 – deposit decrease on containers >1L
- 2022 – expansion to milk and plant-based drinks

Regulatory authority

Ministry of Environment and Climate Change Strategy

Legislated targets

- **Collection:** 75% for each sub-category of beverage containers listed in Schedule 1 of the Regulation

Scope

Material type

Plastic (including polystyrene cups), metal (aluminium, bi-metal), glass, gable top, aseptic, pouches, bag-in-box

Beverage type

All sealed, ready-to-drink alcohol and non-alcohol beverages

Size

All

Excluded

Infant formula, meal replacements, dietary supplements, coffee cream and other coffee additives, whipping cream, buttermilk, drinkable yogurt and kefir

Is there a DRS for refillables?

Yes (5% refillable market share across Canada in 2024; provincial share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value²

- **Flat rate:** CAD\$0.10 (USD\$0.07)

Handling fee (2024)

Not available (confidential). Encorp and BDL pay handling fees to authorised depots and contracted retailers. Grocery stores serviced directly by Encorp receive a fixed fee per bag of commingled products, while the fees depots receive vary by container type.



Container recycling fee (2024)³

- › **Milk:**
- › Aluminium ≤1L: CAD\$0.02 (USD\$0.02)
- › Plastic ≤1L: CAD\$0.04 (USD\$0.03)
- › Plastic >1L: CAD\$0.05 (USD\$0.04)
- › Glass ≤1L: CAD\$0.15 (USD\$0.11)
- › Glass >1L: CAD\$0.15 (USD\$0.11)
- › Bi-metal ≤1L: CAD\$0.05 (USD\$0.04)
- › Bi-metal >1L: none
- › Drink box ≤1L: none
- › Gable top ≤1L: none
- › Gable top >1L: CAD\$0.01 (USD\$0.01)
- › Polystyrene cups: CAD\$0.04 (USD\$0.03)
- › **All other beverages:**
- › Aluminium ≤1L: CAD\$0.02 (USD\$0.02)
- › Plastic ≤1L: CAD\$0.04 (USD\$0.03)
- › Plastic >1L: CAD\$0.05 (USD\$0.04)
- › Glass ≤1L: CAD\$0.15 (USD\$0.11)
- › Glass >1L: CAD\$0.15 (USD\$0.11)
- › Bi-metal ≤1L: CAD\$0.05 (USD\$0.04)
- › Bi-metal >1L: none
- › Drink box ≤1L: none
- › Gable top ≤1L: none
- › Gable top >1L: CAD\$0.01 (USD\$0.01)
- › Bag-in-box: CAD\$0.20 (USD\$0.15)

*CRFs are subject to GST

System structure & administration

Clearing system

Centralised

System operator

Encorp Pacific (Canada) (better known as 'Return-It'; a federally incorporated, not-for-profit product stewardship corporation that represents brand owners of ready-to-drink beverages including all soft drinks, juice, water, dairy, wine, spirits, some ciders and coolers, as well as some import beer. The Board of Directors consists of representatives of the beverage and retail grocery industries as well as directors who have no connection to either industry.)

Brewers Distributors Limited (BDL) (privately-owned distribution and logistics company; serves as the service provider for the BC Brewers Recycled Container Collection Council [BRCCC], the not-for-profit product stewardship agency for most alcohol aluminium cans in BC. Its members represent >95% of overall beer production in the province and the majority of import production. The BRCCC Board of Directors includes representative from BDL, Labatt Breweries Ltd., Molson Coors Canada, Sleeman Breweries Ltd., the BC Craft Brewers Guild and Beer Canada.)

System finance^{4,5}

Container recycling fees, unredeemed deposits, material revenues, other fees and income

Unredeemed deposits

System operators

Material owner

System operators

Container return & refund points

Collection model

Hybrid: Retailers selling eligible beverages must take back containers and pay out refunds. Retailers are required to accept up to 24 containers/person/day of the same brand and type they sell. In addition to retailers (grocery stores, government liquor stores, private retail liquor stores, rural agency stores), containers can be returned to independently owned and operated depots, some of which have contracts with either Encorp or BDL. BRCCC, through BDL, also provides on-site collection services through thousands of licensed bars and restaurants (HORECA).

Online take-back? Yes**Number of collection points**

~2,562, including 1,482 food retailers (includes government liquor stores), 162 Encorp depots (84 of which have contracts/ collection agreements with BDL), two corporate Return-It "Express Plus" locations, 16 "Express & GO" stations, 675 licensee retail stores, and 225 rural agency locations

Population per collection point

~2,204

Method of return

Mostly manual

Barcode-based system?

No, except for where collection is automated

Container deposit markings

It is not mandatory for containers to be marked or labelled with a "Return for Refund" or "Return for Refund Where Applicable" messages. However, a container must not bear any label, mark, or stamp which indicates that it cannot be returned for refund.

Refund payment options

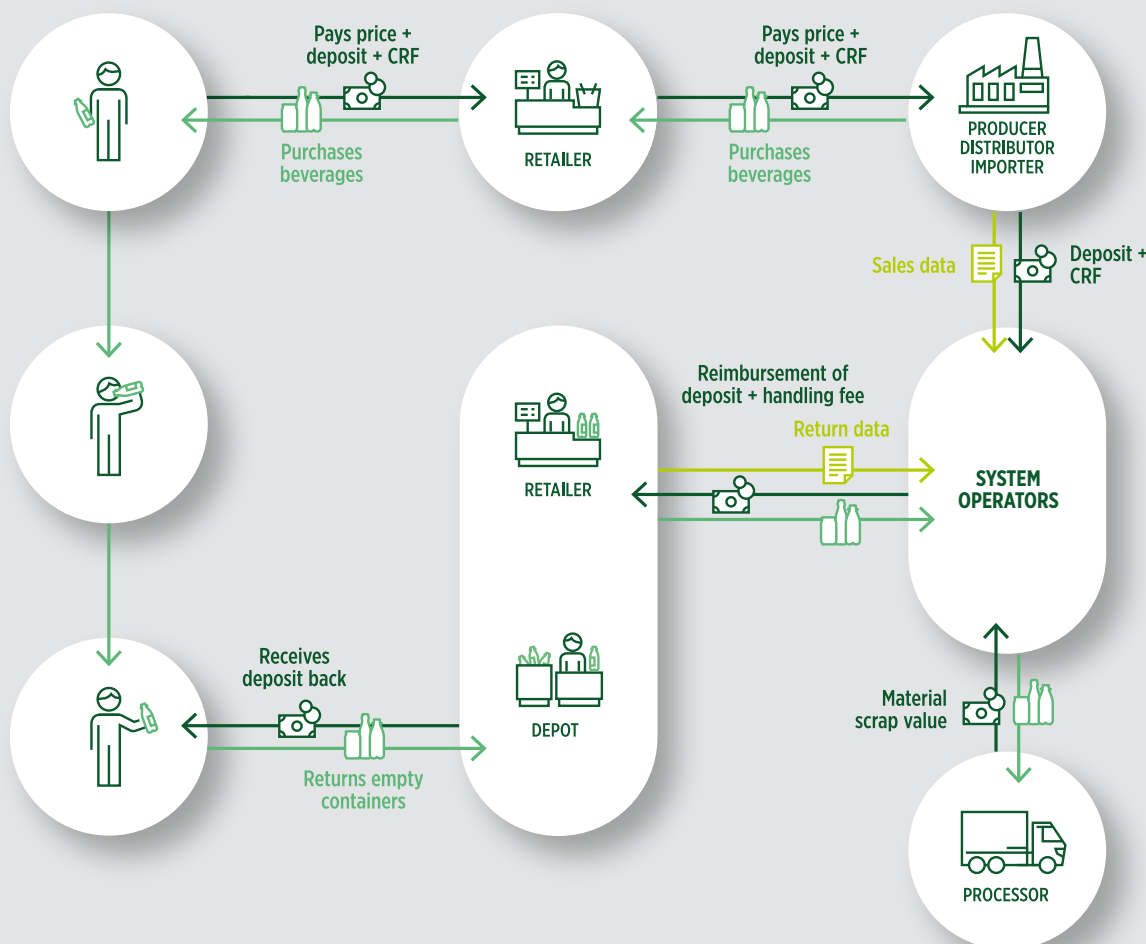
Cash, electronic funds transfer, cheque, donation to charity



Return rate (2023)^{6,7}

Plastic	Aluminium	Bi-metal	Glass	Drink box	Gable top	Bag-in-box	Pouches	Total
79%	88%	79%	90%	59%	63%	54%	33%	83%

Money, material & data flow



¹ The 2004 Recycling Regulation (B.C. Reg. 449/2004) replaced the 1997 Beverage Container Product Stewardship Program Regulation, which replaced the 1970 Litter Act, which required manufacturers and retailers to participate in a deposit system to encourage the return of many types of beverage containers.

² Less than half of Encorp's Return-It depots are licensed by the Brewers Recycled Container Collection Council (BRCCC) to refund aluminium beer cans. The rest have no choice but to take-back BRCCC containers for deposit refund as customers do not distinguish between the licensed and non-licensed depots and they expect all containers to be accepted. To offset the cost of handling containers for which depots receive no handling fees, some of the unlicensed depots may discount the deposit paid to consumers to compensate for collection costs.

³ Container recycling fees are calculated on an annual basis and are based on the net cost of collecting and recycling specific containers.

⁴ 'Other fees and income' includes interest income as well as revenues from service provider contracts with other extended producer responsibility (EPR) programmes that Encorp administers.

⁵ BDL, on behalf of BRCCC, has entered into service agreements with several depots for collection and sorting services. BRCCC revenues collected from both cans and bottles play return location partners for the collection, sorting, and return of BRCCC containers. In the case of the Liquor Distribution Branch, BRCCC operates under an agreement with the agency to pay it handling fees for each container collected from its stores. Licensee retail stores that sign up as contracted collection partners are also paid a handling fee for each container they collect.

⁶ The return rates presented include all deposit containers (those collected by Encorp and BDL).

⁷ Encorp has an agreement in place with Recycle BC, who manages residential packaging and paper, and its post-collection processor to ensure that beverage containers collected within the kerbside system are accounted for and included in the total units collected and used to calculate Encorp's recovery rate. In 2023, it's estimated that approximately 105 million deposit containers were collected through the Recycle BC channel, accounting for 7.7% of Encorp's total recovery rate.



Newfoundland & Labrador

Population: **0.5m**

Population density: **1.5/km²**

National (Canada) GDP per capita,
PPP (international \$): **61,582.3**

System operator's website:

Sources

- 1) Multi-Materials Stewardship Board. "Annual Report 2022-23." Available at: <https://mmsb.nl.ca/wp-content/uploads/2023/11/Multi-Materials-Stewardship-Board-MMSB-Annual-Report-2022-23-Final.pdf>
- 2) Multi-Materials Stewardship Board. "Newfoundland & Labrador: Beverage Distributor Guide." Available at: <https://mmsb.nl.ca/wp-content/uploads/2020/09/BeverageDistributorsGuide-2020-1.pdf>
- 3) Personal communication with Gordon Wall, Field Operations Office, Multi Materials Stewardship Board, 30 May 2024 and 17 July 2024. <https://greendepotnl.ca/>

Legislative framework

Name of legislation

Waste Management Regulations, under the Environmental Protection Act

Legislation enacted¹

November 1996

Appointment of system operator

1996

System started

January 1997

Key updates

- › April 2020 – increase in handling fee
- › April 2022 – increase in handling fee, introduction of new handling fee for depots offering Xpress drop-off service
- › April 2023 – increase in handling fee

Regulatory authority

Ministry of Environment and Climate Change

Legislated targets

None

Scope

Material type

Plastic, metal (aluminium, bi-metal), glass, gable top, aseptic, pouches, bag-in-box

Beverage type

Sealed, ready-to-drink non-alcohol and alcohol drinks (includes milk product alternatives labelled as both a fortified plant-based beverage and not a source of protein)

Size

≤5L (1.32 gal)

Excluded

Milk (as defined by the Canadian Food and Drug Regulations), milk product alternatives that are fortified plant-based beverages (as defined by the Canadian Food and Drug Regulations; e.g., soy, almond, oat), infant formula, concentrates, medicinal/nutritional supplements

Is there a DRS for refillables?

Yes (5% refillable market share across Canada in 2024; provincial share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit/refund value²

› Variable rate:

- › Non-alcohol: CAD\$0.08/\$0.05 (USD\$0.06/\$0.04)
- › Miniature liquor (50ml): CAD\$0.08/\$0.05 (USD\$0.06/\$0.04)
- › Wine and spirits:
 - Plastic, glass: CAD\$0.20/\$0.10 (USD\$0.15/\$0.07)
 - Aluminium, gable top, aseptic, pouches, bag-in-box: CAD\$0.08/\$0.05 (USD\$0.06/\$0.04)
- › Beer: CAD\$0.08/\$0.05 (USD\$0.06/\$0.04)

Handling fee (2024)

› Flat rate:

- › CAD\$0.0465 (USD\$0.034) (paid to depots and participating kerbside programmes)
- › An additional \$0.002/unit (USD\$0.002) is paid to depots offering Xpress drop-off service



System structure & administration

Clearing system

Centralised

System operator

Multi-Materials Stewardship Board (MMSB) (Crown Corporation of the provincial government; governed by a Board of Directors appointed by the Lieutenant Governor in Council)

System finance

Material revenues, unredeemed deposits, non-refundable portion of deposits (goes into Waste Management Trust Fund)

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Depot

Population per collection point

10,215

Number of collection points

53

Method of return

Manual

Barcode-based system?

No

Container deposit markings

Containers must include a return for refund message (e.g., Return for Refund; Refundable; Return for refund where applicable, etc.). Variations of the wording are acceptable as long as the concept of a refund is evident and the Mobius loop symbol or the word “Recyclable” appears on the label.

Refund payment options

Cash, donation to charity

Return rate (2023-24)

Plastic (PET)	Other plastics	Aluminium	Bi-metal	Glass	Gable top	Aseptic	Total
78%	31%	70%	49%	50%	19%	42%	69%

*Note: The return rates above represent containers returned through the DRS depot network only and do not include those recovered via residential kerbside programmes (MRF operations). If deposit containers recovered via the kerbside system are included, the total collection rate would be 71.8%. A breakdown of material-specific return rates that include containers recovered via all collection channels is presented below.

Containers collected via kerbside programmes

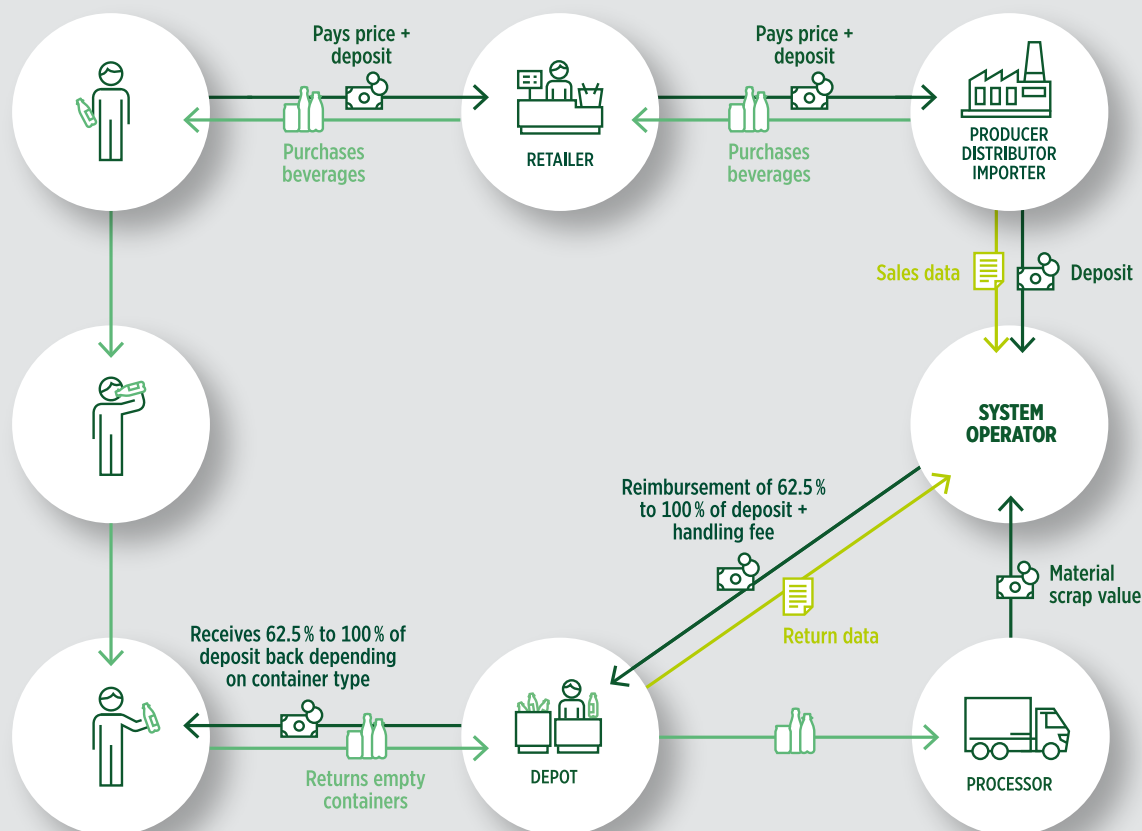
Plastic (PET)	Other plastics	Aluminium	Bi-metal	Glass	Gable top	Aseptic	Total
3%	3%	3%	16%	0%	11%	5%	3%

Total containers collected (via DRS depot network + kerbside programmes)

Plastic (PET)	Other plastics	Aluminium	Bi-metal	Glass	Gable top	Aseptic	Total
81%	34%	73%	64%	50%	29%	47%	72%



Money, material & data flow



¹ Newfoundland and Labrador's DRS was established by the Beverage Container Control Regulations (1996), legislation enacted under the Packaging Material Act (1996). These regulations established an Environmental Trust Fund and gave regulatory authority to the MMSB to operate the DRS. In 2003, in order to allow for the development of other stewardship programmes beyond drinks containers, the province repealed and replaced these regulations with the Waste Management Regulations (2003), made under the Environmental Protection Act (2002). Part 1 of the Regulations sets out the composition and duties of the MMSB, and also continues the Waste Management Trust Fund established under section 4 of the Beverage Container Regulations. Part 2 defines the DRS's scope, the minimum deposit/refund amounts to be applied, and the responsibilities of beverage distributors. It also prohibits the sale of any beverage container that is not refillable or recyclable.

² Part of the revenue generated from the non-refundable portion of the deposits (CAD\$0.03 [USD\$0.02] for non-alcohol containers, beer cans and imported bottles, and CAD\$0.10 [USD\$0.07] for wine and spirits containers) helps cover system costs, including administration, handling, transportation, and processing.



New Brunswick

Population: 0.8m

Population density: 11.9/km²

National (Canada) GDP per capita,
PPP (international \$): 61,582.3

System operator's website:

Sources

- 1) Encorp Atlantic. "Deposit Values." Available at: <https://encorpatl.ca/wp-content/uploads/2023/12/Deposits-and-CRFs-English.pdf>
- 2) Encorp Atlantic. "FAQ for Brand Owners. Extended Producer Responsibility Beverage Containers Program in New Brunswick. Effective April 1, 2024." Available at: <https://encorpatl.ca/wp-content/uploads/2023/12/FAQ-EPR-APRIL1-2024-ENGLISH.pdf>
- 3) Encorp Atlantic. "Stewardship Plan: New Brunswick Beverage Containers Program. Submitted to Recycle NB – August 1, 2023. Finalized – January 30, 2024." Available at: <https://www.recyclenb.com/static/site-content/files/management-plans/encorp-atlantic/encorp-stewardship-plan-to-recycle-nb-final.pdf>
- 4) Encorp Atlantic. 12 June 2024. "Request for Proposal (RFP-001): Redemption Centre (RC) Services for Rogersville and Surrounding Area." Available at: <https://encorpatl.ca/wp-content/uploads/2024/06/RFP-001-RC-Services-Rogersville.pdf>
- 5) New Brunswick Government. "Guidelines: Beverage Container Labelling Requirements." Available at: <https://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/LandWaste-TerreDechets/BeverageContainerLabellingRequirements.pdf>
- 6) Personal communication with Gilles Doucette, Director of Operations, Encorp Atlantic, 16 July 2024
- 7) Recycle NB. "Beverage Containers – Overview." Available at: <https://www.recyclenb.com/industry-beverage-containers#/>
- 8) Retail Council of Canada. 19 December 2023. "New Brunswick: Rules surrounding container recycling fee in used beverage container stewardship program." Available at: <https://www.retailcouncil.org/province/nb/new-brunswick-rules-surrounding-container-recycling-fee-in-used-beverage-container-stewardship-program/>

Legislative framework

Name of legislation

Designated Materials Regulation under the Clean Environment Act

Legislation enacted

May 1991 (initial legislation) and March 2023 (new regulation)

Appointment of system operator

Current operator appointed 1 January 2023 (it is unknown when previous system operators were appointed)

System started

June 1992

Key updates

- › 1993 – expansion to juice
- › 2020 – expansion to dairy drinks, fortified plant-based drinks, unfortified plant-based drinks, and sports drinks
- › 1 April 2024 – transition to full extended producer responsibility model; end of 'half-back' deposit mechanism; deposit decrease for alcohol containers (except for single-use glass alcohol); introduction of container recycling fee

Regulatory authority

Recycle NB (arm's length government agency)

Legislated targets

None

Scope

Material type

Plastic (PET, HDPE, PP, PS, LDPE, other), metal (aluminium, steel), glass, gable top, aseptic, bag-in-box, plastic cups with foil lids, pouches

Beverage type

Sealed, ready-to-drink alcohol and non-alcohol drinks including water and flavoured water, fruit and vegetable juices, soft drinks, drinks with dairy not labelled as milk, unfortified plant-based drinks (e.g., almond, rice), fortified plant-based drinks labelled as "not a source of protein," sports drinks, nutritional supplements not labelled as "meal replacements" or "formulated liquid diets", beer, wine, spirits, low-alcohol drinks, cannabis drinks

Size

≤ 5L (1.32 gal)

Excluded

Unprocessed apple cider, products labelled as milk (including cow's milk, goat milk, and flavoured milk), plant-based milk alternative drinks not labelled as "fortified", meal replacements, formulated liquid diets, infant formula, concentrated drinks

Is there a DRS for refillables?

Yes (5% refillable market share across Canada in 2024; provincial share not available)



Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit/refund value^{1,2}

Prior to 1 April 2024

› Variable rate ('half-back' deposit):

- › Non-alcohol ≤5L (1.32 gal): CAD\$0.10/\$0.05 (USD\$0.07/\$0.03)
- › Alcohol ≤500ml (0.13 gal): CAD\$0.10/\$0.05 (USD\$0.07/\$0.03)
- › Alcohol >500ml (0.13 gal): CAD\$0.20/\$0.10* (USD\$0.15/\$0.07)

As of 1 April 2024

› Variable rate ('full-back' deposit):

- › Single-use glass alcohol >500ml (0.13 gal): CAD\$0.20 (USD\$0.15) (not subject to HST)
- › All other containers: CAD\$0.10 (USD\$0.07) (not subject to HST)

Handling (service) fee (2024)

- › Flat rate: CAD\$0.05383 (USD\$0.04)

Container recycling fee (2024)

Prior to 1 April 2024

None

As of 1 April 2024

- › Aluminium non-alcohol: CAD\$0.01 (USD\$0.01)
- › Aluminium alcohol: CAD\$0.02 (USD\$0.02)
- › PET/HDPE non-alcohol: CAD\$0.03 (USD\$0.02)
- › All other plastics (including alcohol PET/HDPE): CAD\$0.01 (USD\$0.01)
- › Steel: CAD\$0.08 (USD\$0.06)
- › Cartons: none
- › Glass: CAD\$0.11 (USD\$0.08)

Subject to HST

System structure & administration

Clearing system

Centralised

System operator³

Prior to 1 April 2024 (two operators)

- › Non-alcohol containers: Encorp Atlantic (privately-run company representing non-alcohol beverage distributors)
- › Alcohol containers: New Brunswick Liquor Corporation (also known as Alcool NB Liquor [ANBL]) (provincial Crown corporation responsible for the distribution, sale, and regulation of alcohol beverages in the province)

As of 1 April 2024 (one operator)

Encorp Atlantic/Atlantique (federally incorporated, not-for-profit producer responsibility organisation [PRO] representing 300+ brand owners who sell/distribute beverage products in New Brunswick; its Board of Directors includes representatives from Beer Canada, the Canadian Beverage Association, Craft Alcohol NB, Retail Council of Canada, Spirits Canada, and Wine Growers Canada)

System finance

Prior to 1 April 2024

Material revenues, unredeemed deposits, 50% of non-refundable portion of deposits ("half-back revenue")

As of 1 April 2024

Material revenues, unredeemed deposits, container recycling fees

Unredeemed deposits

Prior to 1 April 2024

75% to system operators and 25% to the provincial government's Environmental Trust Fund

As of 1 April 2024

System operator

Material owner

System operator

Container return & refund points

Collection model⁴

Return-to-Depot: Containers can be returned to depots, which are independently owned and operated under service agreements with the system operator (the latest agreement was signed in July 2024 for a period of seven years). These agreements outline responsibilities, accepted materials, and service standards, such as hours of operation.

Number of collection points

73

Population per collection point

~11,656

Method of return

Manual

Barcode-based system?

No

Container deposit markings

Containers must include a return for refund message. Variations of the wording are acceptable as long as the concept of a refund (e.g., Return for Refund; Refundable; Return for refund where applicable, etc.) is evident and the message is in both English and French. The message must be readily visible on the container and cannot be placed on a lid. Front labels, back labels, can tops, necks, inkjet on the container, imprints moulded into the container, or adhesive stickers are all acceptable.

Refund payment options

Cash

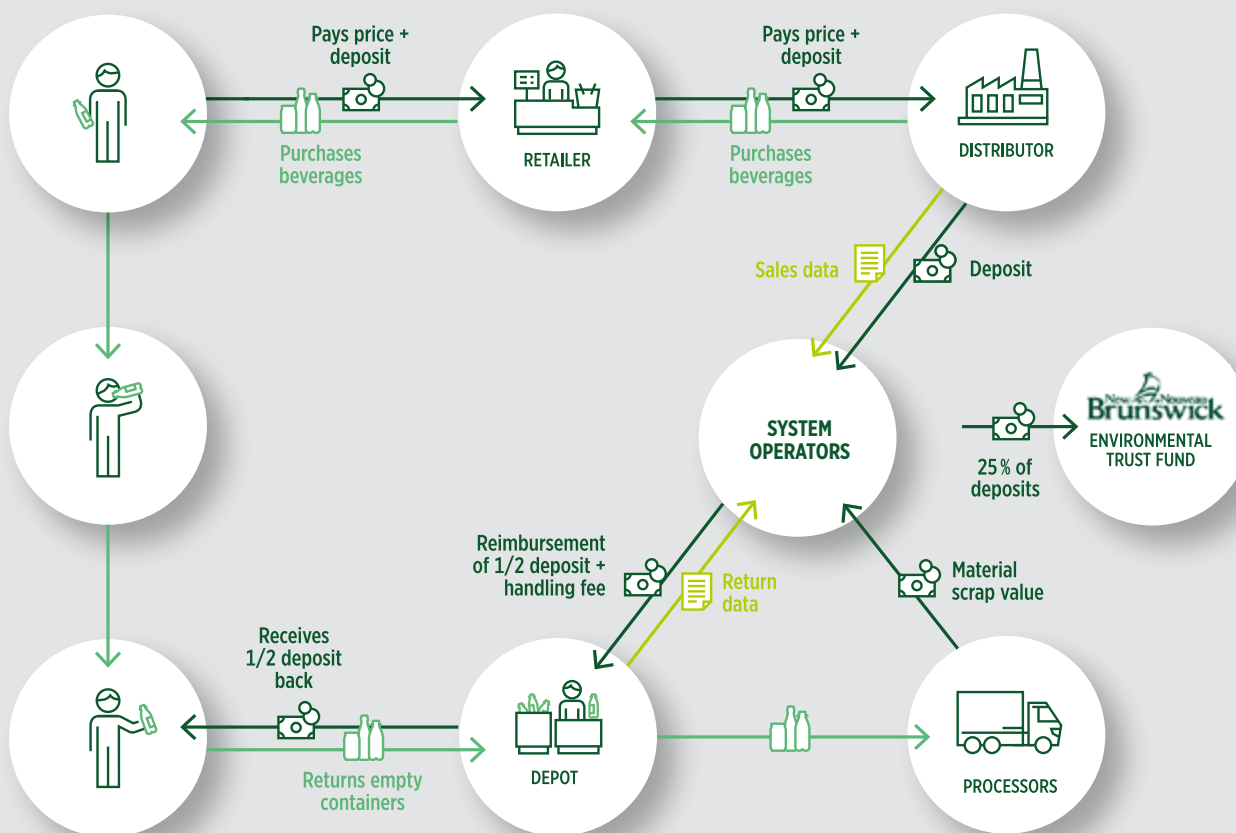


Return rate (2022)

Plastic (PET/HDPE)	Aluminium	Steel	Glass	Cartons	Other (pouches and other plastics)	Total
68%	78%	53%	80%	32%	34%	72%

Money, material & data flow

Prior to 1 April 2024



¹ New Brunswick's migration of its DRS to a full extended producer responsibility model took effect on 1 April 2024. Prior to this, the province operated a 'half-back' deposit system, under which customers received half their deposit when returning containers. Fifty-percent of this "half-back" revenue (CAD\$0.025 or \$0.05 depending on container size), plus revenues generated from unredeemed deposits and commodity sales, was used to finance the system. The remaining 50% went into the province's Environmental Trust Fund where it was used for environmental conservation, education, protection, and other provincial environmental initiatives aimed at reducing waste. In accordance with section 50.961(1) and (2) of the Regulation, the programme now operates as a full-back deposit system for all beverage containers.

² Prior to 1 April 2024, a CAD\$0.20 deposit (with a CAD\$0.10 refund) was applied to all alcohol containers > 500 ml (up to 5L). Under the new system, this CAD\$0.20 deposit is now exclusively applied to alcohol non-refillable glass containers over 500ml (up to 5L). As a result of this change, other types of alcohol containers (e.g., plastic, metal) that previously had a \$0.20 deposit will see their deposit rate reduced to CAD\$0.10.

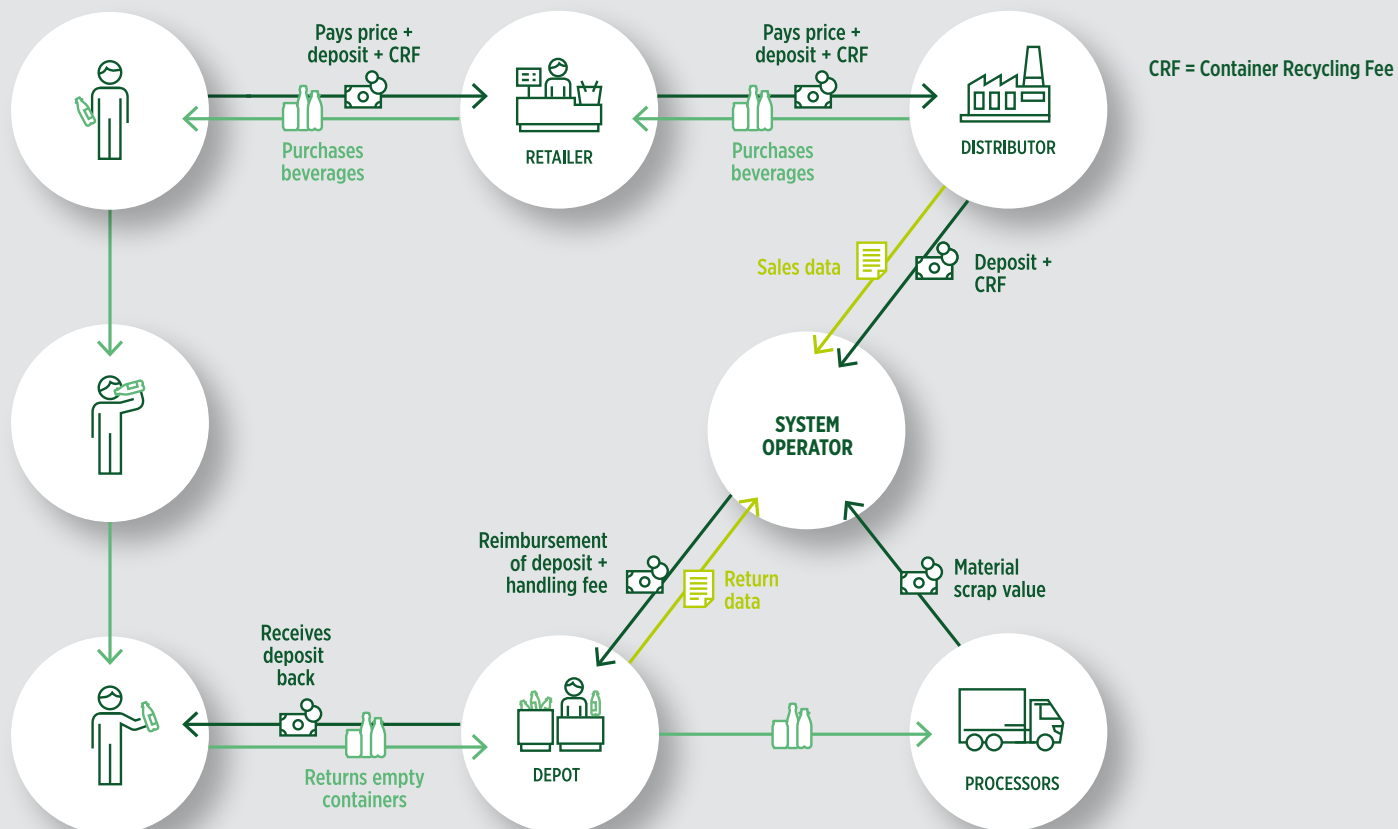
³ Before the beverage container programme transitioned to a full EPR model, the system operator was Encorp Atlantic Inc., a corporation formed in 1992 to represent non-alcohol beverage distributors under the General Regulation (Beverage Containers Act), which was dissolved in 2023. As of 1 April 2024, the new system operator is Encorp Atlantic/Atlantique, a not-for-profit producer responsibility organisation established in 2023 following amendments to the Designated Materials Regulation (Clean Environment Act).

⁴ In addition to depots, the system operator is currently exploring the concept of bicycle racks with drop-off slots for empty beverage containers. A few have been installed in southeastern New Brunswick. Encorp is researching other collection bin designs that could be offered to communities across the province to improve access to recycling in outdoor public spaces, such as large metal outdoor bins in parks. Encorp is also looking into establishing a partnership with Tourism NB and/or Parks NB to install outdoor beverage container collection bins in provincial parks, protected areas, and recreational areas in high-traffic locations.



Money, material & data flow

As of 1 April 2024



Northwest Territories

Population: **0.04m**

Population density: **0.04/km²**

National (Canada) GDP per capita,
PPP (international \$): **61,582.3**

System operator's website:

Sources

- 1) Government of Northwest Territories. "Waste Reduction and Recovery Program: 2022-2023 Annual Report." Available at: https://www.gov.nt.ca/ecc/sites/ecc/files/resources/waste_annualreport_2022-23_web.pdf
- 2) Personal communication with Lauren Newton and David Dahl, Department of Environment and Climate Change, Government of the Northwest Territories, 26 March 2024.
- 3) "Plain Language Summary – NWT Beverage Container Regulations." Available at: https://www.enr.gov.nt.ca/sites/enr/files/summary_nwt_beverage_container_regulations.pdf

Legislative framework

Name of legislation

Beverage Container Regulations, under the Waste Reduction and Recovery Act

Legislation enacted

October 2003

Appointment of system operator

2005

System started

July 2005

Key updates

- › 2010 – expansion to include certain milk containers
- › 2016 – increase to container recycling fees and simplification of container categories

Regulatory authority

Government of the Northwest Territories Department of Environment and Climate Change

Legislated targets

None

Scope

Material type

Plastic, metal (aluminium, bi-metal), glass, aseptic, pouches, gable top, bag-in-box

Beverage type

All sealed, ready-to-serve drinks including non-alcohol (soft drinks, energy drinks, water, juices, and milk and liquid milk products) and alcohol (wine, spirits, beer) drinks

Size

- › Milk and liquid milk products: $\geq 30\text{ml}$ (0.01 gal)
- › Other beverages: any size

Excluded

Infant formula, milk and liquid milk products $< 30\text{ml}$ (0.01 gal)

Is there a DRS for refillables?

Yes (5% refillable market share across Canada in 2024; provincial share not available)

Deposits & fees¹

Deposit initiator

Producer/Distributor/Importer

Deposit/refund value

› Variable rate:

- › Containers $\leq 1\text{L}$ (0.26 gal): CAD\$0.10 (USD\$0.07)
- › Containers $> 1\text{L}$ (0.26 gal): CAD\$0.25 (USD\$0.19)

Container recycling fee (2024)²

- › Aluminium $\leq 1\text{L}$: CAD\$0.08 (USD\$0.06)
- › Aluminium $> 1\text{L}$: None
- › Plastic $\leq 1\text{L}$: CAD\$0.08 (USD\$0.06)
- › Plastic $> 1\text{L}$: CAD\$0.08 (USD\$0.06)
- › Glass $\leq 1\text{L}$: CAD\$0.13 (USD\$0.10)



- › Glass >1L: CAD\$0.13 (USD\$0.10)
- › Gable top ≤1L: CAD\$0.05 (USD\$0.04)
- › Gable top >1L: CAD\$0.05 (USD\$0.04)
- › Aseptic/Drink pouch: ≤1L: CAD\$0.05 (USD\$0.05)
- › Aseptic/Drink pouch >1L: CAD\$0.05 (USD\$0.04)
- › Bi-metal ≤ 1L: CAD\$0.05 (USD\$0.04)
- › Bi-metal >1L: CAD\$0.05 (USD\$0.04)
- › Bag-in-box >1L: CAD\$0.10 (USD\$0.07)

Handling fee (2024)³

› Variable rate*:

- › Aluminium: CAD\$0.030-\$0.040 (USD\$0.022-\$0.030)
- › Plastic ≤1L: CAD\$0.035-\$0.045 (USD\$0.026-\$0.033)
- › Plastic >1L: CAD\$0.040-\$0.050 (USD\$0.030-\$0.037)
- › Glass: CAD\$0.040-\$0.050 (USD\$0.030-\$0.037)
- › Aseptic/Gable top/Drink pouch: CAD\$0.040-\$0.050 (USD\$0.030-\$0.037)
- › Bi-metal: CAD\$0.040-\$0.050 (USD\$0.030-\$0.037)
- › Bag-in-box: CAD\$0.040-\$0.050 (USD\$0.030-\$0.037)

*The lower fees shown for each material apply specifically to the Yellowknife depot, while the higher fees are applicable to all other depots in the territory.

Processing fee (2024)

- › Aluminium: CAD\$0.015 (USD\$0.011)
- › All other materials: CAD\$0.030 (USD\$0.022)

System structure & administration

Clearing system

Centralised

System operator

Government of the Northwest Territories Department of Environment and Climate Change

System finance

Material revenues, unredeemed deposits, container recycling fees

Unredeemed deposits

System operator (kept in the Environment Fund¹)

Material owner

Processors

Population per collection point

~1,549

Method of return

Manual

Barcode-based system?

No

Container deposit markings

None

Refund payment options

Cash, donation to charity

Container return & refund points

Collection model

Return-to-Depot: Containers can be returned to a mix of permanent and temporary satellite depots. In communities without permanent depots, containers are also collected during scheduled collection events throughout the year.

Number of collection points

29, including 23 permanent depots and 6 temporary satellite depots

¹ Consumers pay both a deposit and a container recycling fee on each eligible beverage purchased. While the deposit is refundable upon return of the empty container, the container recycling fee is not; it goes into the Environment Fund, which supports system costs. Unredeemed deposits also contribute to this fund. Established under the Waste Reduction and Recovery Act, the Environment Fund is separate from the general government account. It covers all deposit system expenses, and any surplus is used by the government for new waste reduction and recovery initiatives.

² Container recycling fees vary by type of container and size, and are based on the estimated costs to collect, process, and transport beverage containers and to administer the DRS.

³ With the exception of a few, depots are eligible to receive monthly subsidies to help offset expenses related to operation. They are also eligible to apply for interest free loans to help offset start-up costs. Depot development grants are also offered to help with the costs of renovations or other improvements to depot facilities.

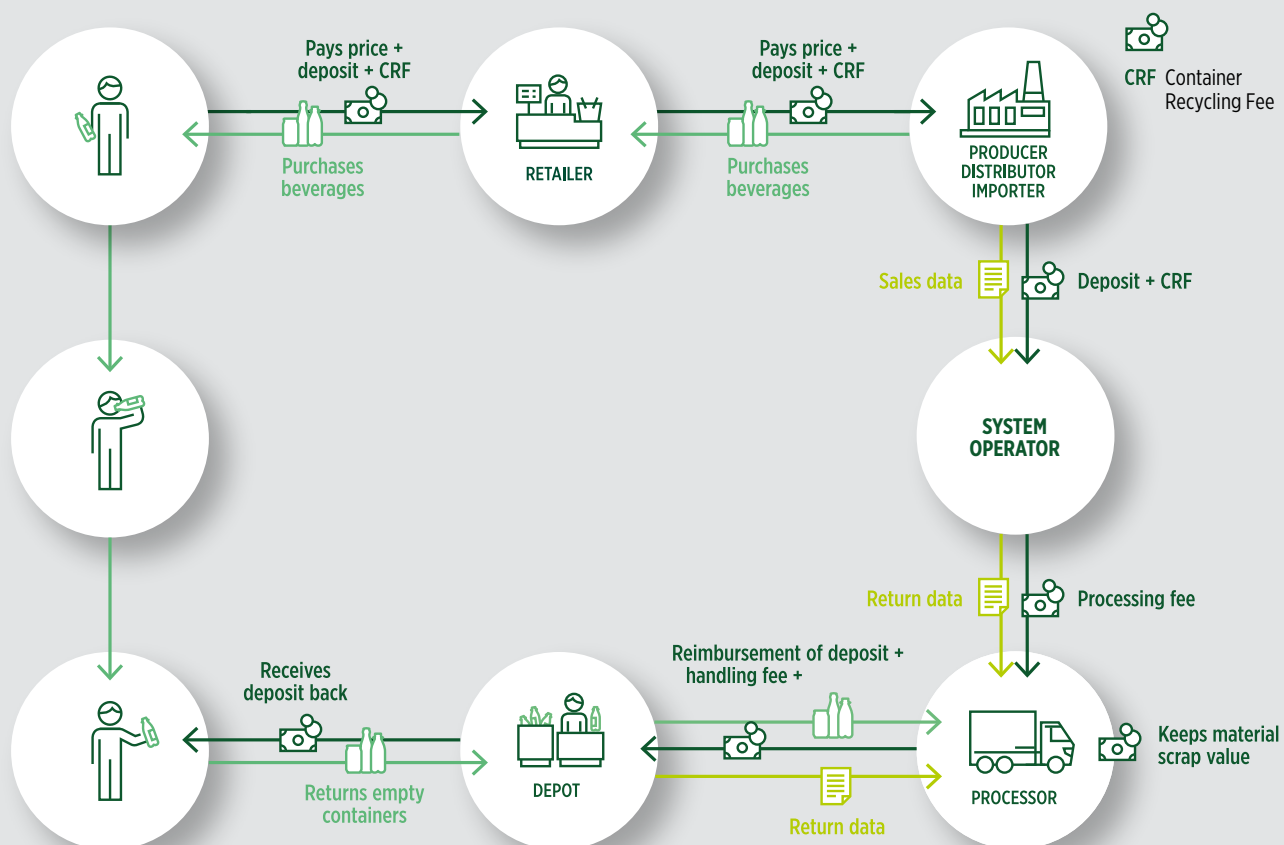
⁴ The return rate for glass includes non-refillable glass bottles ≤1L and >1L. While the return rate for glass ≤1L was 87%, the rate for glass >1L was 142%. The system operator suspects the high return rate for large glass bottles may be the result of containers purchased outside the territory being returned to the programme. The Department of Environment and Climate Change and the NWT Liquor Commission are investigating options to assess the monitor the situation.



Return rate
(2022-23)⁴

Plastic	Aluminium	Bi-metal	Glass*	Gable top/aseptic	Pouches	Bag-in-box	Total
66%	74%	47%	89%	43%	33%	28%	69%

Money, material & data flow



Nova Scotia

Population: **1.1m**

Population density: **20.2/km²**

National (Canada) GDP per capita,
PPP (international \$): **61,582.3**

System operator's website:

Legislative framework

Name of legislation

Solid Waste–Resource Management Regulations, under
Section 102 of the Environment Act

Legislation enacted

1995

Appointment of system operator

February 1996

System started

April 1996

Key updates

None

Regulatory authority

Government of Nova Scotia (Department of Environment
and Climate Change)

Legislated targets

None

Scope

Material type

Plastic, metal (aluminium, bi-metal), glass, gable top,
aseptic, pouches

Beverage type

All sealed, ready-to-serve non-alcohol (juice; health,
energy and diet drinks; soft drinks; water) and alcohol
(wine, spirits, beer) drinks

Size

<5L (1.32 gal)

Excluded

Dairy milk and milk products, soya and rice beverage
products, meal replacements, formulated liquid diets,
foods for low energy diets, baby formulas, concentrates,
wine-making kits

Is there a DRS for refillables?

Yes (5% refillable market share across Canada in 2024;
provincial share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit/refund value¹

› Variable rate:

- › Non-alcohol <5L (1.32 gal): CAD\$0.10/\$0.05 (USD\$0.07/\$0.04)
- › Alcohol ≤500ml (0.13 gal): CAD\$0.10/\$0.05 (USD\$0.07/\$0.04)
- › Alcohol >500ml (0.13 gal): CAD\$0.20/\$0.10 (USD\$0.15/\$0.07)

Handling fee (2024)

› Flat rate: CAD\$0.0499 (USD\$0.037)

Processing fee

Not available

Sources

1) Divert NS. "The Shape of the Future is Circular 23/24 Annual Report." Available at:
<https://www.divertnsannualreport.ca/>

2) Personal communication with Dale Lyon, DivertNS, 26 September 2024



System structure & administration

Clearing system

Centralised

System operator²

Divert NS (registered business name of the Resource Recovery Fund Board; not-for-profit organisation, operating at arms-length from government)

System finance

Material revenues, non-refundable portion of deposits ("half back revenue"), unredeemed deposits

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Depot: Containers can be returned to depots and mobile service locations. They can also be placed in household kerbside collection bags, though this forfeits the refund; in this case, non-public buy backs, operated by municipalities or private contractors, recover the containers and are reimbursed by Divert NS.

Number of collection points

77

Container deposit markings

Containers must include a return for refund message. Variations of the wording are acceptable as long as the concept of a refund (e.g., Return for Refund; Refundable; Return for refund where applicable, etc.) is evident.

Population per collection point

-13,929

Method of return

Manual

Barcode-based system?

No

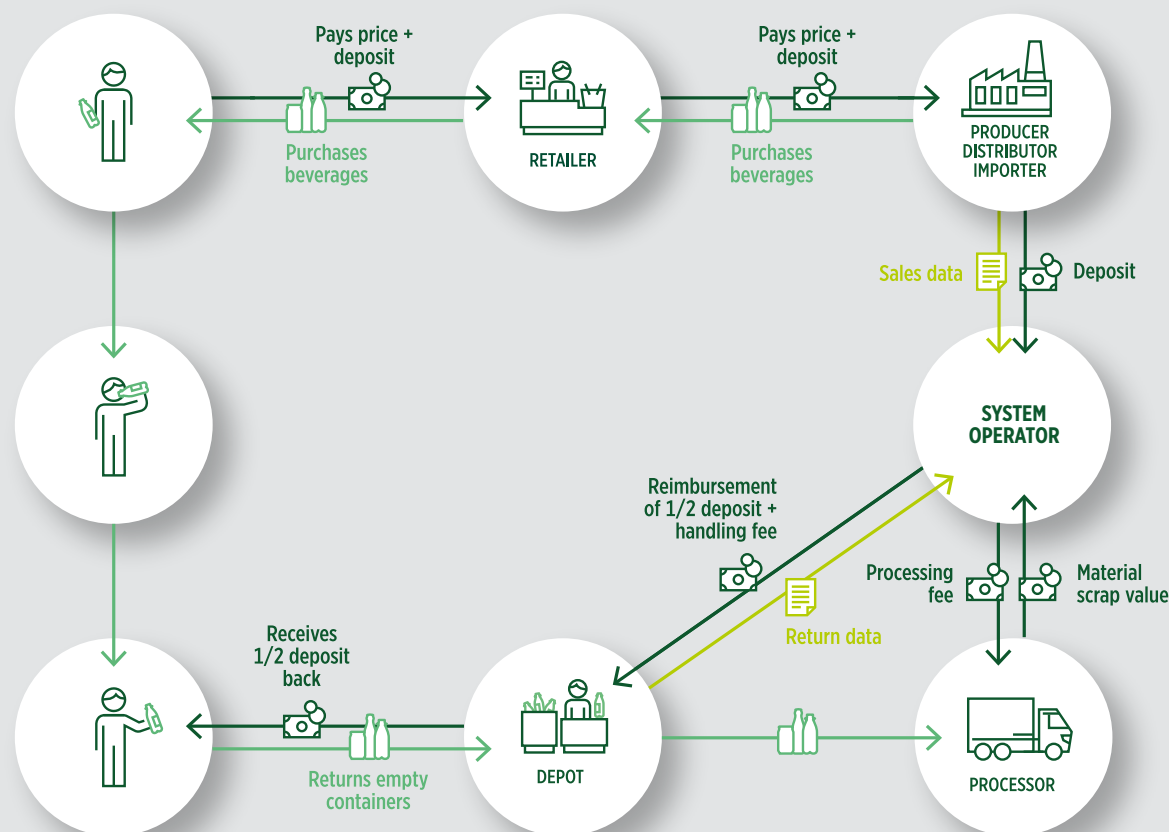
Refund payment options

Cash

Return rate (2023-24)

Aluminium	Bi-metal	Glass	Plastic (PET/HDPE)	Gable top	Aseptic	Total
84%	45%	75%	74%	45%	36%	77% ²

Money, material & data flow



¹ Nova Scotia's DRS is based on a "half-back" model, where consumers who purchase single-use drinks containers and take them back for recycling are refunded only half (50%) of the initial deposit paid.

² The return rate does not include beer containers as sales and returns data for these containers was not available.



Ontario

Population: **16.0m**

Population density: **17.9/km²**

National (Canada) GDP per capita,
PPP (international \$): **61,582.3**

System operator's website:

Sources

- 1) Association of Municipalities of Ontario. "Ontario Baseline Waste & Recycling Report 2023." Available at: <https://www.amo.on.ca/sites/default/files/assets/DOCUMENTS/Waste/2023/AMO-ON-Baseline-2023-v6-AODA.pdf>
- 2) Brewers Retail Inc. 2024. "The Beer Store Responsible Stewardship 2023: Championing Sustainability in Ontario." Available at: <https://www.thebeerstore.ca/api/images/wyfly6ekqxs8/13rUGbx9Nm8JVx2zhAA9lo/614e6efd24cdb72a41515e8f9a555334/pdfresizer.com-pdf-resize.pdf>
- 3) Brewers Retail Inc. Spring 2021. "Empty Return Guide: Sorting and handling TBS and ODRP deposit containers." Available at: <https://www.thebeerstore.ca/wp-content/uploads/2022/03/Empty-Return-Guide-Spring-2021.V2.pdf>
- 4) Crawley, M. 12 July 2024. "Few Ontario grocery stores sign on to Doug Ford's booze sale plan." CBC News. Available at: <https://www.cbc.ca/news/canada/toronto/ontario-alcohol-beer-wine-grocery-store-supermarket-sales-1.7261181>
- 5) Government of Ontario. "Improving Choice and Convenience Through a Modernized Marketplace for the Retailing and Distribution of Beer and Recycling in Ontario: Early Implementation Agreement." Available at: <https://www.ontario.ca/files/2024-05/mof-early-implementation-agreement-2024-05-23.pdf>
- 6) Liquor Control Board of Ontario. "Bottle Return: Ontario Deposit Return Program Administrator." Available at: https://hellolcbo.com/app/answers/detail/_a_id/982/-/bottle-return%3A-ontario-deposit-return-program-administrator
- 7) Liquor Control Board of Ontario (LCBO). "New Grocery and Convenience Store Q&A." Available at: <https://www.doingbusinesswithlcbo.com/content/dam/lcbo/common/dbwl/New%20Retailer%20QA.pdf>
- 8) "Master Framework Agreement dated September 22, 2015 between the Province and Brewers Retail Inc. and Labatt Brewing Company Limited and Molson Canada 2005 and Sleeman Breweries Ltd. And Her Majesty the Queen in Right of Ontario." Available at: <https://www.thebeerstore.ca/wp-content/uploads/2019/04/Master%20Framework%20Agreement.pdf>
- 9) Ontario Government. 14 December 2023. "Ontario Consumers Will Be Able to Buy Beer, Cider, Wine and Low-Alcohol Ready-to-Drink Beverages at Convenience, Grocery and Big Box Stores." Available at: <https://news.ontario.ca/en/release/1003988/ontario-consumers-will-be-able-to-buy-beer-cider-wine-and-low-alcohol-ready-to-drink-beverages-at-convenience-grocery-and-big-box-stores>
- 10) Reguly, T. and D. Ramsden. 5 June 2024. "Ontario government accelerating the expansion of the alcoholic beverage marketplace: updates for current and future retailers." Available at: <https://www.torjys.com/en/our-latest-thinking/publications/2024/06/ontario-government-accelerating-the-expansion-of-the-alcoholic-beverage-marketplace>
- 11) The Beer Store. "Open Ownership." Available at: <https://www.thebeerstore.ca/ownership-governance/open-ownership/>

Legislative framework

Name of legislation¹

Exhibit B (Ontario Deposit Return Program Agreement) of the Master Framework Agreement dated September 22, 2015 between the Province and Brewers Retail Inc., Labatt Brewing Company Limited, and Molson Canada, Sleeman Breweries Ltd. and Her Majesty the Queen in Right of Ontario (as of the time of writing, a revised Ontario Deposit Return Agreement is set to be concluded between the Ontario Government and the LCBO and TBS by October 1, 2024)

Legislation enacted

2006

Appointment of system operator

Unknown

System started

5 February 2007

Key updates

- › 31 October 2024: new take-back requirement for grocery stores that sell alcohol and who are located over 5km from an existing The Beer Store outlet
- › 1 January 2026: new take-back requirement for grocery stores that sell alcohol and who are located within 5km of an existing The Beer Store outlet

Regulatory authority

Ontario Ministry of Finance

Legislated targets²

There are no targets set out in the original regulation (O. Reg 13/07, which was revoked in 2021); however, the 2015 "Master Framework Agreement" between the province and The Beer Store (set to end in 2025) includes an overall return rate target of 85% for programme containers by the end of 2018.

Scope

Material type

Plastic, metal (aluminium, bi-metal), glass, gable top, aseptic, bag-in-box

Beverage type

Alcohol beverages
(e.g., beer, wine, spirits,
cider, ready-to-drink cocktails)

Size

>100ml (0.03 gal)

Excluded

Non-alcohol beverages

Is there a DRS for refillables?

Yes (18% refillable market share in 2022)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

› Variable rate:

- › Wine and spirits ≤630ml (0.17 gal): CAD\$0.10 (USD\$0.07)
- › Wine and spirits >630ml (0.17 gal): CAD\$0.20 (USD\$0.15)
- › Beer ≤1L (0.26 gal): CAD\$0.10 (USD\$0.07)
- › Beer >1L (0.26 gal): CAD\$0.20 (USD\$0.15)

Handling fee (2024)

- › The Beer Store (TBS) locations: For wine, spirit, and imported beer containers that are not sold at TBS but are returned at TBS, the LCBO pays TBS a per unit service fee. This fee is determined in contract and is unknown. The LCBO is also obliged to reimburse TBS for all deposit refunds that TBS pays out to consumers who containers that were not sold at TBS.
- › Grocery stores: CAD\$0.02 (USD\$0.015) (paid directly by the LCBO)



System structure & administration

Clearing system

Centralised

System operator^{3,4}

Brewers Retail Inc. (privately-owned beer retailer controlled by brewers, operating as The Beer Store [TBS])

System finance

Material revenues, unredeemed deposits, LCBO revenue

Unredeemed deposits

Beer distributors/bottlers and the
Liquor Control Board of Ontario (LCBO)

Material owner

System operator

Container return & refund points

Collection model^{4,5}

Return-to-Retail: Containers can be returned to TBS outlets, licensed agency stores, and TBS-contracted empty bottle dealers. Starting 31 October 2024, grocery stores $\geq 4,000\text{ft}^2$ (372m^2) that sell alcohol must also accept returns of empty alcohol containers during the hours in which alcohol is offered for sale. Until 1 January 2026, some grocery stores will be temporarily exempt from taking back containers, if they are located within 5km (3.1 miles) of a TBS location (as of 3 September 2024). After 1 January 2026, all grocery stores $\geq 4,000\text{ft}^2$ (372m^2) selling alcohol will be required to accept returns and provide deposit refunds to customers. TBS outlets accept all containers, while grocery stores must take back only the types they sell.

Convenience stores that sell alcohol are exempt. All exempt stores must display signage for the nearest return point.

Online take-back? No

Number of collection points

1,706, including 416 TBS stores, 348 on-site brewery retail stores (beer containers only), 387 TBS retail partner stores and LCBO Convenience Outlets, 71 TBS-contracted empty bottle dealers, and 484 grocery stores (number of stores with licenses to sell alcohol and therefore required to take back empties as of 12 July 2024)

Population per collection point

9,377

Method of return

Mostly manual

Barcode-based system?

No, except for where collection is automated

Container deposit markings

None

Refund payment options

Cash

¹ The Ontario Deposit Return Program (ODRP) was initially established pursuant to Ontario Regulation 13.07, enacted under the Liquor Act. However, this regulation was repealed in 2021. Consequently, the sole governing framework for the programme at present is the "Master Framework Agreement" (MFA) between the province and Brewers Retail Inc. (The Beer Store), which was signed and extended for ten years by the previous government in 2015. In December 2023, the Ontario Government informed Brewers Retail Inc. that the MFA will not be renewed after it expires on 31 December 2025. Nevertheless, TBS has agreed to continue to run the DRS for alcohol containers until at least 31 December 2030. A revised Ontario Deposit Return Agreement (ODRP) must be concluded between the Ontario Government and the Liquor Control Board of Ontario (LCBO) and TBS by 1 October 2024.

² While not applicable to deposit containers, Ontario Regulation 391/21 (Blue Box) under the Resource Recovery and Circular Economy Act (2016) includes a collection target of 75% for non-alcohol beverage containers supplied in the province by 2026 (increasing to 80% by 2030).

³ TBS currently operates as a unique open retail and wholesale system primarily owned by three brewing companies: Molson, Labatt, and Sleeman, which are owned by multinational corporations. It is also partially owned by 30 Ontario-based brewers (In 2015, TBS announced that it would be opening its ownership to all Ontario-based brewers, large and small. Under the current ownership model, Ontario brewers who satisfy certain qualification criteria have the opportunity to become TBS shareholders).

⁴ Since its establishment in 1927, TBS has been operating a private deposit programme for the beverage containers it sells. Originally, TBS sold beer in refillable bottles only, and the deposit encouraged consumers to return their bottles for reuse. The programme was expanded to single-use containers as they began to enter the market. Building off the success of TBS's system, in 2007, the provincial government enacted the Ontario Deposit Return Program (ODRP), which established a partnership between TBS and the LCBO. The agreement allows for only TBS to accept and refund deposits for all alcohol containers which are sold through LCBO and The Beer Store.

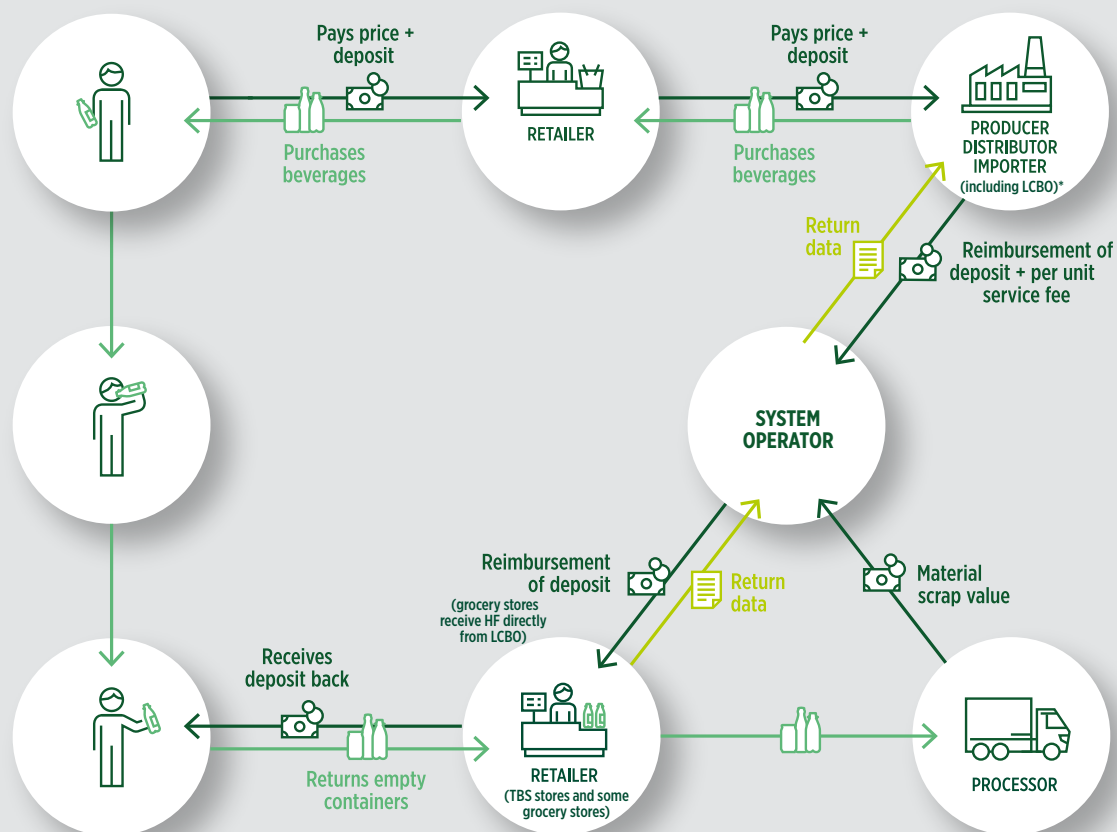
⁵ On 28 March 2024, the provincial government signed a new agreement with TBS, the "Early Implementation Agreement." This agreement continues the existing deposit system for alcohol containers and establishes a new obligation for grocery stores that are more than 4,000ft² to collect empty alcohol containers if there is no TBS outlet within 5km (for stores with a TBS outlet within 5km, the requirement to accept returns starts in January 2026).



Return rate (2023)

Plastic (PET)	Aluminium	Glass	Aseptic/bag-in-box	Total
42%	76%	77%	26%	75%

Money, material & data flow



Prince Edward Island

Population: 0.2m

Population density: 31.0/km²

National (Canada) GDP per capita,
PPP (international \$): 61,582.3

System operator's website:

Sources

- 1) Government of Prince Edward Island. "Beverage Container Program." Available at: <https://www.princeedwardisland.ca/en/information/environment-water-and-climate-change/beverage-container-program>
- 2) Personal communication with Mike Cheverie, Program Coordinator, Beverage Containers Program, 30 January 2024 and 28 May 2024
- 3) Campbell, K. and S. Ross. 13 November 2024. "No timeline set yet for increase in bottle and can refunds on P.E.I." CBC News. Accessed 19 November 2024 from <https://www.cbc.ca/news/canada/prince-edward-island/pei-legislature-nov-13-1.7382327>

Legislative framework

Name of legislation

General Regulations and the Recyclable Beverage Container Deposit Regulations, under the Beverage Containers Act

Legislation enacted

2007

Appointment of system operator

2008

System started

May 2008

Key updates¹

None

Regulatory authority

Department of Environment, Energy, and Climate Action

Legislated targets

None

Scope

Material type

Plastic, metal (aluminium, bi-metal), glass, gable top, aseptic, bag-in-box, pouches

Beverage type

Ssealed, ready-to-drink non-alcohol (juices; sport, energy and diet drinks; soft drinks; water) and alcohol (wine, spirits, beer) beverages

Size

≤ 5L (1.32 gal)

Excluded

Milk and milk substitutes, concentrates, nutritional supplements

Is there a DRS for refillables?

Yes (5% refillable market share across Canada in 2024; provincial share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit/refund value¹

› Variable rate:

- › Non-alcohol: CAD\$0.10/\$0.05 (USD\$0.07/\$0.04)
- › Alcohol ≤500ml (0.13 gal): CAD\$0.10/\$0.05 (USD\$0.07/\$0.04)
- › Alcohol >500ml (0.13 gal): CAD\$0.20/\$0.10 (USD\$0.15/\$0.07)

Handling fee (2024)

› Flat rate: CAD\$0.04916 (USD\$0.036)

Processing fee (includes freight) (2024)

CAD\$0.01616 (USD\$0.012) (paid by provincial government to processors)



System structure & administration

Clearing system

Centralised

System operator

Department of Environment, Energy, and Climate Action

System finance

Non-refundable portion of deposits (“half-back” revenue),
unredeemed deposits, material revenues

Unredeemed deposits

Provincial government (treasury)

Material owner

Provincial government

Container return & refund points

Collection model

Return-to-Depot

Number of collection points

13, including 10 ‘parent’ depots and 3 satellite depots

Population per collection point

13,622

Container deposit markings

None

Method of return

Manual

Refund payment options

Cash

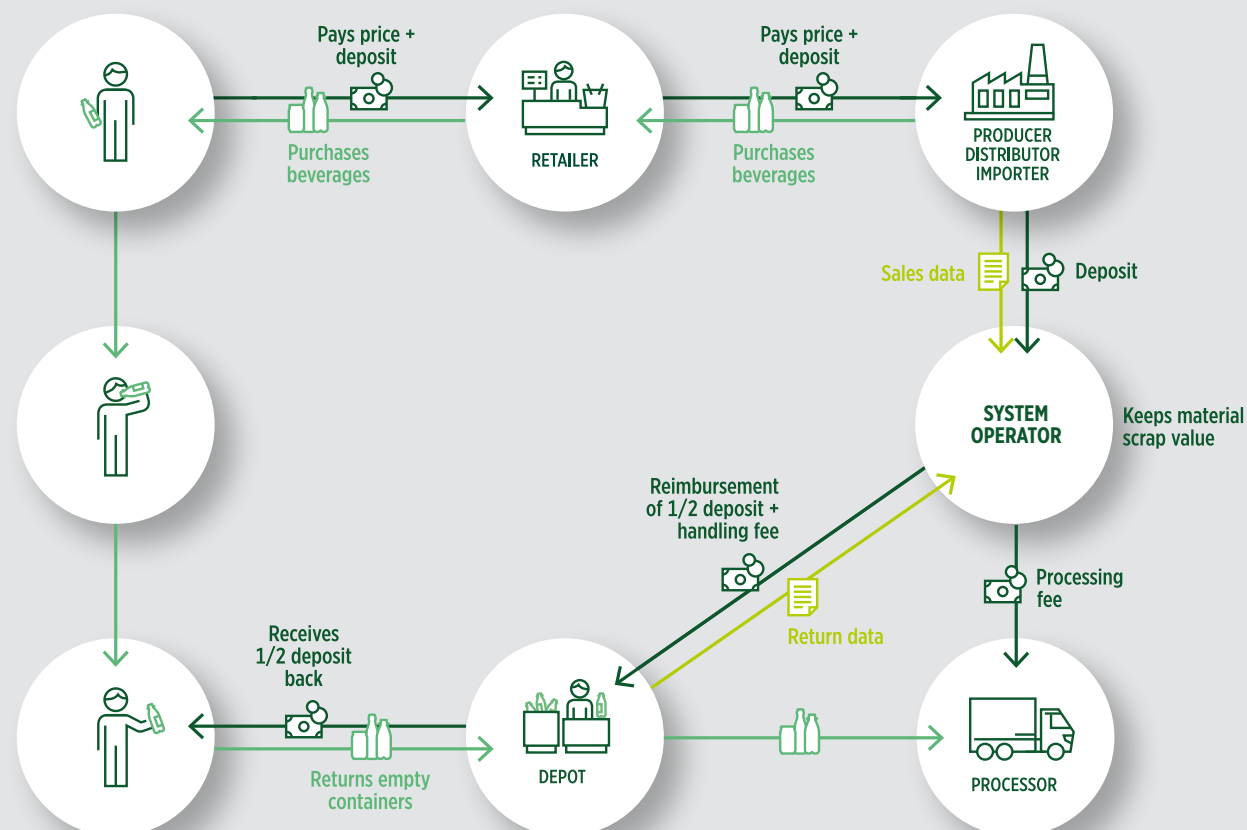
Barcode-based system?

No

Return rate (2023)

Aluminium	Steel	Glass	Plastic (PET)	Plastic (HDPE)	Plastic (PVC)	Gable top	Aseptic and Pouches	Total
87%	75%	76%	76%	11%	43%	27%	61%	81%

Money, material & data flow



¹ In March 2024, PEI's Environment Minister announced plans to double the deposit on beverage containers, aiming to boost recycling rates. Initially, this change was expected to be implemented by August 2024. However, in July 2024, it was revealed that the earliest the new deposit rates could take effect would be November 2024, pending an amendment to PEI's Beverage Containers Act. By November 2024, the Minister indicated that additional time was needed to gather information and complete consultations before determining the path forward. If it is determined that increasing deposits is the best approach, legislative changes are expected to be introduced during the spring 2025 sitting of the legislature.

² Prince Edward Island's deposit system is based on a "halfback" model, where the deposit paid on single-use drinks containers is only partially (50%) refunded to the consumer (deposits on refillable containers are 100% refundable).



Quebec

Population: 9.0m

Population density: 6.9/km²

National (Canada) GDP per capita,
PPP (international \$): 61,582.3

System operator's website:

Sources

- 1) Consignation. "Toward a modernized, environmentally responsible deposit-refund system for Quebec." Available at: <https://consignation.ca/en/citizens/depositssystemmodernization/>
- 2) "Entente portant sur la consignation, la recuperation et le recyclage des contenants a remplissage unique de biere." 1 janvier 2022. Available at: <https://www.recyc-quebec.gouv.qc.ca/sites/default/files/documents/consigne-entente-biere.pdf>
- 3) QBCRA. Available at: <https://sites.google.com/view/qbcra/the-association>
- 4) Quebec Government. "Modernization of Quebec's Deposit-Return and Curbside Collection Systems." Available at: <https://www.environnement.gouv.qc.ca/matieres/valorisation/consigne-collecte-selective-en.pdf>
- 5) Quebec Government. "Règlement visant l'élaboration, la mise en œuvre et le soutien financier d'un système de consigne de certains contenants et règlement transitoire." Available at: <https://www.environnement.gouv.qc.ca/matieres/consigne-collecte/feuillelet-synthese-consigne.pdf>
- 6) Quebec Ministère de l'Environnement et de la Lutte contre les changements climatiques. "Modernization of Quebec's deposit and selective collection systems." Available at: <https://www.environnement.gouv.qc.ca/matieres/consigne-collecte/index-en.htm>
- 7) Recyc-Quebec. "Fonctionnement de la consigne." Available at: <https://www.recyc-quebec.gouv.qc.ca/entreprises-organismes/mieux-gerer/consigne/fonctionnement>
- 8) Recyc-Quebec. "Tableau des ventes et de la recuperation des contenants consignés (Bière et Boissons gazeuses)." Available at: <https://www.recyc-quebec.gouv.qc.ca/sites/default/files/documents/statistiques-ventes-recuperation-cru.pdf>
- 9) Regulation respecting the development, implementation and financial support of a deposit-refund system for certain containers. Available at: <https://www.environnement.gouv.qc.ca/matieres/consigne-collecte/reglement-consigne-version-administrative-en.pdf>

Legislative framework

Name of legislation

- › Act respecting the sale and distribution of beer and soft drinks in non-returnable containers, under the Environment Quality Act (1972)
- › Act to amend mainly the Environment Quality Act with respect to deposits and selective collection
- › Regulation respecting the development, implementation, and financial support of a deposit-refund system for certain containers

Legislation enacted

- › 1984 – original legislation
- › March 2021 – adoption of Bill 65, an Act to amend mainly the Environment Quality Act with respect to deposits and selective collection
- › June 2022 – enactment of regulations for the implementation and financial support of an expanded deposit system under EPR principles

Appointment of system operator(s)

- › **Old system (before 1 November 2023):** 1990 (RECYC-QUÉBEC) and 1996 (Boisson Gazeuses Environnement)
- › **New system (1 November 2023 and thereafter):** October 2022 (Association québécoise de récupération des contenants de boissons [AQRCB]/Quebec Beverage Container Recycling Association [QBCRA])

System started

1984

Key updates

- › 1996 – expansion to soft drinks
- › 1 November 2023 – Phase 1 of DRS modernisation (expansion to all aluminium containers 100ml to 2L, change to deposit values (including increase of minimum deposit

from 5- to 10-cents)

- › 1 March 2025 (planned) – Phase 2 of DRS modernisation (expansion to all materials, ready-to-drink beverages 100ml to 2L)

Regulatory authority

Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs and RECYC-QUÉBEC

Legislated targets¹

Old system (prior to 1 November 2023)

- › **Collection:** 75%

New system (1 November 2023 and thereafter)

› Collection ("recovery"):

- › Metal: 75% (2026 and 2027), 80% (2028 and 2029), 85% (2030 and 2031), 90% (2032), increasing by 5% every two years up to 90%
- › Plastic: 55% (2026 and 2027), 75% (2028 and 2029), 80% (2030 and 2031), increasing by 5% every two years up to 90%
- › Glass: 60% (2026 and 2027), 75% (2028 and 2029), 80% (2030 and 2031), increasing by 5% every two years up to 90%
- › Multi-layer: 65% (2028 and 2029), 70% (2030 and 2031), increasing by 5% every two years up to 90%
- › Biobased: 75% (2028 and 2029), 80% (2030 and 2031), increasing by 5% every two years up to 90%
- › Overall: 70% (2026 and 2027), 80% (2028 and 2029), 85% (2030 and 2031), 90% (2032)

› Recycling ("reclamation")

- › Metal: 75% (2026 and 2027), 80% (2028 and 2029), 85% (2030 and 2031), increasing by 5% every two years

up to 90%

- › Plastic: 53% (2026 and 2027), 73% (2028 and 2029), 78% (2030 and 2031), increasing by 5% every two years up to 90%
- › Glass: 58% (2026 and 2027), 73% (2028 and 2029), 78% (2030 and 2031), increasing by 5% every two years up to 90%
- › Multi-layer: 60% (2028 and 2029), 65% (2030 and 2031), increasing by 5% every two years up to 90%
- › Biobased: 73% (2028 and 2029), 78% (2030 and 2031), increasing by 5% every two years up to 90%
- › Overall: 65% (2026 and 2027), 75% (2028 and 2029), 80% (2030 and 2031), increasing by 5% every two years up to 90%

Local recycling (“local reclamation”)

- › Metal and plastic: 80% (2026)
- › Glass: 90% (2026)
- › Multi-layer: 80% (2027)
- › Biobased: 80% (2028)

Accessibility

- › 1,200 collection points (excluding bulk return sites) across southern Quebec by 1 November 2023
- › 1,500 collection points (excluding bulk return sites) across southern Quebec by 1 March 2025.
- › Each administrative region must have a minimum number of collection points per number of inhabitants, as follows:
 - Montréal and Laval: 1 for every 15,000 inhabitants
 - Montérégie, Estrie, Outaouais, Laurentides, Lanaudière and Capitale-Nationale: 1 for every 8,000 inhabitants
 - Saguenay-Lac-Saint-Jean, Chaudière-Appalaches, Mauricie and Centre-du-Québec: 1 for every 6,000 inhabitants
 - Abitibi-Témiscamingue, Bas-Saint-Laurent, Gaspésie-Îles-de-la-Madeleine, and Côte-Nord, with the exception of the territories of the regional county municipalities of Minganie, Caniapiscau and Golfe-du-Saint-Laurent: 1 for every 4,000 inhabitants
- › In each regional municipality, there must be at least 2 collection points at which it is possible to return an unlimited number of containers at each visit.

Scope

Material type²

Old system (prior to 1 November 2023)

Plastic, metal (aluminium, bi-metal), glass

New system – Phase 1 (1 November 2023 to 28 February 2025)

Plastic (soft drinks and beer), metal (aluminium, bimetal), glass (soft drinks and beer)

New system – Phase 2 (1 March 2025 and thereafter)

Plastic, metal (aluminium, bimetal), glass, biobased, multi-layered containers²

Beverage type²

Old system (prior to 1 November 2023): Beer, soft drinks

New system – Phase 1 (1 November 2023 to 28 February 2025)

› Dependent on material type:

- › Glass and plastic: soft drinks, beer
- › Metal: All ready-to-drink beverages including alcohol (beer, wine, spirits, cider) and non-alcohol beverages (soft drinks, fruit drinks, juices, flat and sparkling waters [flavoured or not], dairy or plant milk)

New system – Phase 2 (1 March 2025 and thereafter)

- › All ready-to-drink beverages including alcohol (beer, wine, spirits, cider) and non-alcohol beverages (soft drinks, fruit drinks, juices, flat and sparkling waters [flavoured or not], dairy or plant milk)

Size²

Old system (prior to 1 November 2023)

≤ 8L (2.11 gal)

New system (1 November 2023 and thereafter)

100ml to 2L (0.03 gal – 0.53 gal)

Excluded²

Old system (prior to 1 November 2023)

All drinks except for soft drinks and beer (i.e., water, juice, wine, spirits, cider, milk), multi-layered containers, bag-in-box containers

New system – Phase 1 (1 November 2023 to 28 February 2025)

› Dependent on container material:

- › Glass and plastic bottles containing drinks other than soft drinks or beer
- › Multi-layered containers holding milk and juice, bag-in-box containers, concentrates, infant formula, syrup, yogurt drinks, any product containing more than 50% milk permeate

New system – Phase 2 (1 March 2025 and thereafter)

Concentrates, infant formula, syrup, yogurt drinks, any product containing more than 50% milk permeate

Is there a DRS for refillables?³

Yes (5% refillable market share across Canada in 2024; provincial share not available)



Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

Old system (prior to 1 November 2023)

› Variable rate:

- › Soft drinks (regardless of material type or container size): CAD\$0.05 (USD \$0.04)
- › Beer cans ≤ 450ml (0.12 gal): CAD\$0.05 (USD\$0.04)
- › Beer cans > 450ml (0.12 gal): CAD\$0.20 (USD\$0.15)
- › Beer glass ≤ 450ml (0.12 gal): CAD\$0.10 (USD \$0.08)
- › Beer glass > 450ml (0.12 gal): CAD\$0.20 (USD \$0.15)

New system – Phase 1 (1 November 2023 to 28 February 2025)

› Variable rate³:

- › Plastic (beer and soft drinks only): CAD\$0.10 (USD\$0.07)
- › Metal: CAD\$0.10 (USD\$0.07)
- › Glass <500ml (0.13 gal) (beer and soft drinks only): CAD\$0.10 (USD\$0.07)
- › Glass 500ml to 2L (0.13 gal to 0.53 gal) (beer and soft drinks only): CAD\$0.25 (USD\$0.19)

New system – Phase 2 (1 March 2025 and thereafter)

› Variable rate³:

- › Glass ≥ 500ml (0.13 gal): CAD\$0.25 (USD\$0.19)
- › All other containers: CAD\$0.10 (USD\$0.07)

Handling fee

Old system (prior to 1 November 2023)

- › Flat rate: CAD\$0.02 (USD\$0.015)

New system (1 November 2023 to 28 Feb 2025)

- › Flat rate: CAD\$0.025 (USD\$0.019)

New system (1 March 2025 and thereafter)

- › **Variable-rate:** TBD, but will vary by material as well as type of collection point (e.g., retailers vs. depots), based on an annual net cost activity study. Once finalised, collection points will receive handling fees retroactive to 1 November 2023.

Producer fee

Old system (prior to 1 November 2023)

Small producers paid a fee to BGE (for soft drinks) and RECYC-QUÉBEC (for beer) for every container sold or delivered. These fees, shown below, compensated larger producers who handled collection on their behalf.

› Small soft drinks producers:

- › Aluminium: CAD\$0.01 (USD \$0.01)
- › Plastic: CAD\$0.03 (USD \$0.02)
- › Glass: CAD\$0.05 (USD \$0.04)

› Small beer producers:

- › Aluminium: CAD\$0.01 (USD \$0.01)
- › Bimetal, Glass, Plastic: CAD\$0.05 (USD \$0.04)

New system (1 November 2023 and thereafter)

TBD – fees will be eco-modulated and based on the net cost to recycle each container type after accounting for material revenues and unredeemed deposits

System structure & administration

Clearing system

Centralised

System operator

Old system (prior to 1 November 2023)

- › Soft drink containers: Boissons Gazeuses Environnement (BGE) (non-profit organisation established by the Québec soft drinks industry; in 1999, it took over RECYC-QUÉBEC's responsibility to manage the system for single-use soft drinks containers)
- › Beer containers: RECYC-QUÉBEC (Société Québécoise de récupération et de recyclage; government corporation), in collaboration with the Québec Brewers Association (QBA, l'association des Brasseurs du Québec)

New system (1 November 2023 and thereafter)

Quebec Beverage Container Recycling Association (QBCRA) (comprises beverage producers involved in container recovery, recycling, and reclamation in Quebec, including the Canadian Beverage Association, L'Association des brasseurs du Québec, Association des Négociants Embouteilleurs de Vins, Conseil des industriels laitiers du Québec inc., Conseil de la Transformation alimentaire du Québec, Conseil Canadian du Commerce de Détail)

System finance

Material revenues, unredeemed deposits, producer fees

Unredeemed deposits

Old system (prior to 1 November 2023)

System operators (BGE transferred 50% of unredeemed soft drink deposits [or a minimum of CAD\$700,000/year] to RECYC-QUÉBEC, with the rest kept by BGE. For beer containers, RECYC-QUÉBEC retained 33% of unredeemed deposits and returned 66% to the brewers' collection agreement members)

New system (1 November 2023 and thereafter)

System operator



Material owner**Old system (prior to 1 November 2023)**

Producer/Distributor/Importer

New system (1 November 2023 and thereafter)

System operator

Container return & refund points

Collection model**Old system (prior to 1 November 2023)**

Return-to-retail: All retailers selling eligible containers were required to take them back (no exemptions).

New system (1 November 2023 and thereafter)

Hybrid: Retailers selling deposit-bearing containers with a sales area >375m² (4,036 ft²) must take back containers and refund deposits, either independently or in collaboration with other retailers, while meeting specific criteria. Empty containers can also be returned to Consignation and Consignation+ return sites (i.e., depots), which have gradually been rolling out since 1 November 2023. Both types of sites offer express return, allowing consumers to drop off unsorted containers in a bag, while Consignation+ sites also offer bulk returns for large volumes. These return sites can be located inside retailers or in separate structures.

All return sites must be within a 1 km (0.6 miles) radius of a retailer, except when multiple retailers collaborate on a single return site, which must be within 1 km of one associated establishment and up to 5 km (3.1 miles) from others in municipalities with <3,000 people.

Additionally, establishments offering on-site consumption, such as restaurants and institutional cafeterias, must participate in the DRS. Those with seating capacities >75 must comply by November 2023, and those with capacities of ≥20 by March 2025.

Online take-back? No**Number of collection points****Old system (prior to 1 November 2023)**

Approximately 8,000 retailers including 1,200 large retailers with RVMs

New system (1 November 2023 and thereafter)

As of August 2024, eight Consignation return sites, two Consignation+ return sites, and approximately 8,000 retailers (1,200 large retailers with RVMs and 6,800 small retailers without RVMs). Once the new system is fully deployed, it is expected there will be up to 400 new depots.

Population per collection point**Old system (prior to 1 November 2023)**

~1,129

New system (1 November 2023 and thereafter)

~1,127 (this number is expected to decrease over the coming months as more depots open)

Method of return**Old system (prior to 1 November 2023)**

82% automated / 18% manual

New system (1 November 2023 and thereafter)

Mostly automated (collection is automated at all depot sites as well as large retailers)

Barcode-based system?

Yes

Container deposit markings

No

Refund payment options**Old system (prior to 1 November 2023)**

Cash

New system (1 November 2023 and thereafter)

Cash, electronic funds transfer, donation to charity

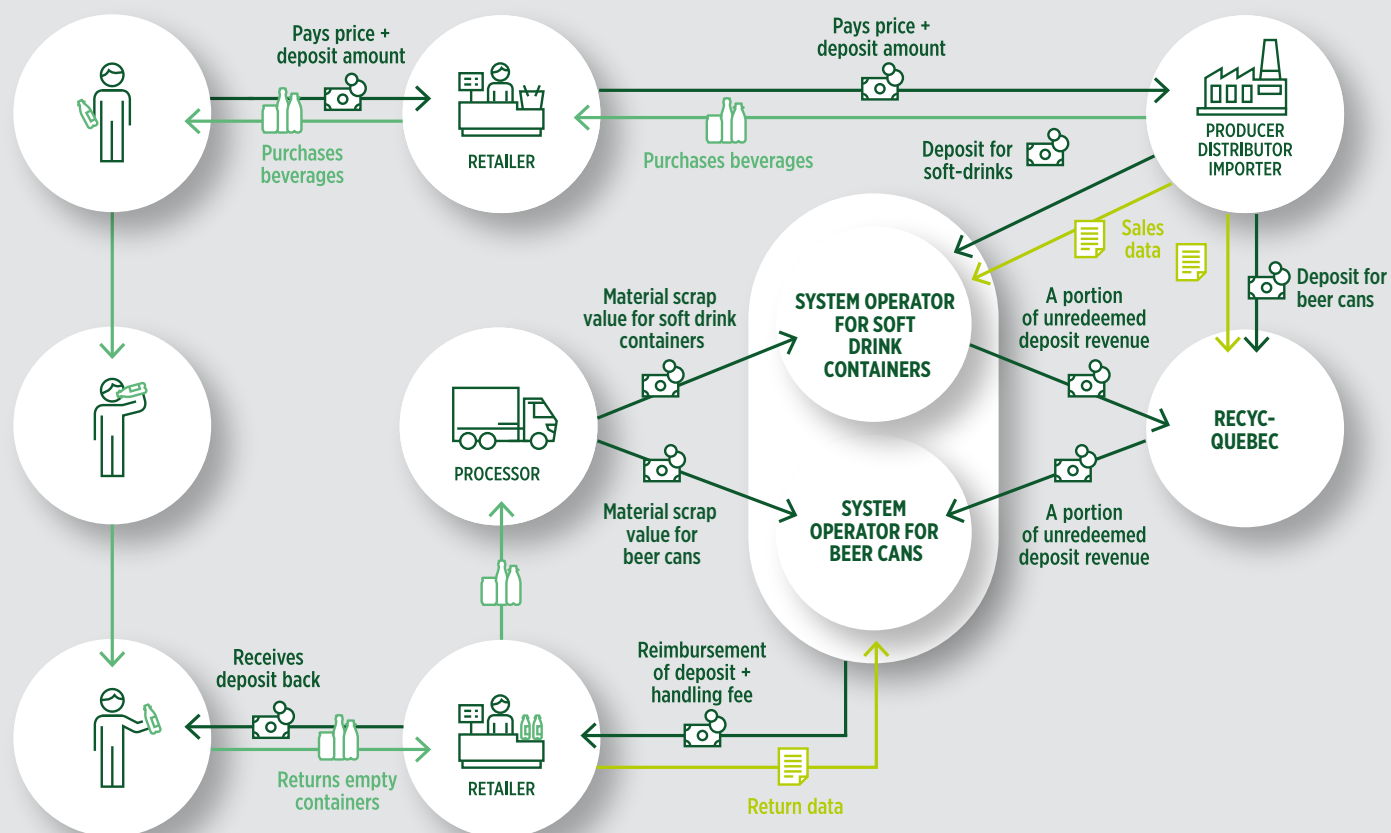


Return rate (2022)⁵

Plastic	Metal	Glass	Total
54%	71%	56%	68%

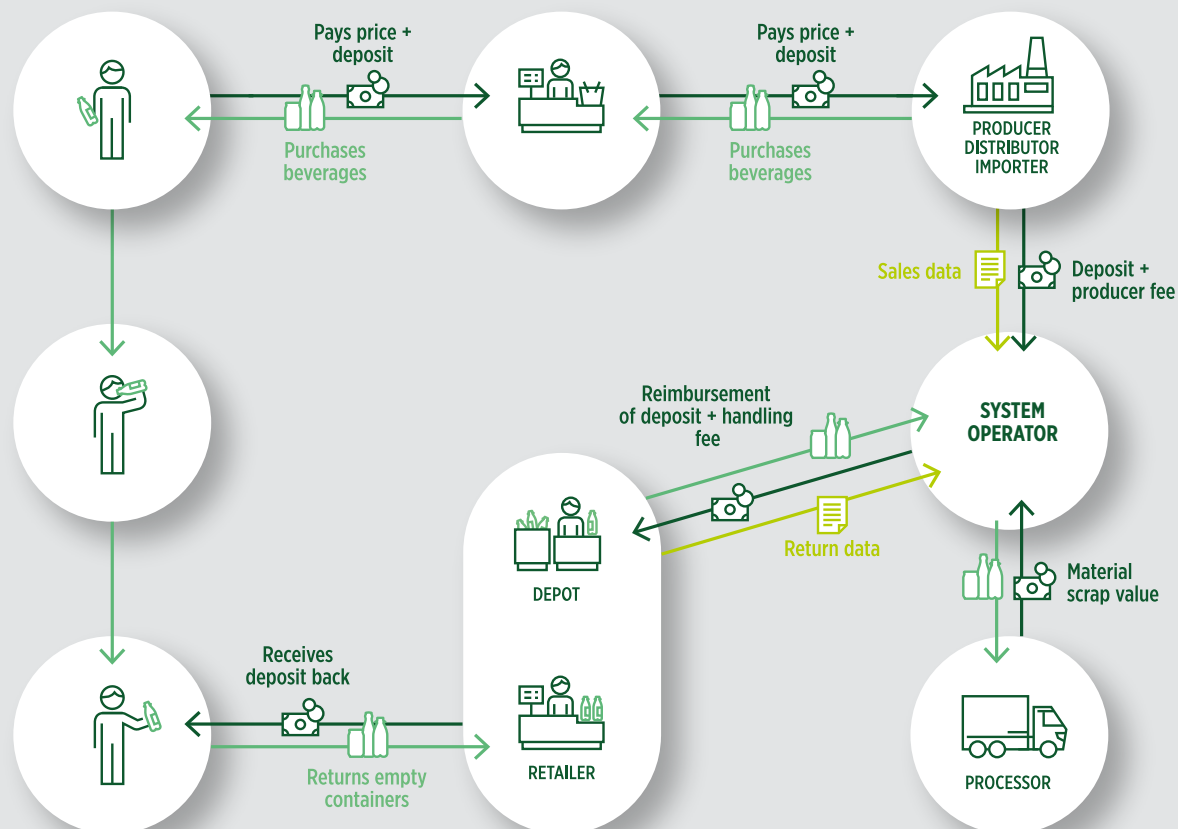
Money, material & data flow

Old system (prior to 1 November 2023)



Money, material & data flow

New system (1 November 2023 and thereafter)



¹ Recycling is deemed local if occurring in Québec, Ontario, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and Labrador, and in the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York and Pennsylvania.

² The inclusion of multi-layered containers was originally scheduled to take place on 1 November 2025, but was accelerated by six months to coincide with the introduction of all remaining plastic and glass containers.

³ Under the new regulations, refillable containers are also included in the deposit system. The new system operator is legally required to accept these containers within the collection network. Additionally, there are specific targets (for collection, recycling, and local recycling) established for refillable containers, distinct from those for single-use.

⁴ Quebec's new regulations, as outlined in Section 18, include a trigger mechanism for adjusting deposit amounts (similar to Oregon's legislation). If the collection ("recovery") rate for a type of redeemable container is more than 10% below the minimum target collection rate for two consecutive years, the deposit amount can be increased to enhance recovery performance.

⁵ Recyc-Québec will not be releasing the 2023 return rates due to it being a transition year.



Saskatchewan

Population: 1.2m

Population density: 2.1/km²

National (Canada) GDP per capita,
PPP (international \$): 61,582.3

System operator's website:

Sources

- 1) Government of Saskatchewan. "Beverage Container Program." <https://www.saskatchewan.ca/business/taxes-licensing-and-reporting/provincial-taxes-policies-and-bulletins/beverage-container-program>
- 2) Personal communication with Roxanne Peters and Kevin Acton of SARCAN Recycling, May 2024
- 3) SARC. "Annual Report 2023-2024." Available at: https://issuu.com/sarcsarcandocs/sarc_annual_report_2023_-_2024
- 4) SARCAN Recycling. "Beverage Containers." Available at: <https://sarcan.ca/how-to-sarcan/what-to-recycle/#beverage-containers>

Legislative framework

Name of legislation¹

The Environmental Management and Protection Regulations under The Environmental Management and Protection Act, 2010

Legislation enacted

1973

Appointment of system operator

May 1988

System started

June 1988

Key updates

- › 1990 – expansion to plastic bottles used for soft drinks, juice, and alcohol
- › 1992 – expansion to glass bottles used for soft drinks, juice, and alcohol, and steel/bi-metal ready-to-serve drinks containers; deposit increase
- › 1998 – expansion to aseptic and gable-top cartons
- › 2017 – expansion to milk and other drinkable dairy; deposit increase for certain containers
- › 2018 – increase to environmental handling charge

Regulatory authority

Ministry of Environment

Legislated targets

None

Scope

Material type

Plastic, metal (aluminium, bi-metal, tin), glass, gable top, aseptic

Beverage type

All sealed, ready-to-serve alcohol and non-alcohol drinks including water, soft drinks, tea, juice, milk and drinkable dairy products, beer, wine, and spirits

Size

All

Excluded

Foil pouches, bag-in-box containers, industrial milk bladders (>5L), meal replacements, products labelled as fortified liquid diet, baby juices and formula, concentrates

Is there a DRS for refillables?

Yes (5% refillable market share across Canada in 2024; provincial share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

› Variable rate:

- › Plastic, metal, gable top/aseptic < 1L (0.26 gal): CAD\$0.10 (USD\$0.07)
- › Plastic, metal, gable top/aseptic ≥ 1L (0.26 gal): CAD\$0.25 (USD\$0.19)
- › Glass ≤ 300ml (0.08 gal): CAD\$0.10 (USD\$0.07)
- › Glass 301-999ml (0.08-0.26 gal): CAD\$0.20 (USD\$0.15)
- › Glass ≥ 1L (0.26 gal): CAD\$0.40 (USD\$0.30)

Environmental Handling Charge (2024)²

› Variable rate:

- › Metal: CAD\$0.07 (USD\$0.05)
- › Plastic: CAD\$0.08 (USD\$0.06)
- › Aseptic/gable top: CAD\$0.05 (USD\$0.04)
- › Glass: CAD\$0.09 (USD\$0.07)

Handling fee

None



System structure & administration

Clearing system

Centralised

System operator

SARCAN Recycling (the recycling division of SARC [Saskatchewan Association of Rehabilitation Centre], a province-wide association providing services to community-based organisations that serve people with disabilities)

System finance

Material revenues, unredeemed deposits, provincial grants, Environmental Handling Charges

Unredeemed deposits

Provincial government (general revenue fund)

Material owner

System operator

Container return & refund points

Collection model

Return-to-Depot: Containers can be returned to depots, which are owned and operated by SARCAN Recycling. SARCAN also operates a bin programme for the HORECA or Industrial, Commercial, and Institutional (IC&I) sector, in which businesses, clubs, event centres, leisure centres, etc. can order recycling bins free of charge to encourage recycling. As of July 2024, 364 bins were ordered by over 80 workplaces and public spaces across the province.

Number of collection points

73

Barcode-based system?

No

Population per collection point

-16,864

Container deposit markings

None

Method of return

Manual (14% of all containers returned are returned via SARCAN's Drop & Go service)

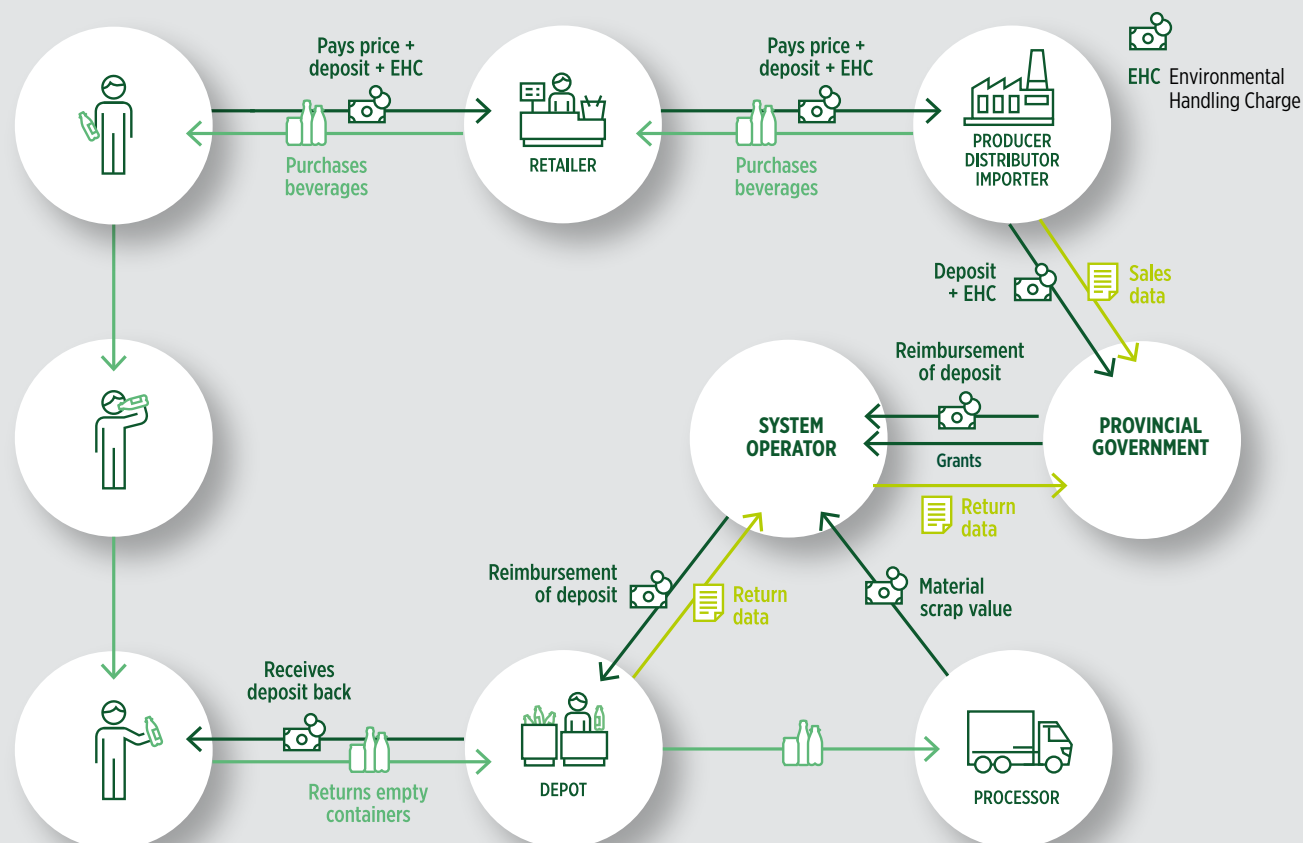
Refund payment options

Cash, electronic funds transfer (Interac e-transfer, PayPal), cheque, donation to charity

Return rate (2023-24)³

Glass	Aluminium	Plastic	Aseptic/Polycoat	Total
94%	91%	80%	56%	84%

Money, material & data flow⁴



¹ Saskatchewan's DRS was originally legislated under the Litter Control Act (1973) (and later, the Designated Container Regulations [1990]). When it was first passed, the Litter Control Act required refillable bottles for beer and soft drinks. In 1988, it was amended to allow the use of single-use aluminium cans and PET bottles. At the same time, in anticipation of the need for a DRS to deal with the increased waste from single-use containers, the Act was also amended to provide for a refundable deposit and handling fee.

² Unlike the deposit, the Environmental Handling Charge is a non-refundable fee.

³ Data on beer container return rates is not included as these were not available.

⁴ The processing operation is owned and operated by SARCAN Recycling.



Yukon

Population: **0.05m**

Population density: **0.1/km²**

National (Canada) GDP per capita,
PPP (international \$): **61,582.3**

System operator's website:

Sources

- 1) Personal communication with Michelle Falloon, Environmental Protection Analyst, Yukon Government, 28 March 2024 and 31 May 2024
- 2) Yukon Government. 2021. "Part 1: Current programs and infrastructure. Extended Producer Responsibility in the Yukon: exploration and implementation considerations." Available at: <https://yukon.ca/sites/yukon.ca/files/env/env-epr-yukon-part-1.pdf>
- 3) Yukon Government. July 2024. "Recycling in the Yukon 2023." Available at: <https://yukon.ca/sites/yukon.ca/files/env/env-recycling-yukon-2023.pdf>

Legislative framework

Name of legislation

Recycling Fund Regulation and Beverage Container Regulation, made under the Environment Act

Legislation enacted

October 1992

Appointment of system operator

Not applicable

System started

October 1992

Key updates

- › 1996 – expansion to glass and plastic bottles
- › 1998 – expansion to tin and aseptic containers
- › 2017 – expansion to milk and milk substitutes

Regulatory authority

Environment Yukon

Legislated targets

None

Scope

Material type

Plastic, metal (aluminium, bi-metal), glass, gable top, aseptic

Beverage type

Sealed, ready-to-serve alcohol and non-alcohol beverages including wine, spirits, beer, milk (flavoured/unflavoured, and liquid milk products such as cream, buttermilk, eggnog), milk substitutes (e.g., rice, soy, almond or coconut milk), drinkable dairy products, juice, soft driks, coffee drinks and liquid coffee flavouring, fruit smoothie drinks

Size

≥30ml (0.01 gal)

Excluded

Canned coconut milk, canned condensed or evaporated milk, canned whipping cream, powdered drink crystals, juice concentrate, liquid meal replacement, infant formula

Is there a DRS for refillables?

Yes (5% refillable market share across Canada in 2024; provincial share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit/refund value¹

› Variable rate:

- › Milk and milk substitutes (any size): CAD\$0.10/\$0.05 (USD\$0.07/\$0.04)
- › Drinks other than milk <750ml (0.2 gal): CAD\$0.10/\$0.05 (USD\$0.07/\$0.04)
- › Drinks other than milk ≥750ml (0.2 gal): CAD\$0.35/\$0.25 (USD\$0.26/\$0.19)

Handling fee (2024)

› Variable rate:

- › Aluminium: CAD\$0.025 (USD\$0.019)
- › Beer/cider: CAD\$0.025 (USD\$0.019)
- › Milk <750ml (0.2 gal): CAD\$0.040 (USD\$0.030)
- › Milk ≥750ml (0.2 gal): CAD\$0.075 (USD\$0.056)
- › Plastic and glass <750ml (0.2 gal): CAD\$0.040 (USD\$0.030)
- › Plastic and glass ≥750ml (0.2 gal): CAD\$0.075 (USD\$0.056)

Processing fee (2024)

- › Aluminium: CAD\$0.027 (USD\$0.020)
- › Beer/cider: CAD\$0.012 (USD\$0.009)
- › Milk <750ml (0.2 gal): CAD\$0.024 (USD\$0.018)
- › Milk ≥750ml (0.2 gal): CAD\$0.048 (USD\$0.036)
- › Plastic and glass <750ml (0.2 gal): CAD\$0.025 (USD\$0.019)
- › Plastic and glass ≥750ml (0.2 gal): CAD\$0.048 (USD\$0.036) (paid to processing facilities)

System structure & administration

Clearing system

Centralised

System operator

Yukon Government Department of Community Services

System finance

Recycling Fund Fees¹, unredeemed deposits, territorial government grants

Unredeemed deposits

System operator (kept in the Recycling Fund, a dedicated government fund set up under regulation to be used solely to support recycling activities)

Material owner

Processors

Container return & refund points

Collection model

Return-to-Depot: Containers can be returned to privately operated depots. In addition to depots, a subscription-based service is available for the kerbside collection of recyclables, including beverage containers.

Number of collection points

14

Barcode-based system?

No

Population per collection point

~3,268

Container deposit markings

None

Method of return

Manual

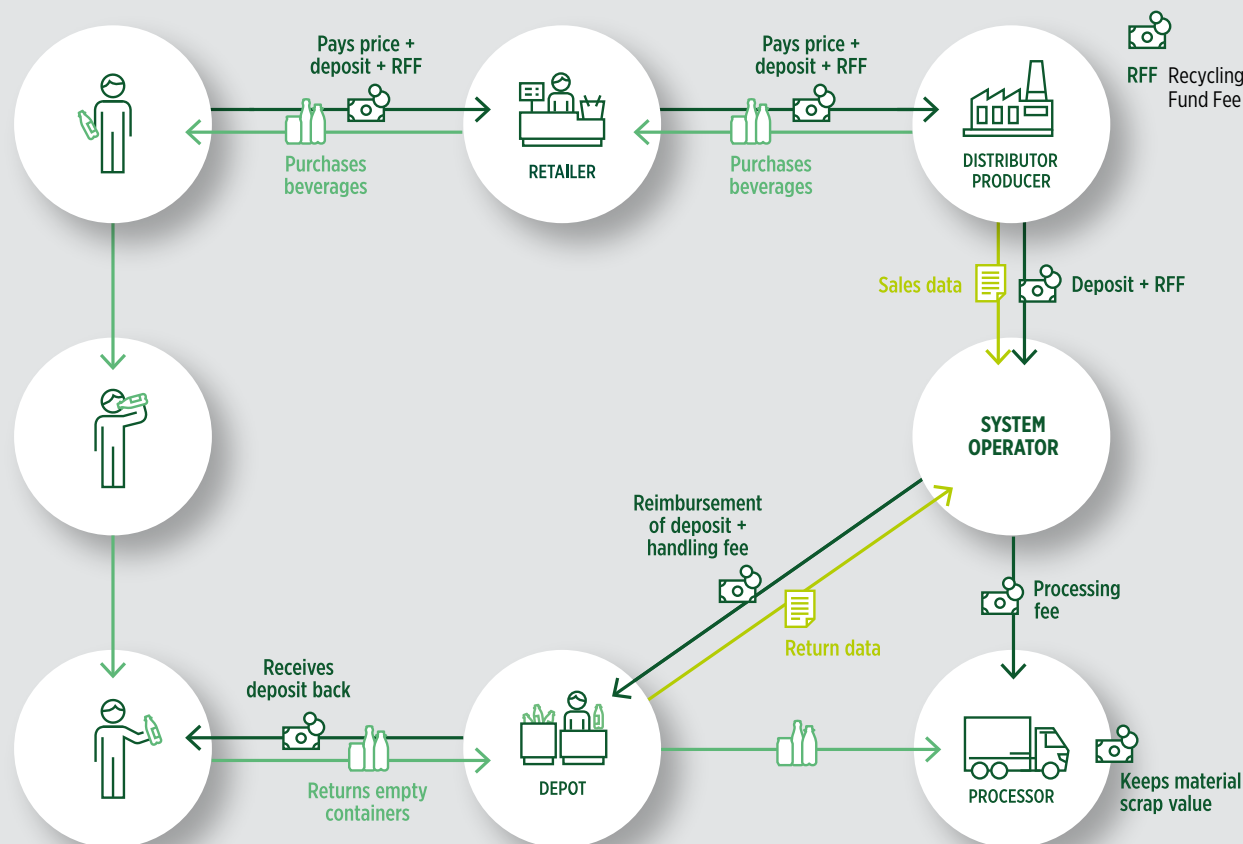
Refund payment options

Cash

Return rate (2023)²

Milk/milk substitutes	Containers <750ml	Containers ≥750ml	Total
63%	76%	90%	76%

Money, material & data flow



¹ The deposit includes both a refundable portion and a non-refundable surcharge, called a 'recycling fund fee' (RFF). The non-refundable RFF (CAD\$0.05 for milk and milk substitutes [any size] and for drinks other than milk <750ml; and CAD\$0.10 for drinks other than milk ≥750ml) is collected by retailers and goes into the 'Recycling Fund' (a fund administered by the government).

² The Yukon Government does not track beverage container return rates by material type, but rather by container size, and separately for milk containers.



Central America & the Caribbean

Region snapshot



Country	Population	Population Density (population/km ²)	Legislation Enacted	System Started
Barbados	0.3m	655.8	1986	1986
Belize	0.4m	17.9	2009	Unknown
Total*	0.7m			

*Note: Due to rounding, the sum of country populations may not exactly match the total population.

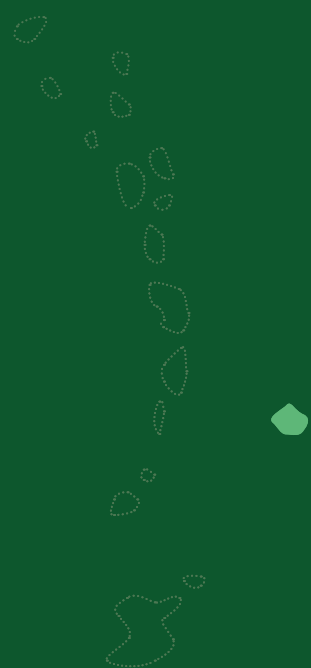


Barbados

Population: **281,995**

Population density: **655.8/km²**

GDP per capita, PPP (international \$): **19,357.2**



Sources

- 1) Circular Caribbean and GIZ, October 2022. "Policy Brief (Input Paper): Comparative Analysis of Returnable Containers Act." Available at: <https://www.sica.int/download/?134201>
- 2) "Examining the Barbados deposit refund system." 3 March 2020. Available at: https://trinidadexpress.com/business/local/examining-the-barbados-deposit-refund-system/article_20aacb4a-5db2-11ea-922d-dfcc19e052ba.html

Legislative framework

Name of legislation

Returnable Containers Act and Returnable Containers (Amendment) Act (2019)

Legislation enacted

June 1986

Appointment of system operator

Unknown

System started

1986

Key updates

- › 2019 – changes to deposit level (by material type and size), expansion to all material types

Regulatory authority

Ministry of the Environment and Drainage

Legislated targets

None

Scope

Material type

Plastic (PET, HDPE, LDPE), metal (aluminium, steel), glass, carton

Beverage type

Carbonated and non-carbonated soft drinks, mineral water, soda water, beer and malt drinks

Size

≤ 3.8L (1 gal)

Excluded

Milk, some types of water, wine and spirits

Is there a DRS for refillables?

Unknown (34% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

› Variable rate:

- › Glass: USD\$0.15 (€0.14)
- › PET: USD\$0.10 (€0.09)
- › HDPE, LDPE <1L: USD\$0.05 (€0.045)
- › HDPE, LDPE >1L: USD\$0.10 (€0.09)
- › Aluminium: USD\$0.05 (€0.045)
- › Other: USD\$0.05 (€0.045)

Handling fee (2024)

Collection point operators receive 20% of the redemption value on containers they take back



System structure & administration

Clearing system

Unknown

System operator

Unknown

System finance

Unknown

Unredeemed deposits

Retained by the private sector

Material owner

Unknown

Container return & refund points

Collection model

Hybrid: Retailers must accept any container of the same design, shape, size, colour, composition, and brand they sell.

Online take-back? Unknown

Number of collection points

Unknown number of retailers and ~8 redemption centres

Population per collection point

Unknown

Container deposit markings

None

Method of return

Manual

Refund payment options

Cash

Barcode-based system?

No

Return rate

Data not available

Money, material & data flow

Not available



Belize

Population: 410,820

Population density: 17.9/km²

GDP per capita, PPP (international \$): 14,195.3

Legislative framework

Name of legislation

Returnable Containers Act (Revised), 328:01

Legislation enacted

August 2009

Appointment of system operator

Unknown

System started

Unknown

Key updates

› 2011 – expanded to plastic containers

Regulatory authority

Ministry of Forestry, Fisheries, and Sustainable Development

Legislated targets

None

Scope

Material type

Plastic, metal (aluminium, steel), glass

Beverage type

Carbonates soft drinks, beer and other malt drinks

Size

≤ 3.79L (1 gal)

Excluded

Water, milk, juice, wine and spirits, any beverage not explicitly listed as included

Is there a DRS for refillables?

Unknown (35% refillable market share in 2024)

Deposits & fees

Deposit initiator

Distributor

Deposit value

› Variable rate:

› Plastic ≤500ml: BZ\$0.05 (€0.02, USD\$0.03)

› Plastic >500ml: BZ\$0.10 (€0.05, USD\$0.05)

› Glass, metal: BZ\$0.15 (€0.07, USD\$0.07)

Handling fee

Unknown

Producer fee

Unknown

Sources

- 1) Belize Department of the Environment. "Situation Analysis of the Returnable Containers Act and the Belize Recycling Sector (Summary Paper)." Available at: <https://doe.gov.bz/download/summary-of-situation-analysis-of-the-returnable-containers-act-and-the-belize-recycling-sector/>
- 2) Circular Caribbean and GLZ. October 2022. "Policy Brief (Input Paper): Comparative Analysis of Returnable Containers Act." Available at: <https://www.sica.int/download/?134201>
- 3) Petterd, A., Wander, A., and H. Cooney. 20 September 2019. "Belize-Waste Data report: Analysis of waste generation and disposal data collected in Belize." Available at: <https://doe.gov.bz/download/belize-waste-data-report-analysis-of-waste-generation-and-disposal-data-collected-in-belize/>



System structure & administration

Unknown

Container return & refund points

Collection model

Return-to-Retail: Retailers must take back any containers of the design, shape, size, colour, composition and brand they sell.

Number of collection points

There is only one company (Bowen & Bowen Pty Ltd.) accepting container returns

Population per collection point

Unknown

Method of return

Manual

Barcode-based system?

No

Container deposit markings

None

Refund payment options

Cash

Return rate

Data not available

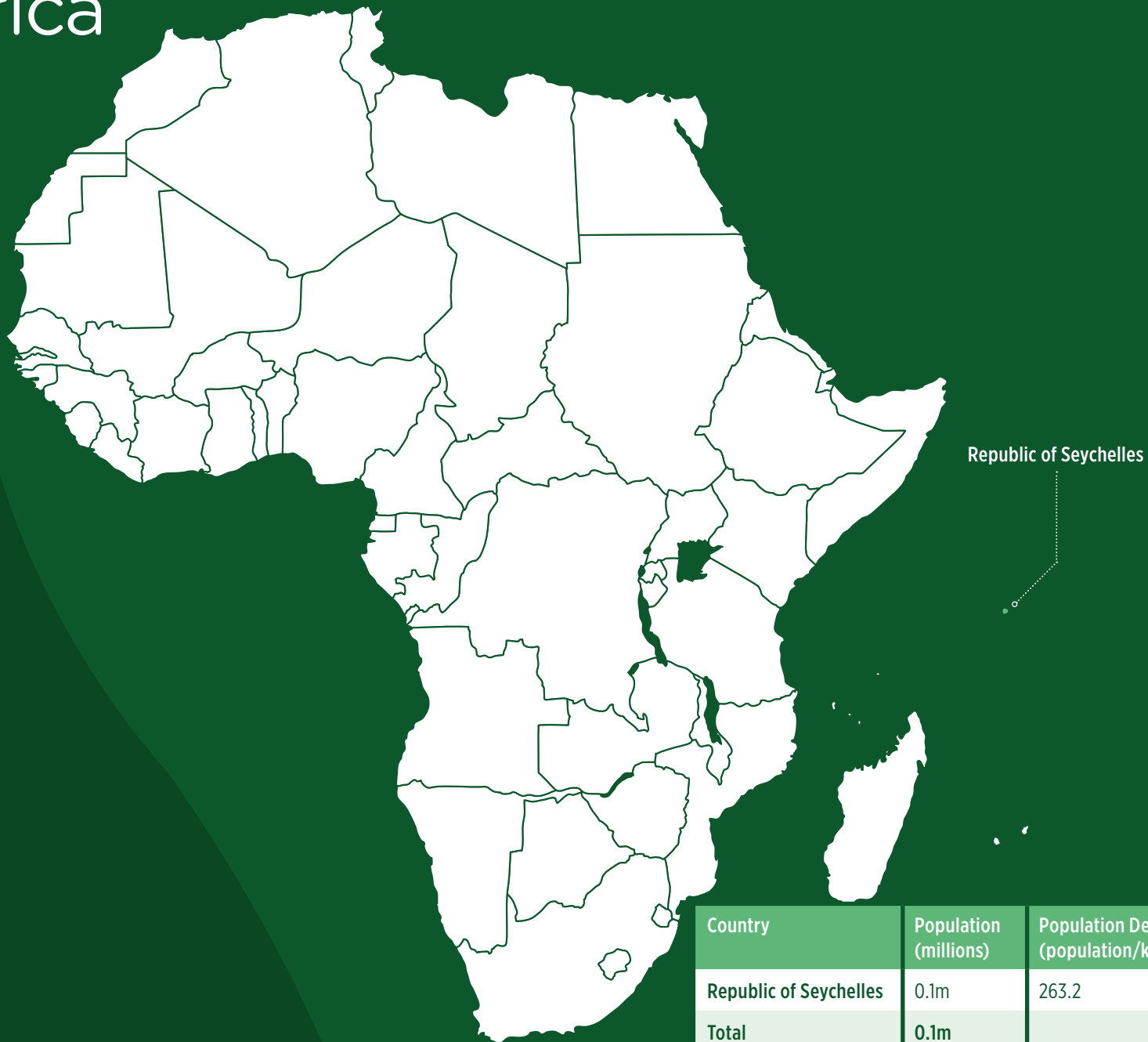
Money, material & data flow

Not available



Africa

Region snapshot



Country	Population (millions)	Population Density (population/km ²)	Legislation Enacted	System Started
Republic of Seychelles	0.1m	263.2	Unknown	2007
Total	0.1m			

Source for population: The World Bank. "Population, total." <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=BB>



Republic of Seychelles

Population: **0.1m**

Population density: **263.2/km²**

GDP per capita, PPP (international \$): **32,693.6**

System operator's website

Sources

- 1) Environment Protection (Environmental Levies on PET, Plastic and Glass Bottles and Cans) Regulations, 2020. Available at: <https://www.nationalassembly.sc/sites/default/files/2020-10/SI-81-2020-Environment-Levies-on-PET-Plastic-Glass-Bottles-Cans.pdf>
- 2) Environment Protection (Environmental Levies) (Amendment) Regulations, 2020. Available at: <https://seyliv.org/sc/legislation/si/2020/8/SI%208%202020%20-%20Environment%20Protection%20%28Environmental%20Levies%29%20%28Amendment%29.pdf>
- 3) Joubert-Lawen, R. 3 March 2022. "Recycling success: 8.5 million glass bottles collected in Seychelles since programme launch last year." Available at: <http://www.seychellesnewsagency.com/articles/16400/Recycling+success+.+million+gl+ass+bottles+collected+in+Seychelles+since+programme+launch+last+year>
- 4) Krutli, P., Nef, D., Zumwald, M., Haupt, M., Harlay, J. & M. Stauffacher. 2019. "Waste Management in the Seychelles – Pathways for Systemic Change." USYS TdLab Transdisciplinary Case Study 2018.
- 5) Lai, A., Hensley, J., Krutli, P., and M. Stauffacher. 2017. "Solid Waste Management in the Seychelles: USYS TdLab Transdisciplinary Case Study 2016." Available at: https://ethz.ch/content/dam/ethz/special-interest/usys/tdlab/docs/csproducts/cs_2016_report.pdf
- 6) Laurence, D. 15 January 2021. "Deposit on bottles of alcohol to go into effect in Seychelles on January 18." Available at: <http://www.seychellesnewsagency.com/articles/14154/Deposit+on+bottles+of+alcohol+to+go+into+effect+in+Seychelles+on+January+>
- 7) Malbrook, J., and B. Bonnelame. 26 October 2015. "Seychelles company exports millions of shredded PET bottles to reduce the islands' solid waste." Available at: <http://www.seychellesnewsagency.com/articles/3913/Seychelles+company+exp+orts+millions+of+shredded+PET+bottles+to+reduce+the+islands+solid+waste>
- 8) "New levy to be imposed on glass bottles from July 1." 21 May 2018. Available at: <https://www.nation.sc/archive/258947/new-levy-to-be-imposed-on-glass-bottles-from-july-1>
- 9) Rapold, N.S. June 2019. "A Pathway Towards the Implementation of an Electronic Waste Management System in Seychelles – Status Quo Analysis and Assessment of Future Strategies." Available at: <https://ethz.ch/content/dam/ethz/special-interest/usys/tdlab/docs/education/theses/msc-nina-rapold.pdf>

Legislative framework

Name of legislation

- › Trade Tax Act and the Environment Protection (Environmental Levies on PET, Plastic and Glass Bottles and Cans) Regulations (2020) made under the Environment Protection Act 2016
- › Waste Management Fund Notice, 2007
- › Agreement signed between the Seychelle's Ministry of Environment and Seychelles Breweries and the Seychelles Marketing Board (SMB)

Legislation enacted

2007

Appointment of system operator

Not applicable

System started

October 2007

Key updates

- › 2012 – expansion to aluminium cans
- › 2020 – expansion to glass alcohol bottles

Regulatory authority

Landscape and Waste Management Agency of the Ministry of Agriculture, Climate Change, and Environment

Legislated targets

None

Scope

Material type

Plastic (PET), metal (aluminium), glass

Beverage type

- › **Dependent on material type:**
- › Plastic and metal: All beverages
- › Glass: Imported beer, wine, and spirits

Size

All

Excluded

Baby products in glass bottles

Is there a DRS for refillables?

Unknown (87% refillable market share in 2024)

Deposits & fees

Deposit initiator

Government (customs)

Deposit/refund value

- › **Variable rate:**
- › Plastic: 0.7 SCR/0.5 SCR (€0.05/€0.03, USD\$0.05/\$0.04)
- › Metal: 1 SCR/0.5 SCR (€0.07/€0.03, USD\$0.08/\$0.04)
- › Glass: 2 SCR/1 SCR (€0.13/€0.07, USD\$0.15/\$0.08)

Handling fee (2024)¹

- › **Variable rate:**
- › Plastic: 0.15 SCR (€0.01, USD\$0.01)
- › Metal: 0.20 SCR (€0.01, USD\$0.02)
- › Glass: unknown

System structure & administration

Clearing system

Centralised

System operator

Government

System finance

Non-refundable portion of the deposit, unredeemed deposits

Unredeemed deposits

Waste Management Fund
(special fund of the Ministry of Finance)

Material owner

Recyclers

Container return & refund points

Collection model

Return-to-Redemption Centre

Number of collection points

5

Container deposit markings

None

Population per collection point

19,800

Refund payment options

Cash

Method of return

Manual

Barcode-based system?

No

Return rate (2023)

Data not available

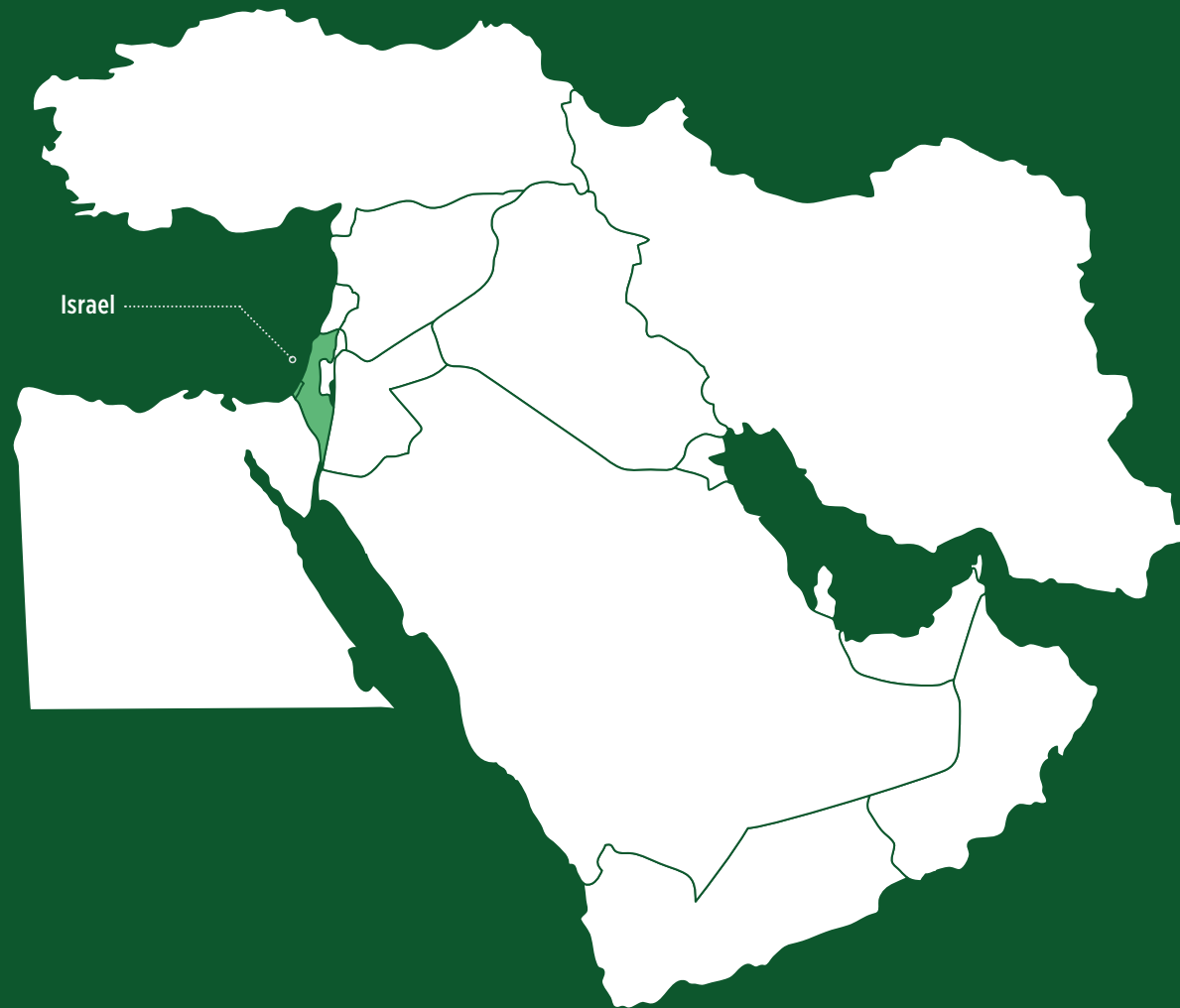
Money, material & data flow

Not available

¹ Handling fees cover operational costs and the refund that redemption centres pay to consumers. Redemption centres also get to keep the non-refundable portion of the deposit to cover operational costs



Middle East



Country	Population (million)	Population Density (population/km ²)	Legislation Enacted	System Started
Israel	9.9m	456.8	1999	2001
Total	9.9m			

Source for population: Jewish Virtual Library. 9 May 2024. "Vital Statistics: Latest Population Statistics for Israel." Available at: <https://www.jewishvirtuallibrary.org/latest-population-statistics-for-israel>



Israel

Population: **9.9m**

Population density: **456.8/km²**

GDP per capita, PPP (international \$): **53,434.0**

System operator's website:

Sources

- 1) Hennessey, Z. 6 December 2021. "Bottled up: Israel's Deposit Law will not also include big bottles." Available at: <https://www.jpost.com/israel-news/bottled-up-israels-deposit-law-will-now-also-include-big-bottles-687987>
- 2) Ministry of Environmental Protection. "Frequently asked questions on the Deposit Law expansion." Available at: https://www.gov.il/en/Departments/fqa/bottle_deposit_expansion_faq
- 3) Ministry of Environmental Protection. 1 December 2021. "Recycling Big! Starting today the Deposit Law has been extended to large bottles, the Ministry of Environmental Protection calls on the public to return the empty drink bottles to the businesses, and receive their deposit fee." Available at: https://www.gov.il/en/departments/news/deposite_2021
- 4) Personal communication with Carmit Bardugo, ASOFTA Recycling Corporation, 28 March 2024. https://www.sec.gov/Archives/edgar/data/1016837/000114420413024533/v342409_20f.htm
- 5) Surkes, S. 25 November 2021. "Supermarkets ill-prepared for expanded bottle deposit law." Available at: <https://www.timesofisrael.com/supermarkets-ill-prepared-for-expanded-bottle-deposit-law/>

Legislative framework

Name of legislation

Deposit on Beverage Containers Law, 5749-1999

Legislation enacted

1999

Appointment of system operator

Not applicable

System started

October 2001

Key updates

- › February 2010 – deposit increase
- › December 2021 – expansion to large drink containers

Regulatory authority

Ministry of Environmental Protection

Legislated targets¹

› Collection:

- › 2022 and 2023: 68% (biennial average), 65% (annual)
- › 2024 and 2025: 73% (biennial average), 71% (annual)
- › 2026 and 2027: 77% (biennial average), 73% (annual)

› Recycling: 90%

Scope

Material type

Plastic (PET), metal, glass

Beverage type

All drinks

Size²

>100ml (0.026 gal) to 5L (0.4 gal)

Excluded

Milk and dairy products

Is there a DRS for refillables?

No (9% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

- › **Flat rate:** 0.3 ILS (€0.07, USD\$0.08) (bottle makers are permitted to raise the deposit for large containers)

Handling fee

None



System structure & administration

Clearing system

Centralised

System operators³

Asofta Recycling Corporation (private company representing over 130 [30%] Israeli beverage importers and producers) and CYCLE (private company representing the Central Bottling Company [CBC], known as Coca-Cola Israel)

System finance

Material revenues, unredeemed deposits

Unredeemed deposits

System operators

Material owner

System operators

Container return & refund points

Collection model

Return-to-Retail: Supermarkets and grocery retailers >28m² (301 ft²) must take back containers (limited to 50/day) of the same type and brand they sell.

Online take-back? No

Number of collection points

Unknown

Barcode-based system?

No

Population per collection point

Unknown

Container deposit markings

Containers must be marked with text indicating the presence of a deposit

Method of return

Mostly manual (as of 2024, there are approximately 500 RVMs)

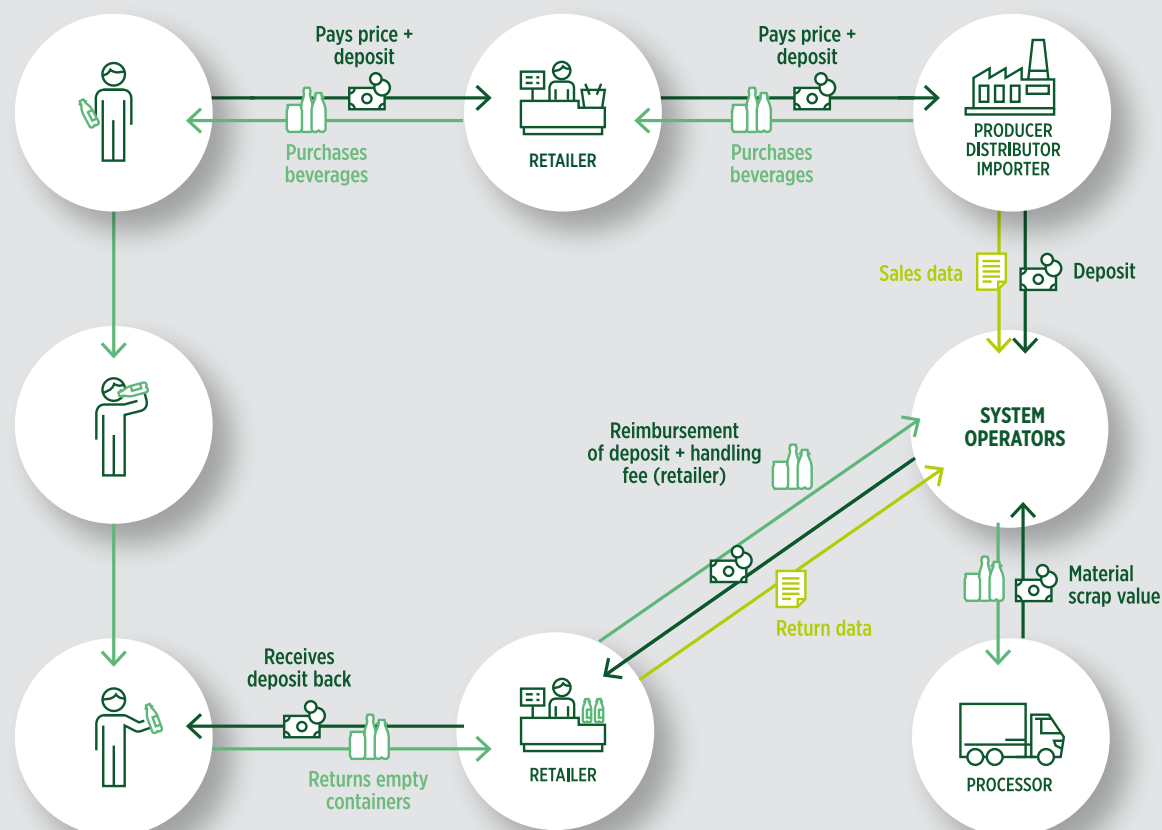
Refund payment options

Cash

Return rate (2023)

Plastic (PET)	Metal	Glass	Total
68%	68%	68%	68%

Money, material & data flow



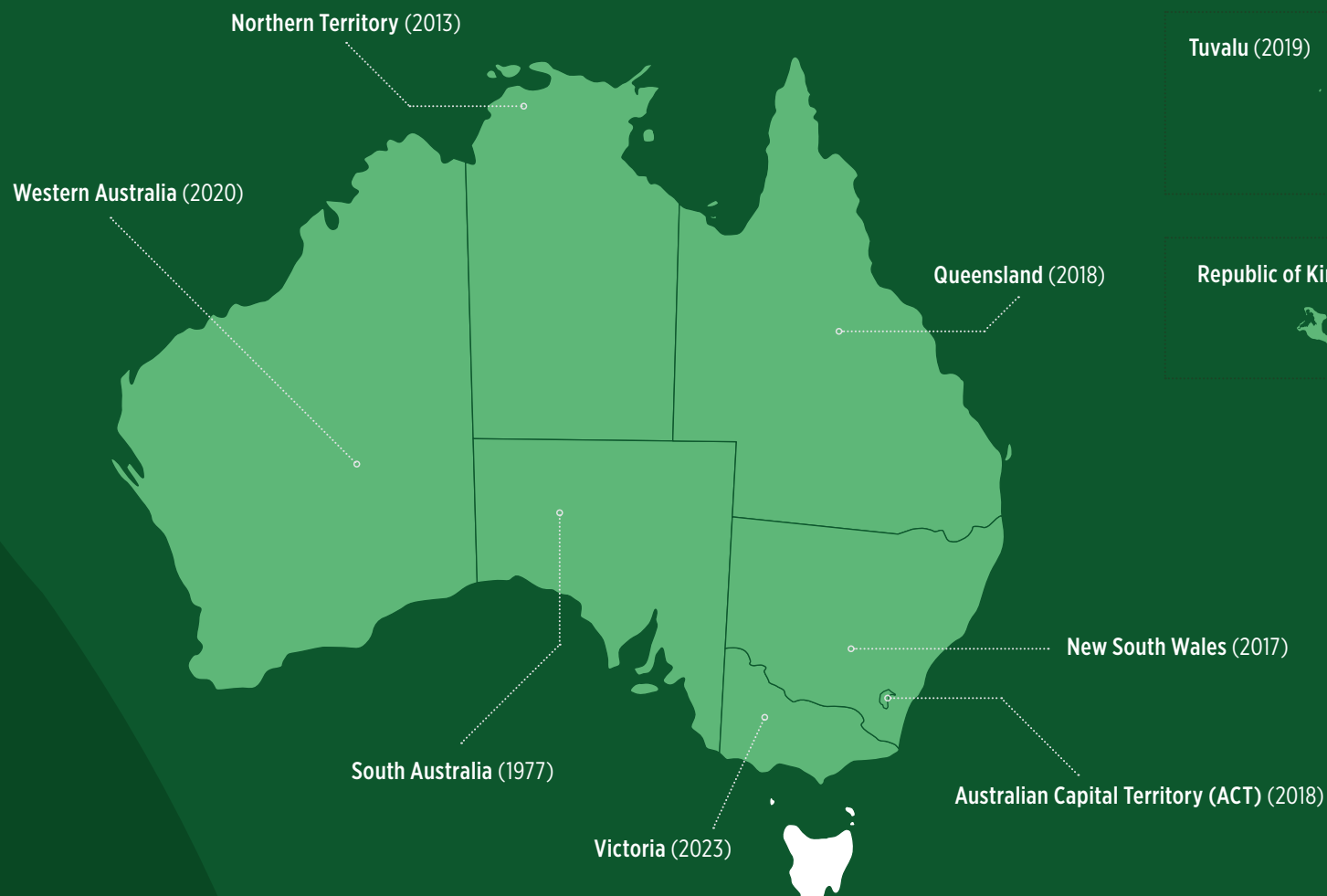
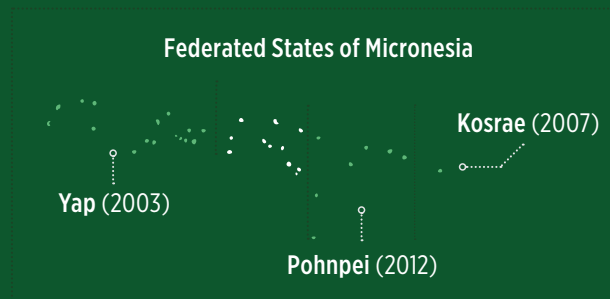
¹ Up until the end of 2021, the collection target was 77%.

² Initially, Israel's DRS legislation applied only to beverage containers between 100ml and 1.5L. However, the law was amended to include larger containers after manufacturers and importers failed to meet the mandated targets of collecting 55% of all large plastic bottles sold annually. In response to this shortfall, the Minister of Environmental Protection announced in October 2020 that a deposit would be applied to large beverage bottles (up to 5L), effective 1 December 2021.

³ Up until 31 December 2023, there were two system operators: ASOFTA and ELA Recycling Corporation. ELA Recycling Corporation ceased operations at the end of 2023, and CYCLE subsequently took its place as the second system operator.



Oceania



Oceania

Latest Return Rates in Deposit Return Systems for Single-use Drinks Containers in Oceania*



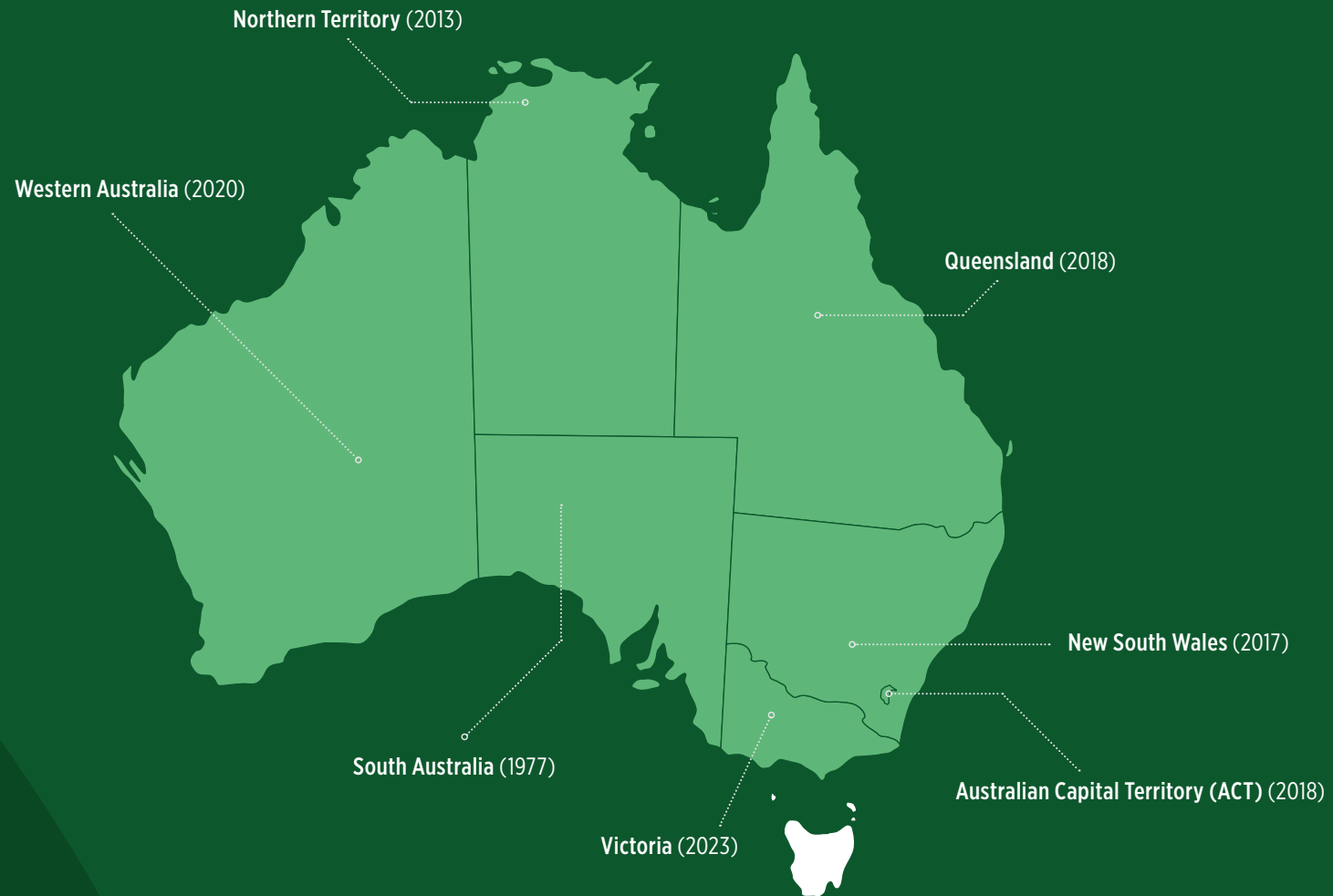
*While most Australian states distinguish between containers collected through MRFs/kerbside collections and those recovered through the DRS depot network, South Australia and the Northern Territory do not provide this breakdown. As a result, it is not possible to determine the number of containers recovered solely through the DRS network. For consistency and to ensure an apples-to-apples comparison with other jurisdictions, the return rates for these states are excluded from the above graph, which presents return rates that include only containers collected through the DRS network (retail or depot collection points).

Country, State, or Province	Population (millions)	Population Density (population/km ²)	Legislation Enacted	System Started
Australia				
Australian Capital Territory (ACT)	0.5m	199.4	2017	2018
New South Wales (NSW)	8.4m	10.5	2017	2017
Northern Territory	0.3m	0.2	2011	2012
Queensland	5.5m	3.2	2017	2018
South Australia	1.9m	1.9	1975	1977
Victoria	6.9m	30.4	2021	2023
Western Australia	2.9m	1.2	2019	2020
Federated States of Micronesia				
Kosrae	0.006m	61.3	2006	2007
Pohnpei	0.04m	110.4	2011	2012
Yap	0.011m	116.0	1995	2003
Republic of Kiribati	0.1m	164.6	2004	2005
Republic of Palau	0.02m	39.3	2006	2011
Republic of the Marshall Islands	0.04m	232.0	2016	2018
Tuvalu	0.01m	438.5	2019	2019
Total*	26.6m			

*Note: Due to rounding, the sum of individual populations may not match the total population.

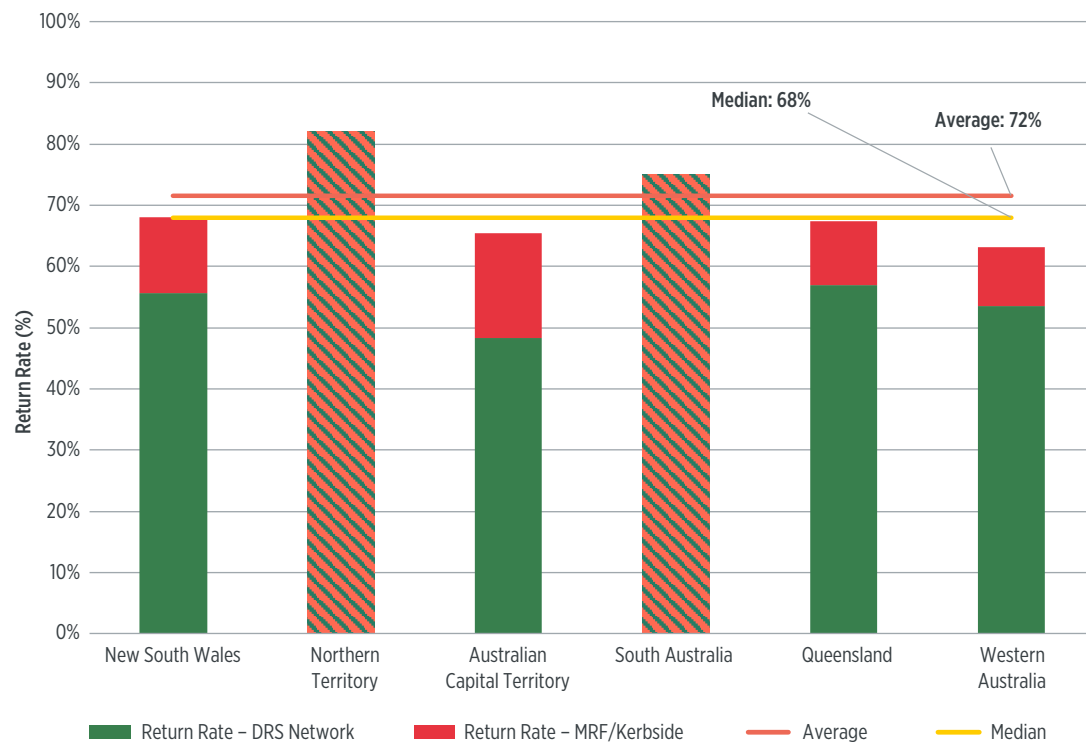


Australia



Australia

Latest Return Rates in Deposit Return Systems
for Single-Use Beverage Containers in Australia*



*Unlike most other deposit return systems in place worldwide, Australia's DRSs are designed to integrate with kerbside collection, and containers recovered through Material Recovery Facilities (MRFs) that meet scheme requirements are included in the reported return rates. This approach is not considered best practice, as deposit containers ending up in MRFs result in consumers forfeiting their deposit refunds. In this case, refunds are available to the MRF operator and municipality in a revenue sharing agreement. To reflect this unique structure, we present Australian return rates as a stacked bar chart. All states except South Australia and Northern Territory provide a breakdown of recovery via MRF/kerbside programmes versus the DRS network. For South Australia and Northern Territory, the rates are shown in two colours to represent the combined rate, including containers recovered via both MRFs and the DRS network.

	Population (millions)	Population Density (population/km ²)	Legislation Enacted	System Started
Australia				
Australian Capital Territory (ACT)	0.5m	199.4	2017	2018
New South Wales (NSW)	8.4m	10.5	2017	2017
Northern Territory	0.3m	0.2	2011	2012
Queensland	5.5m	3.2	2017	2018
South Australia	1.9m	1.9	1975	1977
Victoria	6.9m	30.4	2021	2023
Western Australia	2.9m	1.2	2019	2020
Total*	26.4m			

*Note: Due to rounding, the sum of individual state populations may not add up to the total.

Australian Capital Territory (ACT)

Population: **0.5m**

Population density: **199.4/km²**

National (Australia) GDP per capita, PPP (international \$): **69,114.7**

Scheme coordinator's website:

Network operator's website:

Sources

- 1) ACT Government. "ACT Container Deposit Scheme." Available at: <https://actcds.com.au>
- 2) ACT Government. "ACT Container Deposit Scheme expansion." Available at: <https://yoursayconversations.act.gov.au/act-container-deposit-scheme-expansion#:~:text=The%20proposal%20supports%20a%20national,to%20multiple%20states%20and%20territories.>
- 3) ACT Government. "ACT Container Deposit Scheme expansion." Available at: https://hdp-au-prod-app-act-yoursav-files.s3.ap-southeast-2.amazonaws.com/2617/0181/9858/Listening_report_ACT_Container_Deposit_Scheme_expansion.pdf
- 4) Deloitte. May 2024. "Final Report: Five-year review of the ACT Container Deposit Scheme." Available at: https://www.parliament.act.gov.au/_data/assets/pdf_file/0020/2528210/LIST_Five-Year-Review-of-the-ACT-Container-Deposit-Scheme.pdf
- 5) Exchange for Change. 2022-23 ACT Container Deposit Scheme Annual Statutory Report. Available at: <https://www.exchangeforchange.com.au/who-we-are/publications-and-reports.html>
- 6) Exchange for Change. "Suppliers – Pricing." Available at: <https://www.exchangeforchange.com.au/suppliers/pricing.html>

Legislative framework

Name of legislation

Waste Management and Resource Recovery Amendment Act and the Waste Management and Resource Recovery (Container Deposit Scheme) Amendment Regulation (No 1)

Legislation enacted

November 2017

Appointment of scheme coordinator / network operator

April 2018

System started

30 June 2018

Key updates

None

Regulatory authority

ACT NoWaste (ACT Government, Transport Canberra and City Services)

Legislated targets

None

Scope

Material type

Plastic (HDPE, PET), metal (aluminium, steel), glass, liquid paperboard

Beverage type

Sealed, ready-to-drink alcohol and non-alcohol drinks including flavoured milk, juice, water, soft drinks, and beer

Size

150ml to 3L (0.04 gal to 0.79 gal)

Excluded

Wine, spirits, cordial and plain milk (or milk substitute) containers, flavoured milk $\geq 1\text{L}$ (0.26 gal), pure fruit or vegetable juice $\geq 1\text{L}$ (0.26 gal), casks (bag-in-box) $\geq 1\text{L}$ (0.26 gal), cordials, concentrated fruit/vegetable juices, registered health tonics

Is there a DRS for refillables?

No (<1% refillable market share across Australia in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Refund value

› **Flat rate:** AUD\$0.10 (€0.06, USD\$0.07) (including GST)

Handling fee (2024)¹

AUD\$0.08-\$0.09 (€0.048-€0.05, USD\$0.05-\$0.06) (estimate [confidential]) (paid exclusively to depots)

Producer fee (February 2025-January 2026)²

- › Glass: AUD\$0.1314 (€0.082, USD\$0.085)
- › PET: AUD\$0.1307 (€0.82, USD\$0.085)
- › HDPE: AUD\$0.1110 (€0.069, USD\$0.072)
- › Aluminium: AUD\$0.1636 (€0.10, USD\$0.11)
- › Liquid paperboard: AUD\$0.0667 (€0.042, USD\$0.043)
- › Steel: AUD\$0.0336 (€0.021, USD\$0.022)
- › Other plastics: AUD\$0.0175 (€0.011, USD\$0.011)
- › Other materials: AUD\$0.0186 (€0.012< USD\$0.012)

*Excluding GST

Processing refund (2024)³

AUD\$0.10 (€0.06, USD\$0.07) (including GST) (Paid to MRF operators for each deposit container collected via kerbside recycling. MRFs must negotiate a refund sharing agreement with the local council supplying the kerbside material, which requires council approval. The system coordinator is not required to pay refunds to MRF operators unless such an arrangement is in place.)



System structure & administration

Clearing system

Centralised

Scheme coordinator⁴

Exchange for Change (joint venture established by five of Australia's largest beverage companies [Asahi, Carlton & United Breweries, Coca-Cola Amatil, Coopers Brewery, and Lion])

Network operator⁴

Return-It (recycler owned by Re.Group, a private company founded in 2013)

System finance

Producer fees,
material revenues

Unredeemed deposits⁵

Not applicable

Material owner

Network operator

Container return & refund points

Collection model

Return-to-Depot: Containers can be returned to “drop & go” (bag drop) points (self-service), drop & go PODs (self-service and staffed), staffed depots with automatic counting systems, stand-alone RVMs (self-service), and donation stations (for donation to charity only). Additionally, the mobile collection service ‘ReCollect’ offers consumers the convenience of having containers picked up directly from their homes.

Number of collection points

22, including nine “drop & go” points, six “drop & go PODs”, four cash-back depots (staffed), two stand-alone RVMs, and one donation station

Population per collection point

~21,374

Method of return

Mostly manual, but automated counting systems are in place at all cash-back depots and there are two RVMs

Return rate (2023-24)

*Data is for fiscal year July 2023 to June 2024

Total containers collected (via DRS network + kerbside programmes)

Plastic (PET)	Plastic (HDPE)	Aluminium	Steel	Glass	Liquid paperboard	Total
63%	65%	73%	9%	68%	22%	65%

Breakdown by collection channel

Containers collected via DRS network

Plastic (PET)	Plastic (HDPE)	Aluminium	Steel	Glass	Liquid paperboard	Total
40%	40%	60%	9%	47%	22%	48%

Containers collected via kerbside programmes (MRF)

Plastic (PET)	Plastic (HDPE)	Aluminium	Steel	Glass	Liquid paperboard	Total
24%	25%	13%	0%	21%	0%	17%

Barcode-based system?

Partial – While containers must have barcodes on their labels, this is primarily for quality control during audits rather than for tracking or verification. Other tracking methods, such as manual counts, can also be used.

Container deposit markings

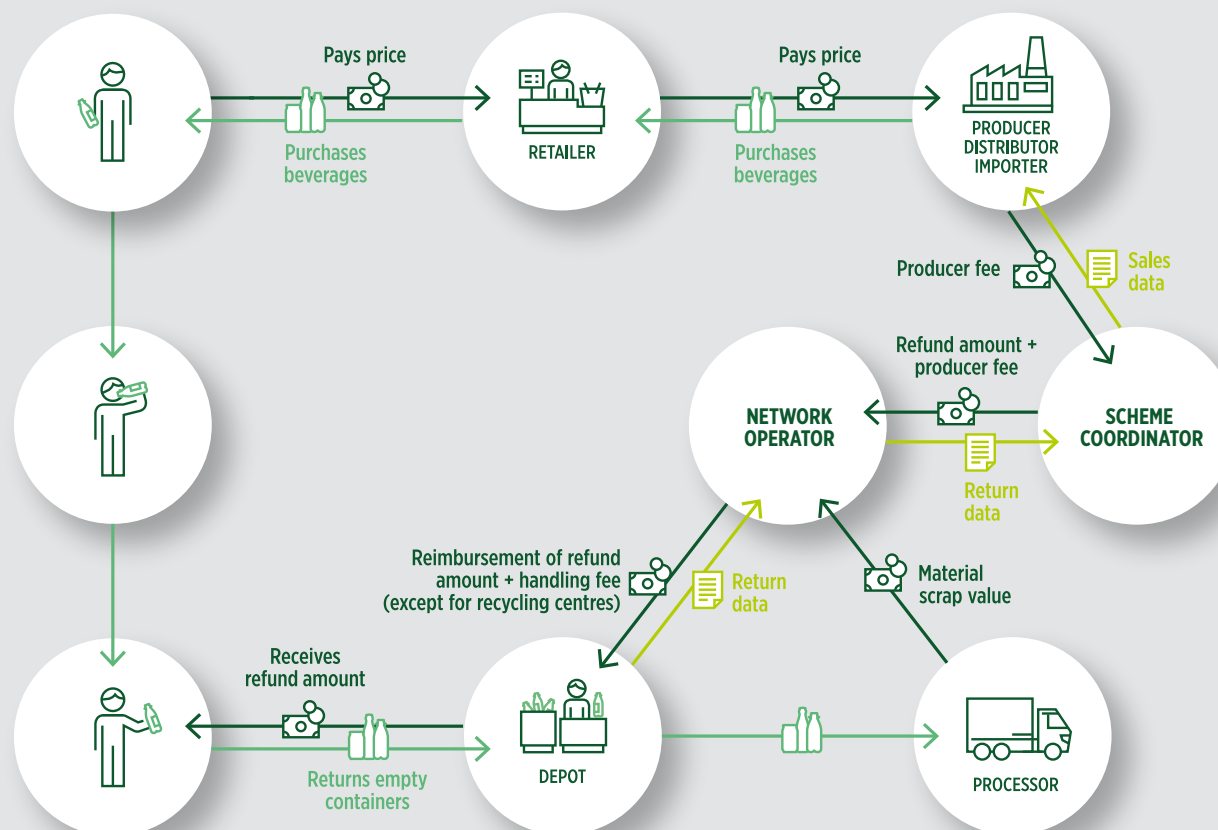
Containers must be marked or labelled with the words: ‘10¢ refund at collection depots/points in participating State/Territory of purchase’

Refund payment options

Cash, electronic funds transfer, donation to charity



Money, material & data flow



¹ The 'handling fee' covers the total cost of collection, transportation and processing of materials.

² Producer fees (called 'supplier contributions' in ACT) cover the core scheme costs which comprise: refunds (AUD\$0.10 [including GST] per container, network fees (fixed fee per container collected that is paid to the network operator), MRF refunds (AUD\$0.10 [including GST], paid to the MRF operator for each container collected through commercial and kerbside recycling), export rebates (to refund suppliers for drinks containers exported out of the ACT), scheme coordinator fee (a fixed fee for administration carried out by the scheme coordinator), scheme compliance fees (fixed fee paid to ACT No Waste to cover compliance costs). The fixed price by material is based on the forecast supply volumes into ACT and forecast scheme costs for that material type.

³ The ACT MRF operator, ReCycle, is entitled to claim a processing refund of AUD\$0.10/unit (including GST) for eligible containers collected through kerbside recycling bins that are sent for reuse and/or recycling. The claimed amount is based on the eligible container factor for facilities that report in weight, or by unit count where claims are already in this format. Eligible container factors provide a standardised count per tonne of material delivered for recycling, allowing the weights shipped by MRF operators to be converted into a count to determine the refund due. These factors, published quarterly by the EPA, are calculated by an independent third-party using sampling data collected from MRFs.

⁴ ACT's split-responsibility model involves both a scheme coordinator and network operator(s) jointly managing the deposit system. The scheme coordinator handles financial management, auditing, fraud identification, verification, community education and marketing services, supplier management, and ensures the scheme meets state-wide performance targets. Meanwhile, the network operator is responsible for establishing and managing return points, overseeing logistics, and selling collected materials to ensure containers are recycled.

⁵ The law does not mandate a specific 'deposit' be paid on beverage containers, but requires that refunds be provided to consumers who return containers at refund points. Consequently, there is no accumulation of unredeemed deposits. Instead, the scheme coordinator charges producers a 'producer fee,' which is calculated based on the number of containers returned and the revenues generated from selling the recycled materials.

⁶ The ACT Government announced that it would consult in 2023 on expanding the scheme to cover additional products such as water, fruit and vegetable juice, flavoured milk, wine, spirit and cordial bottles. The proposal supports an agreement made by the National Environment Ministers in April 2021 to expand and harmonise the scope of container deposit schemes across Australia by the end of 2025. For 12 weeks between 30 May 2023 and 22 August 2023, the Government asked for comment on the proposed expansion of the system. Ninety-one percent of those who responded to the consultation were in favour of expanding the scheme in any scope. The Government was expected to review the preferred expansion option in 2024, but no further information is currently available.



New South Wales (NSW)

Population: **8.4m**

Population density: **10.5/km²**

National (Australia) GDP per capita,
PPP (international \$): **69,114.7**

System operator's website:

Network operator's website:

Sources

- 1) Exchange for Change. "Return and Earn Annual Statutory Report 2021-22." Available at: <https://www.exchangeforchange.com.au/who-we-are/publications-and-reports.html>
- 2) Exchange for Change. "Suppliers – Pricing." Available at: <https://www.exchangeforchange.com.au/suppliers/pricing.html>
- 3) Exchange for Change. "Scheme Performance Dashboard." Available at: <https://www.exchangeforchange.com.au/#nsw-cds-performance-dashboard>
- 4) Exchange for Change. "Schemes – Scheme Reporting – NSW." Available at: <https://www.exchangeforchange.com.au/schemes/scheme-reporting.html>
- 5) Personal communication with Robert Kelman, Director, Reloop Asia-Pacific, March 2024

Legislative framework

Name of legislation

Waste Avoidance and Resource Recovery (Container Deposit Scheme) Regulation, under the Waste Avoidance and Resource Recovery (WARR) Act 2001

Legislation enacted

Amendments to the WARR Act 2001 were passed in October 2016 and the Waste Avoidance and Resource Recovery (Container Deposit Scheme) Regulation 2017 was published in March 2017

Appointment of system operator

July 2017

System started

1 December 2017

Key updates

None

Regulatory authority

NSW Environment Protection Authority

Legislated targets

None

Scope

Material type

Plastic (HDPE, PET), metal (aluminium, steel), glass, liquid paperboard

Beverage type

Sealed, ready-to-drink alcohol and non-alcohol drinks including flavoured milk, juice, water, soft drinks, and beer

Size

150ml to 3L (0.04-0.79 gal)

Excluded

Plain milk, cordials, concentrated fruit or vegetable juice (or a mixture of concentrated fruit and vegetable juices) intended to be diluted before consumption, registered health tonics, glass wine and spirits bottles, flavoured milk $\geq 1\text{L}$ (0.26 gal), $\geq 90\%$ fruit or vegetable juice (or a mixture of fruit and vegetable

juices), containers made of cardboard and plastic, containers made of foil or cardboard, plastic and foil (i.e., aseptic packs) designed to contain $\geq 1\text{L}$ (0.26 gal) of wine, wine-based beverage or water, containers made of plastic or foil (or both) (i.e. sachets) designed to contain $\geq 250\text{ml}$ (0.07 gal) of wine

Is there a DRS for refillables?

No (<1% refillable market share across Australia in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Refund value

› **Flat rate:** AUD\$0.10 (€0.06, USD\$0.07) (including GST)

Handling fee (2024)¹

AUD\$0.08-\$0.09 (€0.048-€0.054, USD\$0.05-\$0.06) (estimate, as this is confidential) (paid to depots only)

Producer fee (February 2025-January 2026)²

- › Glass: AUD\$0.1394 (€0.087, USD\$0.90)
- › PET: AUD\$0.1338 (€0.083, USD\$0.087)
- › HDPE: AUD\$0.0672 (€0.042, USD\$0.044)
- › Aluminium: AUD\$0.1403 (€0.088, USD\$0.091)
- › Liquid paperboard: AUD\$0.0525 (€0.033, USD\$0.034)
- › Steel: AUD\$0.0918 (€0.057, USD\$0.060)
- › Other plastics: AUD\$0.0120 (€0.0075, USD\$0.0078)
- › Other material: AUD\$0.0944 (€0.059, USD\$0.061)

*Excluding GST

Processing refund (2024)³

AUD\$0.10 (€0.06, USD\$0.07) (including GST) (paid to MRF operators for each deposit container collected through kerbside recycling; MRFs must negotiate refund sharing agreements with local councils supplying the kerbside material. This arrangement must be approved by the local council. The scheme coordinator is not obliged to pay refunds to a MRF operator unless such an arrangement is in place.)



System structure & administration

Clearing system

Centralised

Scheme coordinator⁴

Exchange for Change (joint venture established by five of Australia's largest beverage companies [Asahi, Carlton & United Breweries, Coca-Cola Amatil, Coopers Brewery, and Lion])

Network operator⁴

TOMRA Cleanaway (joint venture partnership of two companies [TOMRA and Cleanaway])

System finance

Producer fees,
material revenues

Unredeemed deposits⁵

Not applicable

Material owner

Network operator

Container return & refund points

Collection model

Hybrid: The network includes return points operated by small businesses as well as social enterprises and includes self-service RVMs, staffed automated depots, staffed over-the-counter locations, and reverse vending centres (indoor self-service locations with multiple machines). Containers can also be returned to self-service donation stations, which are machines that will only donate the refund to a charity (they do not issue a refund). These machines only accept plastics, cartons, and cans.

Online take-back? No

Number of collection points

650

Population per collection point

12,977

Return rate (2023-24)

*Data is for fiscal year July 2023 to June 2024

Total containers collected (via DRS network + kerbside programmes)

Plastic (PET)	Plastic (HDPE)	Other plastics	Aluminium	Steel	Glass	Liquid paperboard	Other material	Total
66%	53%	3%	70%	40%	79%	21%	79%	68%

Breakdown by collection channel

Containers collected via DRS network only

Plastic (PET)	Plastic (HDPE)	Other plastics	Aluminium	Steel	Glass	Liquid paperboard	Other material	Total
53%	30%	3%	60%	40%	61%	21%	79%	56%

Containers collected through kerbside programmes (MRF)

Plastic (PET)	Plastic (HDPE)	Other plastics	Aluminium	Steel	Glass	Liquid paperboard	Other material	Total
13%	23%	0%	11%	0%	18%	0%	0%	12%

Method of return

~80% automated / 20% manual

Barcode-based system?

Partial – While containers are required to have barcodes on their labels, this is primarily for quality control during audits rather than for tracking or verification. Other methods of container tracking, such as manual counts, can also be employed.

Container deposit markings

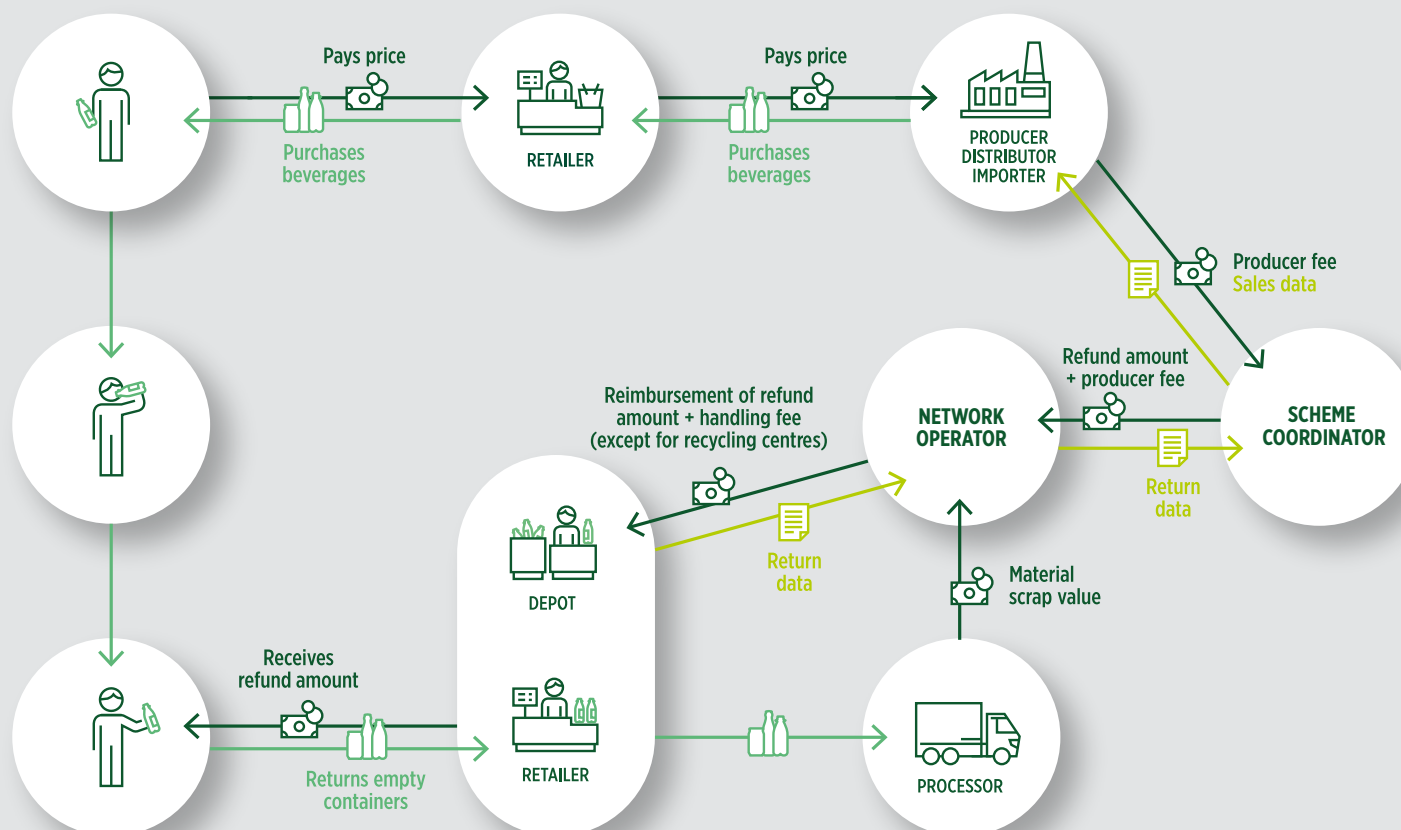
A marking or labelling for a container must contain the words: '10c refund at collection depots/points in participating State/Territory of purchase'

Refund payment options

Cash, store voucher, electronic funds transfer, donation to charity



Money, material & data flow



¹ The 'handling fee' covers the total cost of collection, transportation and processing of materials.

² Producer fees (called 'supplier contributions' in NSW) cover the core scheme costs which comprise: refunds (AUD\$0.10 [including GST] per container), network fees (fixed fee per container collected that is paid to the network operator), MRF refunds (AUD\$0.10 [including GST] paid to the MRF operator for each container collected through commercial and kerbside recycling), export rebates (to refund suppliers for drinks containers exported out of NSW), scheme coordinator fee (a fixed fee for administration carried out by the scheme coordinator), a fixed marketing fee, and scheme compliance fees.

³ Qualified MRF operators are entitled to claim a processing refund of AUD\$0.10/unit (including GST) for eligible containers collected through kerbside recycling bins that are sent for reuse and/or recycling. The claimed amount is based on the eligible container factor for facilities that report in weight, or by unit count where claims are already in this format. Eligible container factors provide a standardised count per tonne of material delivered for recycling, allowing the weights shipped by MRF operators to be converted into a count to determine the refund due. These factors, published quarterly by the EPA, are calculated by an independent third-party using sampling data collected from MRFs.

⁴ NSW's split-responsibility model involves both a scheme coordinator and network operator(s) jointly managing the deposit system. The scheme coordinator handles financial management, auditing, fraud identification, verification, community education and marketing services, supplier management, and ensures the scheme meets state-wide performance targets. Meanwhile, the network operator is responsible for establishing and managing return points, overseeing logistics, and selling collected materials to ensure containers are recycled.

⁵ The law does not mandate a specific 'deposit' be paid on beverage containers, but requires that refunds be provided to consumers who return containers at refund points. Consequently, there is no accumulation of unredeemed deposits. Instead, the scheme coordinator charges producers a 'producer fee,' which is calculated based on the number of containers returned and the revenues generated from selling the recycled materials.



Northern Territory

Population: **0.3m**

Population density: **0.2/km²**

National (Australia) GDP per capita,
PPP (international \$): **69,114.7**

System coordinators' websites:



Sources

- 1) Northern Territory Environment Protection Authority. "Environment Protection (Beverage Containers and Plastic Bags) Act 2011. Annual Report 2024." Available at: <https://territorystories.nt.gov.au/10070/971657>
- 2) Northern Territory Government. 9 March 2021. "Regulated containers – Fact sheet." Available at: https://ntepa.nt.gov.au/_data/assets/pdf_file/0005/285008/factsheet_regulated_containers.pdf
- 3) Northern Territory of Australia. "Container Deposit Scheme stage 1 targets instrument." Available at: https://ntepa.nt.gov.au/_data/assets/pdf_file/0004/1376149/container-deposit-scheme-stage-1-targets-instrument.pdf
- 4) Northern Territory Environment Protection Authority. 11 October 2021. "Container deposit scheme industry information." Available at: <https://ntepa.nt.gov.au/your-business/container-deposit-scheme-industry-information>
- 5) Northern Territory Government. "Improving the Container Deposit Scheme: Implementing Ministerial targets for recovery and recycling of permitted containers. A Policy Roadmap & Implementation Plan for CDS Participants and Territorians." Available at: https://depws.nt.gov.au/_data/assets/pdf_file/0006/1371309/improving-container-deposit-scheme-policy-roadmap-implementation-plan.pdf
- 6) Personal communication with Robert Kelman, Director, Reloop Asia-Pacific

Legislative framework

Name of legislation

Environment Protection (Beverage Containers and Plastic Bags) Regulations under the Environment Protection (Beverage Containers and Plastic Bags) Act

Legislation enacted

4 March 2011

Appointment of system operator

2012

System started

3 January 2012

Key updates

None

Regulatory authority

Northern Territory
Environment Protection
Authority

Legislated targets¹

None

Size

≤3L (≤0.79 gal) (dependent on content)

Excluded²

Concentrated fruit or vegetable juice or a mixture of concentrated fruit and vegetable juices intended to be diluted before consumption, health tonics, cordials, glass containers used for containing wine or spirits, containers used for milk (other than flavoured milk), containers used for containing ≥1L (0.26 gal) of flavoured milk, containers used for containing ≥1L (0.26 gal) of pure juice, containers >3L, containers made of cardboard and plastic, cardboard and foil or cardboard, plastic and foil (i.e. aseptic packs) used for containing ≥1L of wine, wine-based beverage or water, containers made of plastic or foil or plastic and foil (i.e. sachets) used for containing ≥250ml (0.07 gal) of wine

Is there a DRS for refillables?

No (<1% refillable market share across Australia in 2024; state share not available)

Scope

Material type

Plastic (HDPE, PET), aluminium, glass, liquid paperboard

Beverage type

- › Containers <1L (0.26 gal): flavoured milk, pure juice, water in aseptic packs/casks, some wine-based drinks
- › Containers ≤3L (0.79 gal): carbonated soft drinks, non-carbonated soft drinks (including but not limited to: fruit/juice based drinks containing <90% juice, sports drinks, vitamin drinks, energy drinks, ready-to-drink cordials), water that is not in an aseptic pack/cask, beer/ales/stouts/cider, spirit-based drinks, some wine-based drinks

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Refund value

› **Flat rate:** AUD\$0.10 (€0.06, USD\$0.07)

Handling fee (2024)³

AUD\$0.08-\$0.09 (€0.048-€0.054, USD\$0.05-\$0.06)
(estimate, as this is confidential)

Producer fee (2024)

Unknown

¹ The Minister for Environment has set targets to enhance the return, recovery, and recycling of beverage containers. These targets will be implemented in stages as outlined in a policy roadmap. The first stage involves aspirational (voluntary) targets for two years, starting 1 July 2024. Stage 1 targets aim for a 60% recycling rate for eligible HDPE containers, 70% for liquid paperboard (LPB) containers, 75% for PET containers, 90% for aluminium containers, and 95% for glass containers. In the second stage, from 2026 to 2028, the targets will be reviewed and potentially revised based on the outcomes of Stage 1. This may include the introduction of mandatory targets if the voluntary ones are not met without reasonable justification. Stage 2 targets will also be monitored and evaluated over a two-year period in accordance with the Northern Territory Government's Program Evaluation Framework. Public consultation will take place on the recommendations for Stage 2, and further stages will be implemented on a two-year cycle.



System structure & administration

Clearing system

Decentralised

Scheme coordinator

Drinks industry and private recyclers (four companies have been approved to operate as CDS coordinators: Envirobank Recycling [recycler], Marine Stores Pty [owned by drinks producers Coopers and Lion], Statewide Recycling [owned by drinks producer Coca-Cola Amatil], and NT Coordinators Pty [recycler])

System finance

Producer fees, material revenues

Unredeemed deposits⁴

Not applicable

Material owner

System operator

Container return & refund points

Collection model

Return-to-Depot: There is no legal obligation for retailers to take back containers or pay the refund amount. However, if a retailer elects to do so or wishes to operate a RVM, they must obtain a collection depot approval from the regulatory authority.

Number of collection points

18

Population per collection point

~14,091

Method of return

Mostly manual, although some collection points have RVMs

Barcode-based system?

No

Container deposit markings

Containers must include a mark or label that includes the following words: "10c refund at collection depots when sold in NT" or "10c refund at SA/NT collection depots in State/Territory of purchase" or "10c refund at collection depots/points in participating State/Territory of purchase"

Refund payment options

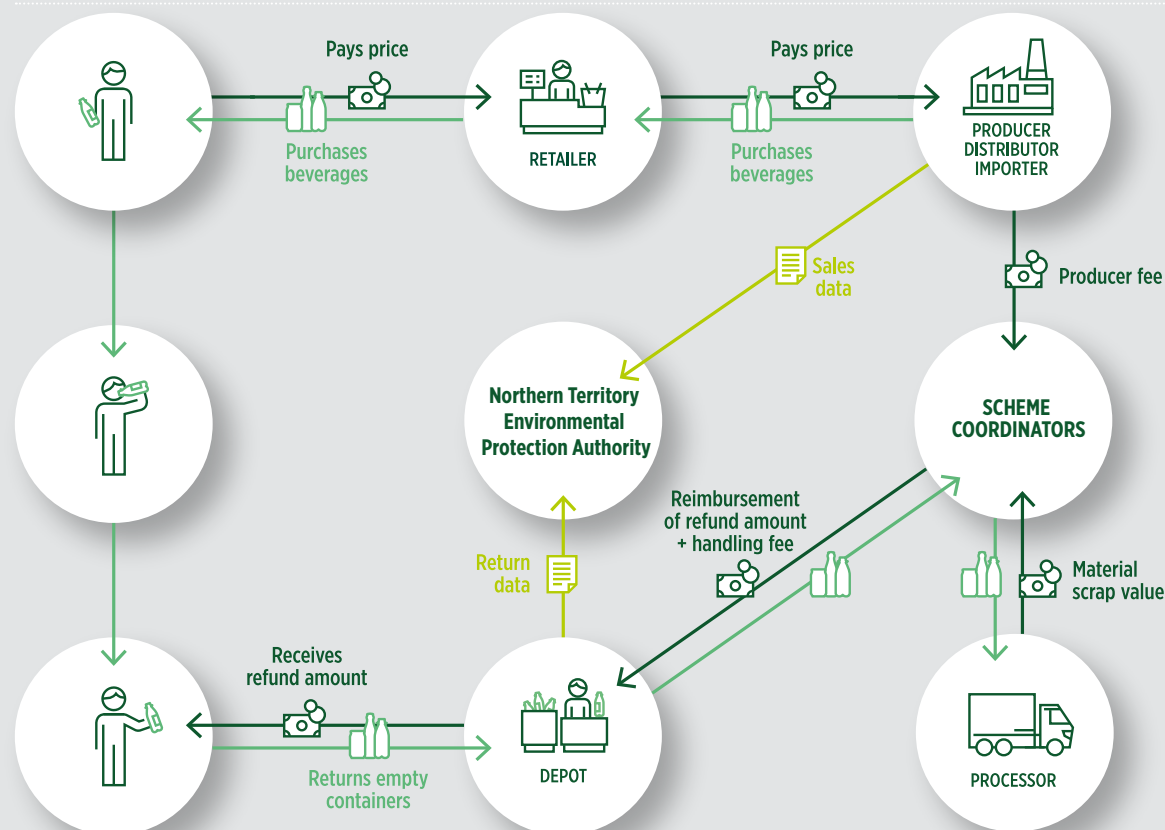
Cash

Return rate (2023-24)

Plastic (PET)	Plastic (HDPE)	Aluminium	Liquid paperboard	Glass	Steel	Total
61%	23%	95%	44%	108%	41%	82%

*These return rates include containers recovered via the DRS network as well as those recovered via kerbside programmes (MRF operations). A breakdown specifically detailing return rates for containers collected solely via the DRS network is unavailable.

Money, material & data flow



² In June 2024, the Department of Environment, Parks, and Water Security released the draft Environment Protection (Beverage Containers and Plastic Bags) Legislation Amendment Bill 2024 (the draft Bill) for public consultation. This draft Bill proposes amendments to the Environment Protection (Beverage Containers and Plastic Bags) Act 2011 and the Environment Protection (Beverage Containers and Plastic Bags) Regulations 2011. The amendments aim to expand the scheme to cover any container ≤3L of ready-to-drink beverages, including wine and spirit bottles, as well as plain milk. If enacted, the draft Bill will implement changes to improve the scheme based on recommendations from a 2018 review and community feedback on a discussion paper released in March 2023. Public consultation on the draft Bill took place from 6 June to 18 July 2024.

³ The 'handling fee' covers the total cost of collection, transportation and processing of materials.

⁴ The law does not mandate a specific 'deposit' be paid on beverages but requires that refunds be provided to consumers who return containers at refund points. Consequently, there is no accumulation of unredeemed deposits. Instead, the system operator invoices producers a 'producer fee'. This fee, which includes the refund value, is based on the number of containers that are returned and also depends on the revenues earned from the sale of material.



Queensland

Population: **5.5m**

Population density: **3.2/km²**

National (Australia) GDP per capita,
PPP (international \$): **61,582.3**

System coordinator's website

Legislative framework

Name of legislation

Waste Reduction and Recycling (Container Refund Scheme) Amendment Regulation, under the Waste Reduction and Recycling Act (2011)

Legislation enacted

September 2017

Appointment of system operator

October 2018

System started

1 November 2018

Key updates

› 1 November 2023 – expansion to include glass wine and spirits bottles

Regulatory authority

Queensland Government Department of Environment and Science

Legislated targets

› **Collection:** 85% by fiscal year 2021-22
› **Accessibility:** At least 307 return points must be operating in each fiscal year

Scope

Material type

Plastic (PET, HDPE, other), metal (aluminium, steel), glass, liquid paperboard

Beverage type

Sealed, ready-to-drink alcohol and non-alcohol drinks

Size

150ml to 3L (0.04 gal to 0.79 gal)

Excluded

Plain milk (including plant-based milk substitutes), containers

≥ 1L (0.26 gal) that contained flavoured milk/pure juice/cask wine/cask water, concentrated/undiluted cordial or syrup containers, sachets > 250ml (0.07 gal) that contained wine, registered health tonics

Is there a DRS for refillables?

No (<1% refillable market share across Australia in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Refund value

› **Flat rate:** AUD\$0.10 (€0.06, USD\$0.07)

Handling fee (2024)¹

› AUD\$0.08-\$0.09 (€0.048-€0.054, USD\$0.05-USD\$0.06) (estimate, as this is confidential)

Producer fee (August 2024-January 2025)²

› Aluminium: AUD\$0.128 (€0.077, USD\$0.085)
› Glass: AUD\$0.139 (€0.084, USD\$0.093)
› HDPE: AUD\$0.135 (€0.081, USD\$0.090)
› PET: AUD\$0.135 (€0.081, USD\$0.090)
› Liquid paperboard: AUD\$0.139 (€0.084, USD\$0.093)
› Steel: AUD\$0.139 (€0.084, USD\$0.093)
› Other: AUD\$0.139 (€0.084, USD\$0.093)
› Weighted average: AUD\$0.133 (€0.080, USD\$0.089)

*Excluding GST

Processing refund (2024)

AUD\$0.10 (€0.06, USD\$0.07) (Paid to MRF operators for each deposit container collected via kerbside recycling; MRFs must negotiate refund sharing agreements with local councils supplying the kerbside material. This arrangement must be approved by the local council. The system coordinator is not obliged to pay refunds to a MRF operator unless such an arrangement is in place.)

Sources

- 1) Container Exchange (COEX). "Beverage manufacturers." Available at: <https://containerexchange.com.au/partners/beverage-manufacturers/>
- 2) Container Exchange (COEX). "Annual Report 2023-2024." Available at: <https://containerexchange.com.au/annual-reports/>
- 3) Personal communication with Robert Kelman, Director, Reloop Asia-Pacific



System structure & administration

Clearing system

Centralised

Scheme coordinator

Container Exchange (COEX) (not-for-profit producer responsibility organisation appointed by government to act as both scheme coordinator and network operator; it is overseen by a Board of Directors comprising representatives from beverage companies [Coca-Cola Europacific Partners Australia, Lion Pty Ltd., small beverage manufacturers] and independent members from outside the beverage industry)

System finance

Producer fees, material revenues

Unredeemed deposits³

Not applicable

Material owner

System operator

Container return & refund points

Collection model

Return-to-Depot: Containers can be returned to four types of collection points, including:

- › **Pop-ups:** These provide a scheduled service where depot operators meet customers at a certain time every week, fortnight, or month.
- › **Depots:** These may be staffed or automated. Some depots offer a drive-through service or an in-house bag drop service.
- › **Bag drops:** These are available at various locations.
- › **Stand-alone RVMs**

Various community organisations also provide donation points where consumers can drop off containers and donate their refunds. These points are not included in the number of collection points below. There is also a free home collection service, 'Container Collect', available to households across 1,029 suburbs.

Number of collection points

354 (includes 152 depots, 108 bag drops, 27 RVM kiosks, and 67 mobile)

Population per collection point

~15,617

Method of return

Mostly manual

Barcode-based system?

Partial – While containers are required to have barcodes on their labels, this is primarily for quality control during audits rather than for tracking or verification. Other tracking methods, such as manual counts, can also be employed.

Container deposit markings

Containers must include a mark or label that identifies the refund amount and states that the refund amount may be claimed at a container refund point in a participating state

Refund payment options

Cash, store voucher, digital refund (electronic funds transfer or PayPal), donation to charity

¹ The handling fee paid to depots is around AUD\$0.06. The system coordinator then pays additional fees to logistics companies, which, when combined amounts to around AUD\$0.08-\$0.09.

² These fees, which represent the contribution that manufacturers make on each container sold into Queensland, cover the core scheme costs such as: refunds paid to consumers, fees paid to refund points to collect and sort eligible containers, transportation and processing fees, fees paid to MRFs to collect eligible containers through kerbside recycling, exports rebates (rebate for manufacturers whose containers have been exported from Queensland), and PRO fees (fees attributable to the overarching coordination and administration of the scheme).

³ The law does not mandate a specific 'deposit' be paid on beverages but requires that refunds be provided to consumers who return containers at refund points. Consequently, there is no accumulation of unredeemed deposits. Instead, the system operator invoices producers a 'producer fee'. This fee, which includes the refund value, is based on the number of containers that are returned and also depends on the revenues earned from the sale of material.



Return rate (2023-2024)

Plastic (PET)	Plastic (HDPE)	Aluminium	Steel	Glass	Liquid paperboard	Total
57%	79%	69%	34%	88%	26%	67%

Breakdown by collection channel

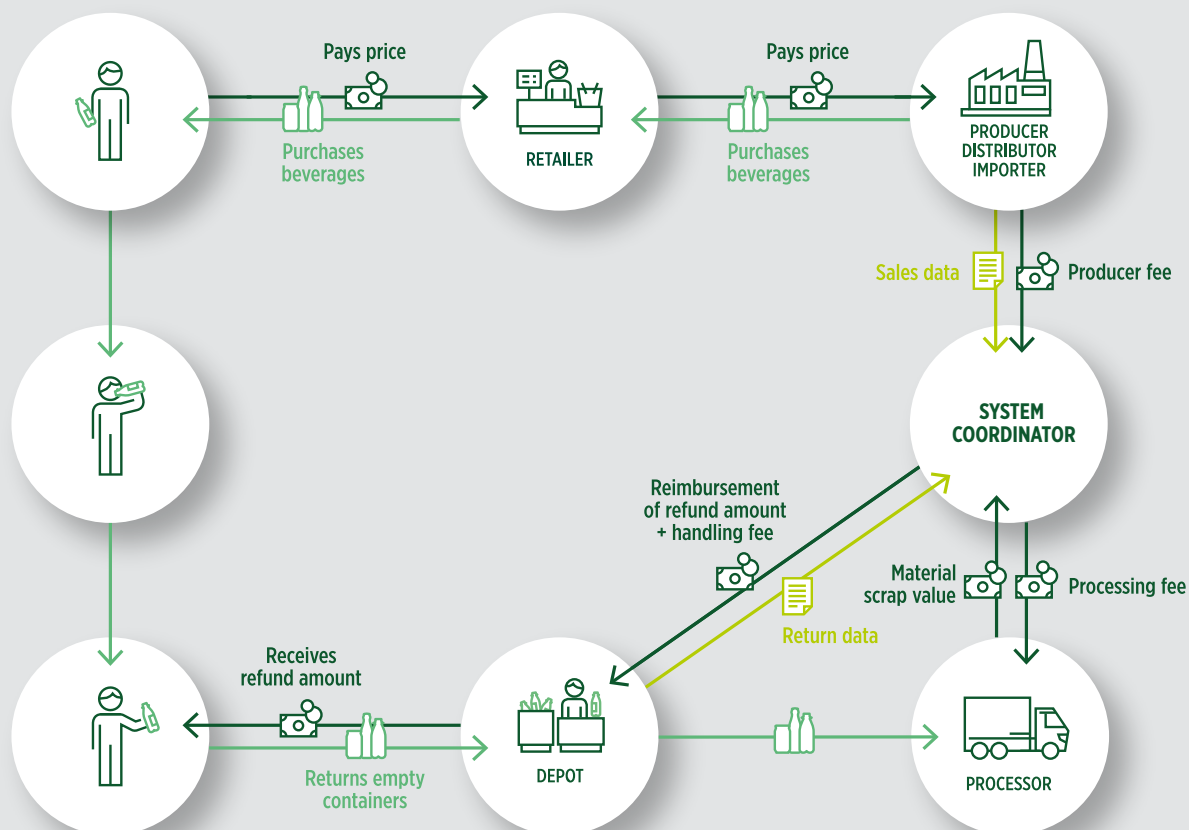
Containers collected via DRS network

Total
57%

Containers collected via kerbside programmes (MRF)

Total
10%

Money, material & data flow



South Australia

Population: **1.9m**

Population density: **1.9/km²**

National (Australia) GDP per capita,
PPP (international \$): **69,114.7**

Regulator's website:

Sources

- 1) Personal communication with Nick Stewart, Team Leader, CDS and Product Stewardship, South Australia Environment Protection Authority, 26 July 2024.
- 2) South Australia EPA. September 2021. "Improving South Australia's Recycling Makes Cents: A discussion paper to review SA's container deposit scheme." Available at: https://www.epa.sa.gov.au/files/15078_cds_discussion_paper_sep2021.pdf
- 3) South Australia EPA. "Environment Protection (Beverage Container Deposit Scheme) Amendment Bill 2024." Available at: <https://yoursay.sa.gov.au/container-deposit-scheme-amendment-bill>
- 4) South Australia EPA. "Container deposits." Available at: https://www.epa.sa.gov.au/environmental_info/waste_recycling/container_deposit
- 5) South Australia EPA. "FAQs." Available at: https://www.epa.sa.gov.au/environmental_info/waste_recycling/container_deposit/faqs
- 6) South Australia EPA. November 2023. "Container deposit: Guidelines – Beverage container approval." Available at: https://www.epa.sa.gov.au/files/4771402_cdlguide01.pdf

Legislative framework

Name of legislation

Part 8, Division 2 ('Beverage Containers') of the Environment Protection Act, and Part 4 of the Environment Protection Regulations

Legislation enacted¹

1975 (Deposit return legislation enacted in 1975 as the Beverage Container Act; integrated with the Environment Protection Act in 1993)

Appointment of system coordinator

Unknown

System started

January 1977

Key updates

- › 2003 – expansion to include flavoured milk and fruit/vegetable juice (<1L)
- › September 2008 – increase to refund value

Regulatory authority

South Australia Environment Protection Authority

Legislated targets

None

Scope

Material type

Plastic (HDPE, PET), aluminium, glass, liquid paperboard

Beverage type

- › Containers <250ml (0.07 gal): Grape wine in aluminium cans or plastic bottles

- › Containers <1L (0.26 gal): Pure fruit/vegetable juice (containing ≥ 90% fruit juice and/or vegetable juice), flavoured milk

- › Containers ≤3L (0.79 gal): Carbonated and non-carbonated soft drinks, fruit drinks, water, cider and non-grape wines, spirits in non-glass containers, beer (<3L)

Size

≤3L (0.79 gal) (dependent on content; see above)

Excluded

Plain milk in any container; wine in glass bottles, plastic containers, and sachets (≥250ml), or aseptic packs/casks (≥1L); spirits in glass bottles; pure fruit/vegetable juice (≥90% juice content) in containers ≥1L; flavoured milk in containers ≥1L; concentrated fruit and/or vegetable juice; health tonics; cordial syrup

Is there a DRS for refillables?

No (<1% refillable market share across Australia in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Refund value

- › **Flat rate:** AUD\$0.10 (€0.06, USD\$0.07)

Handling fee (2024)

Unknown

Producer fee (2024)

Unknown



System structure & administration

Clearing system

Decentralised

Scheme coordinator

Drinks industry (four approved “super collectors” serve as agents for the drinks industry, with three actively participating in the system; of these, only two—State-wide [owned by Coca Cola Amatil] and Marine Stores [owned by Coopers and Lion]—operate facilities for handling and processing returned containers)

System finance

Producer fees, material revenues

Unredeemed deposits²

Not applicable

Material owner

Operational super collectors

Container return & refund points

Collection model

Return-to-Depot

Number of collection points

129

Population per collection point

14,468

Method of return

Manual

Barcode-based system?

No

Container deposit markings

Containers must include a mark or label that includes the following words: “10¢ refund at collection depots when sold in SA” or “10¢ refund at SA/NT collection depots in State/ Territory of purchase” or “10¢ refund at collection depots/ points in participating State/ Territory of purchase”

Refund payment options

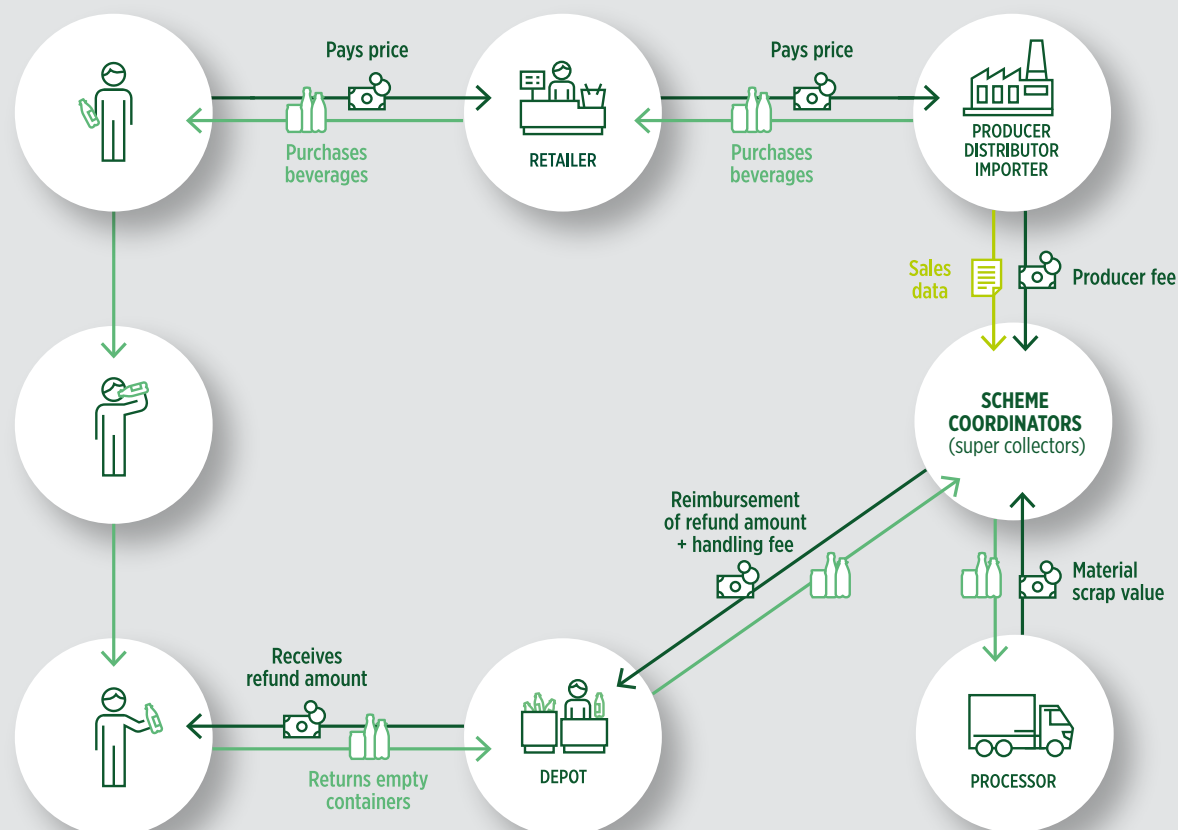
Cash, electronic funds transfer

Return rate (2023-24)

Plastic (PET)	Plastic (HDPE)	Aluminium	Liquid paperboard	Glass	Total
66%	55%	80%	49%	84%	75%

*These rates include containers recovered via the DRS network as well as those recovered via kerbside programmes (MRF operations). A breakdown specifically detailing return rates for containers collected solely via the DRS network is not available.

Money, material & data flow



¹ In September 2024, an 8-week public consultation period was launched to gather feedback on the draft Environment Protection (Beverage Container Deposit Scheme) Amendment Bill 2024. The consultation closed on 25 October 2024. The proposed reforms in the draft bill focus on modernising the scheme by appointing a not-for-profit scheme co-ordinator responsible for administering the scheme, managing contracts, setting costs, and meeting performance targets. Additional reforms include recognising eligible material recovery facilities within the scheme. Following the consultation period, the government will consider feedback to help refine the draft legislation before introducing it to Parliament for further consideration.

² The law does not mandate a specific 'deposit' be paid on beverages but requires that refunds be provided to consumers who return containers at refund points. Consequently, there is no accumulation of unredeemed deposits. Instead, the system coordinator invoices producers a 'producer fee'. This fee, which includes the refund value, is based on the number of containers that are returned and also depends on the revenues earned from the sale of material.



Victoria

Population: 6.9m

Population density: 30.4/km²

National (Australia) GDP per capita,
PPP (international \$): 69,114.7

Scheme operators' websites:

Network (zone) operators' websites:

<https://www.returnit.com.au/vic/>

<https://mytomra.com.au/locations/vic-container-deposit-scheme/>

<https://www.visy.com.au/about-cds>



Sources

- 1) Victoria State Government. "Consultation Summary – Container Deposit Scheme Draft Regulations and Regulatory Impact Statement." Available at: <https://content.vic.gov.au/sites/default/files/2022-10/Consultation-Summary-Container-Deposit-Scheme-0.pdf>
- 2) Victoria State Government. May 2022. "Container Deposit Scheme – Frequently Asked Questions." Available at: <https://engage.vic.gov.au/container-deposit-scheme>
- 3) Victoria State Government. May 2022. "Container Deposit Scheme (CDS) – Draft regulations and regulatory impact statement summary paper." Available at: <https://engage.vic.gov.au/container-deposit-scheme>
- 4) VicReturn. "First Suppliers: Scheme Pricing from 1 February 2025 - 31 July 2025." Available at: <https://vicreturn.com.au/first-suppliers/pricing-guide/>
- 5) <https://cdsvic.org.au/>
- 6) Victoria State Government. 1 November 2024. "Media Release: Victoria's CDS Hits One Billion Returns in First Year." Available at: <https://www.premier.vic.gov.au/sites/default/files/2024-11/241101-Victoria%E2%80%99s-CDS-Hits-One-Billion-Returns-In-First-Year.pdf>
- 7) Recycling Victoria. "Recycling Victoria Annual Report 2023-24." Available at: <https://www.vic.gov.au/sites/default/files/2024-10/Recycling-Victoria-Annual-Report-2023-24.pdf>

Legislative framework

Name of legislation

Circular Economy (Waste Reduction and Recycling) Act 2021 and the Circular Economy (Waste Reduction and Recycling) (Container Deposit Scheme) Regulations 2022

Legislation enacted

December 2021

Appointment of scheme coordinator and network operators

April 2023

System started

1 November 2023

Key updates

None

Regulatory authority

Recycling Victoria

Legislated targets

Accessibility: 600 collection points (from 1 August 2024, there must be at least one collection point per 14,500 people in metropolitan areas. For regional towns of 750 or more, or remote towns of 300 or more, collection points must be located as required within 5km of the town boundary)

Scope

Material type

Plastic (HDPE, PET), metal (aluminium, steel), glass, liquid paperboard

Beverage type

Sealed, ready-to-serve drinks including soft drinks, bottled waters, small flavoured milk drinks, beer and cider, sports drinks, and spirit-based mixed drinks

Size

150ml to 3L (0.04-0.79 gal)

Excluded

Plain milk (including plant-based substitutes), containers ≥1L of flavoured milk/pure fruit or vegetable juice/cask wine or cask water, glass wine and spirit bottles, bag-in-box containers for wine and water ≥1L, sachets (soft plastic or foil) for wine of ≥250L, concentrated or undiluted cordial or syrup containers, registered health tonics and probiotics

Is there a DRS for refillables?

No (<1% refillable market share across Australia in 2024; state share not available)



Deposits & fees

Deposit initiator

Producer/Importer

Refund value

› **Flat rate:** AUD\$0.10 (€0.06, USD\$0.07)

Handling fee (2024)

Unknown

Producer fee (1 February 2025 – 31 July 2025)¹

- › Aluminium: AUD\$0.1458 (€0.091, USD\$0.095)
- › Glass: AUD\$0.1493 (€0.093, USD\$0.097)
- › HDPE: AUD\$0.1468 (€0.092, USD\$0.095)
- › PET: AUD\$0.1468 (€0.092, USD\$0.095)
- › Liquid paperboard: AUD\$0.1503 (€0.094, USD\$0.098)
- › Steel: AUD\$0.1463 (€0.091, USD\$0.095)
- › Other plastics: AUD\$0.1463 (€0.091, USD\$0.095)
- › Other material: AUD\$0.1463 (€0.091, USD\$0.095)
- › Weighted average: AUD\$0.1470 (€0.092, USD\$0.095)

*Excluding GST

Processing refund²

AUD\$0.10 (€0.06, USD\$0.07) (including GST) (paid to MRF operators for each deposit container collected via kerbside recycling, provided they have a refund-sharing agreement in place with the local councils supplying the materials)

System structure & administration

Clearing system

Centralised

Scheme coordinator³

VicReturn (not-for-profit organisation funded by the beverage industry)

Network (zone) operators²

Visy (North Zone), TOMRA Cleanaway (West Zone), and Return-It (East-Zone)

System finance

Producer fees, material revenues

Unredeemed deposits⁴

Not applicable

Material owner

Network (zone) operators

Container return & refund points

Collection model

Hybrid: Mix of return options including stand-alone RVMs, retail stores offering over-the-counter service, and depots (walk-in or drive-through). In addition, Zone Operators may offer pop-services or events (set time and location).

Online take-back? No

Number of collection points

~600

Population per collection point

11,510

Method of return

Mostly manual, but automated counting systems are in place at all cash-back depots

Barcode-based system?

Partial – While containers are required to have barcodes on their labels, this is primarily for quality control during audits rather than for tracking or verification. Other methods of container tracking, such as manual counts, can also be employed.

Container deposit markings

Containers must display the following words: “10¢ refund at collection depots/points in participating State/Territory of purchase”

Refund payment options

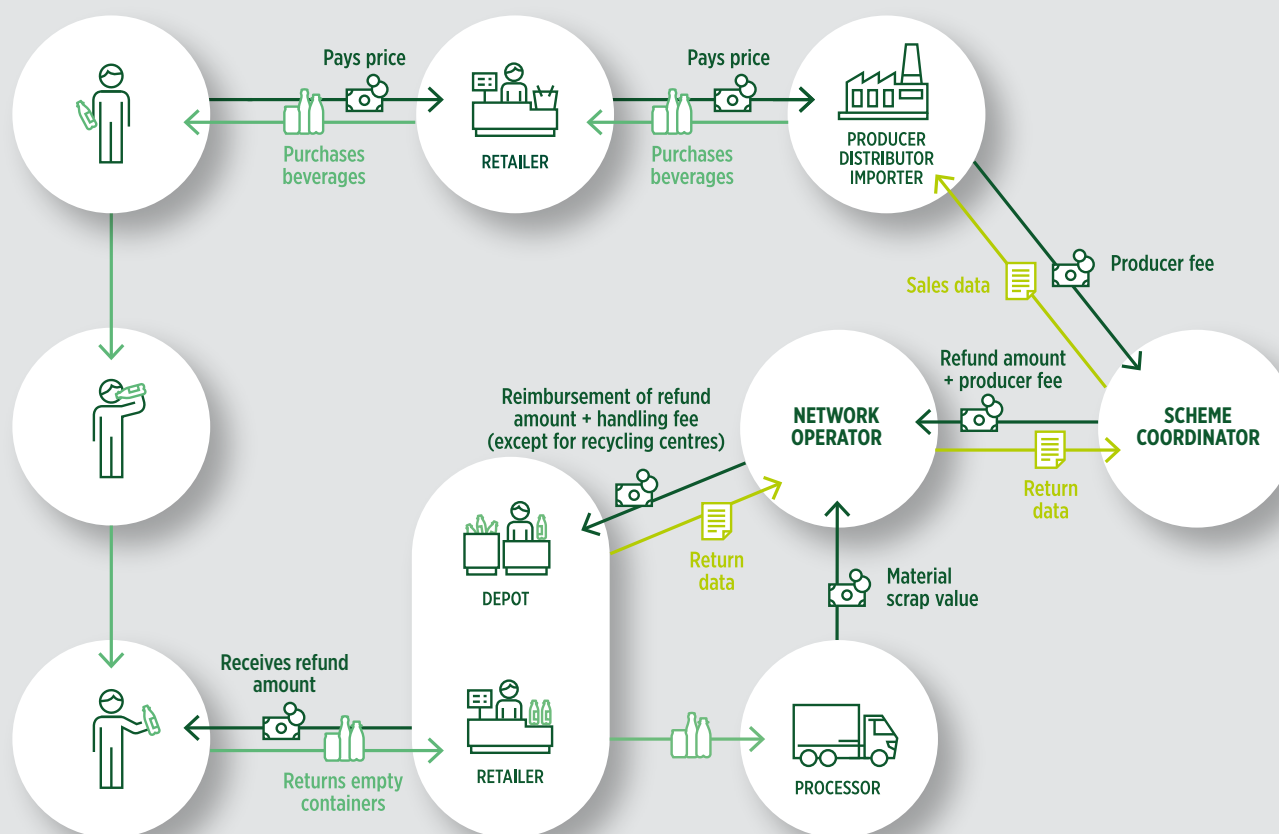
Cash, store vouchers, digital refunds (electronic payment), donation to charity



Return rate

Return rate data is not yet available; however, as of 1 November 2024, one billion containers were returned through the scheme. Of these, approximately 63% (628 million) were returned through the depot network, while 37% were collected via materials recovery facilities (MRFs) processing kerbside materials. Among the total containers collected, around 50% were aluminium, 30% plastic, and 17% glass.

Money, material & data flow



¹ Producer fees (called 'First Supplier Contributions' in Victoria) are calculated and set according to a methodology that takes into account the following information: historical supplier volumes and estimated growth in line with population growth; historical and projected growth in redemptions through the network of return points; historical and projected redemptions through MRFs (kerbside collections); network operator handling and processing fees per container and for each material type; and fixed costs including scheme coordinator and compliance fees. Fees are reviewed every 6 or 12 months. The 1 August 2025 price increase (if applicable) will be updated on 1 April 2025.

² Containers that are placed into council kerbside recycling bins end up at material recovery facilities (MRFs). VicReturn then pays MRFs the refund amount on the eligible containers they collect. MRFs and local councils share in the proceeds from the eligible containers collected from council kerbside recycling bins.

³ The system is a split-responsibility model, which involves a Scheme Coordinator who is responsible for running the administration and finance for the scheme, and a separate Network Operator(s) that is responsible for running the network of return points.

⁴ The law does not mandate a specific 'deposit' be paid on beverages but requires that refunds be provided to consumers who return containers at refund points. Consequently, there is no accumulation of unredeemed deposits. Instead, the scheme coordinator invoices producers a 'producer fee'. This fee is based on the number of containers that are returned and also depends on the revenues earned from the sale of material).



Western Australia

Population: **2.9m**

Population density: **1.2/km²**

National (Australia) GDP per capita,
PPP (international \$): **69,114.7**

Scheme coordinator's website:



Sources

- 1) Government of Western Australia Department of Water and Environmental Regulation. "Annual report 2022-2023." Available at: <https://www.wa.gov.au/system/files/2023-10/dwer-annual-report-2022-23.pdf>
- 2) Government of Western Australia. May 2019. "Minimum network standards: Refund point locations and hours of operation – Container deposit scheme." Available at: <https://www.wa.gov.au/system/files/2022-04/CDS-minimum-network-standards.pdf>
- 3) Government of Western Australia. 8 April 2022. "Container Deposit Scheme – Recovery amount protocol: Guidance for calculating payments to material recovery facility operators." Available at: <https://www.wa.gov.au/government/publications/container-deposit-scheme-recovery-amount-protocol>
- 4) WA Return Recycle Renew Limited. "Annual Report 2022-2023." Available at: <https://cdn.warrrl.com.au/2024/03/2022-23-Annual-Report-1.pdf>
- 5) WA Return Recycle Renew Limited. "First Responsible Suppliers." Available at: <https://warrrl.com.au/first-responsible-suppliers/>
- 6) WA Return Recycle Renew Limited. "Strategic Plan 2021-2024." Available at: <https://warrrl.com.au/wp-content/uploads/2022/02/WARRRL-Strategic-Plan-2021-2024-Jun21.pdf>

Legislative framework

Name of legislation

Waste Avoidance and Resource Recovery (Container Deposit Scheme) Regulations, under Part 5A of the Waste Avoidance and Resource Recovery Act 2007

Legislation enacted

March 2019

Appointment of scheme coordinator

July 2020

System started

1 October 2020

Key updates

None

Regulatory authority

Western Australia Department of Water and Environmental Regulation (DWER)

Legislated targets

› **Collection:** 85% by fiscal year 2023/2024

› **Accessibility:** The minimum network standards mandate at least 229 collection points (114 full-time collection points and 115 flexible collection points). The standards also establish minimum requirements for the location and distribution of collection points, including maximum travel distances to refund points by region (e.g., 5km [3.1 miles] for Perth metropolitan area), as well as specified hours of operation.

Scope

Material type

Plastic, metal (steel, aluminium), glass, liquid paperboard

Beverage type

Sealed, ready-to-drink alcohol and non-alcohol beverages including pure fruit or vegetable juice (≥90% pure juice), flavoured milk, fermented milk product, carbonated and non-carbonated soft drinks and flavoured water (including energy drinks, fruit drinks, sport drinks, kombucha, vitamin drinks), plain water, cider, beer/ale/stout, spirits, wine and wine-based drinks

Size

150ml to 3L (0.04-0.79 gal)

Excluded

Pure fruit or vegetable juice containers of ≥1L (0.26 gal); glass wine and spirits bottles; plain milk (or milk substitutes) containers; flavoured milk containers ≥1L (0.26 gal); casks (plastic bladders in boxes) for wine and casks for water ≥1L (0.26 gal); sachets for wine of ≥ 250ml (0.07 gal); cordials, concentrated juices; registered health tonics

Is there a DRS for refillables?

No (<1% refillable market share across Australia in 2024; state share not available)

Deposits & fees

Deposit initiator

Producer/Importer

Refund value

› **Flat rate:** AUD\$0.10 (€0.06, USD\$0.07)

Handling fee (2024)¹

AUD\$0.08-\$0.09 (€0.048-€0.054, USD\$0.053-\$0.060) (estimate, as this is confidential)

Producer fee (effective 1 February 2023)

- › Aluminium: AUD\$0.1239 (€0.075, USD\$0.83)
- › Glass: AUD\$0.1284 (€0.077, USD\$0.086)
- › HDPE: AUD\$0.1285 (€0.077, USD\$0.086)
- › PET: AUD\$0.1276 (€0.077, USD\$0.085)
- › Liquid paperboard: AUD\$0.1317 (€0.079, USD\$0.088)
- › Other: AUD\$0.1317 (€0.079, USD\$0.088)
- › **Weighted average:** AUD\$0.1266 (€0.076, USD\$0.084)

*Fees subject to GST

Processing refund

Unknown (MRF operators processing material that has been collected through a local government kerbside recycling programme are paid a fee for each eligible container received; this amount is paid out quarterly)



System structure & administration

Clearing system

Centralised

Scheme coordinator

WA Return Recycle Renew Ltd. (WARRRL) (not-for-profit organisation established by Coca Cola Amatil and Lion Pty Ltd.)

System finance

Producer fees, material revenues

Unredeemed deposits²

Not applicable

Material owner

Scheme coordinator

Container return & refund points

Collection model

Return-to-Depot: There are four types of collection points including depots, bag drops, RVMs, and pop-ups (mobile depots). The scheme coordinator also offers an on-demand collection service to make bulk container returns easier for businesses in the HORECA sector (i.e., cafes, restaurants, and bars). Collections can be booked through an online app or the system operator's website.

Number of collection points

255

Population per collection point

~11,198

Method of return

Mostly manual (small number of automated depots)

Return rate (2022-23)

Total containers collected (via DRS network + kerbside programmes)

Plastic (PET)	Plastic (HDPE)	Aluminium	Steel	Glass	Liquid paperboard	Other	Total
56%	50%	65%	57%	78%	24%	28%	63%

Breakdown by collection channel

Containers collected via DRS network

Plastic (PET)	Plastic (HDPE)	Aluminium	Steel	Glass	Liquid paperboard	Other	Total
48%	31%	57%	57%	64%	24%	28%	54%

Containers collected through kerbside programmes (MRF)

Plastic (PET)	Plastic (HDPE)	Aluminium	Steel	Glass	Liquid paperboard	Other	Total
7%	19%	9%	0%	14%	0%	0%	10%

Barcode-based system?

Partial – Containers must have barcodes on their labels, but this is primarily for quality control during audits rather than for tracking or verification. Other methods of container tracking, such as manual counts, can also be employed.

Container deposit markings

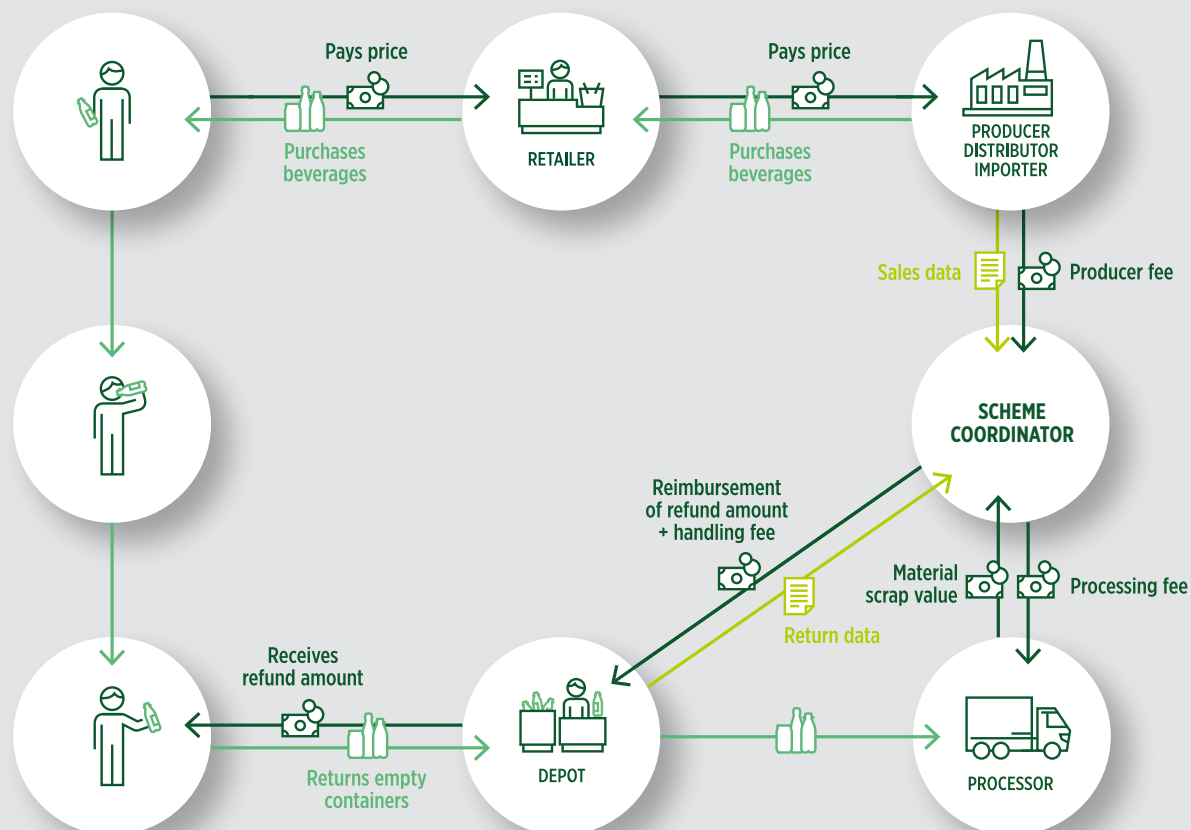
Containers must display the following words “10c refund at collection depots/points in participating State/Territory of purchase”

Refund payment options

Cash, store voucher, electronic funds transfer (deposit directly to bank account, PayPal), donation to charity



Money, material & data flow



¹ The 'handling fee' covers the total cost of collection, transportation and processing of materials.

² The law does not mandate a specific 'deposit' be paid on beverages but requires that refunds be provided to consumers who return containers at refund points. Consequently, there is no accumulation of unredeemed deposits. Instead, the system operator invoices producers a 'producer fee'. This fee, which includes the refund value, is based on the number of containers that are returned and also depends on the revenues earned from the sale of material.



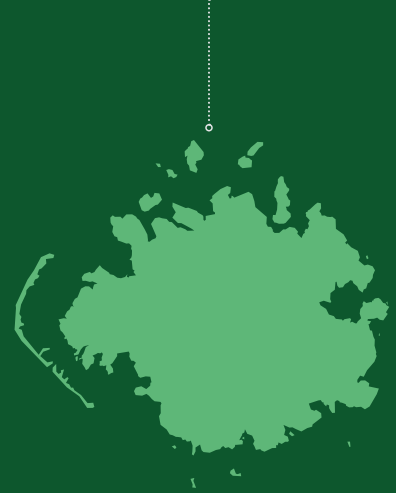
Federated States of Micronesia

Country snapshot

Yap (2003)



Pohnpei (2012)



Kosrae (2007)



Kosrae

Population: **6,744**

Population density: **61.3/km²**

National (Federated States of Micronesia)

GDP per capita, PPP (international \$): **4,216.5**

Regulator's website:



Sources

- 1) "Draft Kosrae State Solid Waste Management Strategy 2018-2027. (Action Plan: 2018-2022)." Available at: <https://www.fsmstatistics.fm/wp-content/uploads/2020/04/Kosrae-State-SWM-New-Strategy.pdf>
- 2) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries, Phase II (J-PRISM II), Japan International Cooperation Agency (JICA), March 2022. "Container Deposit Schemes in the Pacific Islands: A Guide for Policy Makers." Available at: <https://www.sprep.org/sites/default/files/documents/publications/%E5%88%A5%E6%B7%BB%E3%80%80Final%20Copy%20CDS%20Guide.pdf>
- 3) PacWastePlus, November 2020. "Assessment of Legislative Frameworks Governing Waste Management in the Federated States of Micronesia." Available at: <https://pacwasteplus.org/wp-content/uploads/2021/05/waste-legislation-FSM.pdf>
- 4) Personal communication with Alice Leney, 17 April 2024

Legislative framework

Name of legislation

Recycling Program Regulations, under the Kosrae Recycling Program Act

Legislation enacted

August 2006

Appointment of system operator

November 2007

System started¹

October 2007

Key updates

- › 2007 – expanded to glass and plastic bottles
- › 2019 – handling fee increase

Regulatory authority

Kosrae Island Resource Management Authority (KIRMA)

Legislated targets

None

Scope

Material type

Plastic (PET), metal (aluminium), glass

Beverage type

All

Size

All

Excluded

None

Is there a DRS for refillables?

No (0% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit/refund value²

› **Flat rate:** USD\$0.07/\$0.05 (€0.06/€0.05)

Handling fee (2024)

› **Flat rate:** USD\$0.02 (€0.02) (the non-refundable portion of the deposit)



System structure & administration

Clearing system

Centralised

System operator

Micronesia Eco Corporation (operates under contract to KIRMA; its responsibilities include operating the MRF [which also serves as the sole collection point], issuing refunds to consumers, processing containers, and exporting materials for recycling)

System finance

Material revenues, unredeemed deposits, non-refundable portion of the deposit

Unredeemed deposits

Recycling Collection Program Account
(special fund operated by the Kosrae State Department of Administration)

Material owner

System operator

Container return & refund points

Collection model

Return-to-Redemption Centre

Number of collection points

1 (open one day every two weeks; located at the MRF)

Population per collection point

~6,600

Method of return

Manual

Container deposit markings

Unknown

Barcode-based system?

No

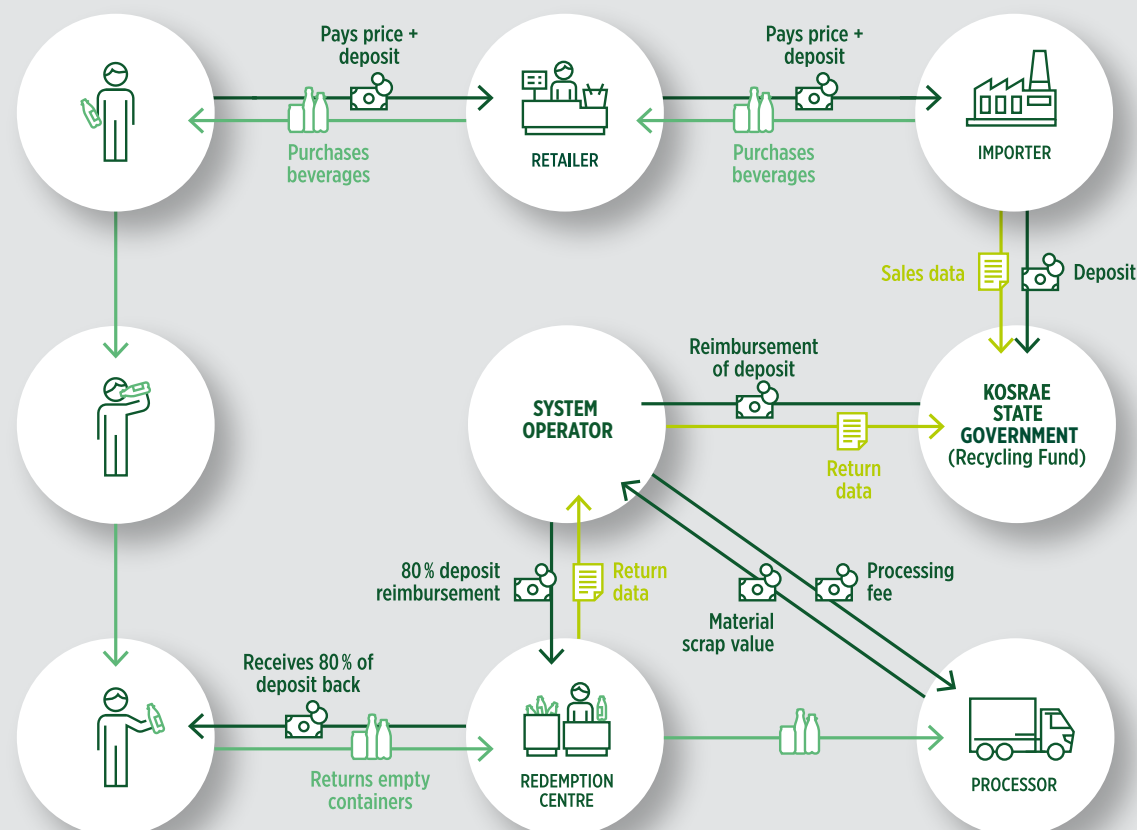
Refund payment options

Cash

Return rate (2023)

Data not available

Money, material & data flow



¹ Kosrae had a DRS covering aluminium cans starting in 1991, which was operated by the Kosrae Community Action Program, a government supported NGO. However, the system collapsed later in the 1990s. In 2006, the United Nations Development Programme funded a study to examine the feasibility of re-launching and expanding the DRS, and in 2007, the new system started after the old legislation (State Law 5 – 15, Chapter 22, Section 9.2201: “Beverage Container Recycling Deposit”) was repealed and a new version was put in place.

² A minimum quantity of five drinks containers is specified in the Regulation so that the minimum refund payout is USD\$0.25 (€0.23)..



Pohnpei

Population: **36,896**

Population density: **110.4/km²**

National (Federated States of Micronesia)
GDP per capita, PPP (international \$): **4,216.5**

System operator's website:



Sources

- 1) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries, Phase II (J-PRISM II), Japan International Cooperation Agency (JICA), March 2022. "Container Deposit Schemes in the Pacific Islands: A Guide for Policy Makers." Available at: <https://www.sprep.org/sites/default/files/documents/publications/%E5%88%A5%E6%B7%BB%E3%91%E3%80%80Final%20Copy%20CDS%20Guide.pdf>
- 2) Personal communication with Alice Leney, 17 April 2024
- 3) "Pohnpei State Solid Waste Management Action Plan 2014-2018." Available at: <https://fsm-data.sprep.org/system/files/Pohnpei%20State%20%20SWMP.pdf>
- 4) "Pohnpei State Solid Waste Management Strategy 2020-2029 (Action Plan: 2020-2024). Available at: https://www.sprep.org/sites/default/files/documents/publications/Pohnpei_SolidWasteMgmt_Strategy.pdf

Legislative framework

Name of legislation

Recycling Program Regulation, under Chapter 3, Title 27 of the Pohnpei Code

Legislation enacted

August 2011

Appointment of system operator

2012

System started

August 2012

Key updates

2016

Regulatory authority

Pohnpei State Environmental Protection Agency

Legislated targets

None

Scope

Material type

Metal (aluminium)

Beverage type

All

Size

All

Excluded

None

Is there a DRS for refillables?

No (refillable market share unknown)

Deposits & fees

Deposit initiator

Importer

Deposit/refund value

› **Flat rate:** USD\$0.06/\$0.05 (€0.06/€0.05)

Handling fee (2024)

› **Flat rate:** USD\$0.01 (€0.01) (the non-refundable portion of the deposit)



System structure & administration

Clearing system

Centralised

System operator

Pohnpei State Environmental Protection Agency

System finance

Material revenues, unredeemed deposits, non-refundable portion of deposits

Unredeemed deposits

Recycling Fund (a Fund of the Treasury with the Pohnpei State Government)

Material owner

System operator, but the Kolonia Town Government (KTG) and Madolenihmw Municipal Government (MMG) receive 35% of revenues from the sale of cans, split pro rata based on what was received at each collection point. KTG crushes cans for shipping and receives an additional 15% of the value of the cans for doing this.

Container return & refund points

Collection model

Return-to-Redemption Centre

Method of return

Manual

Number of collection points

2 (one in Kolonia Town operated by the Kolonia Town Government [KTG] and 1 in Madolenihmw operated by Madolenihmw Municipal Government [MMG])

Barcode-based system?

No

Container deposit markings

Unknown

Refund payment options

Cash

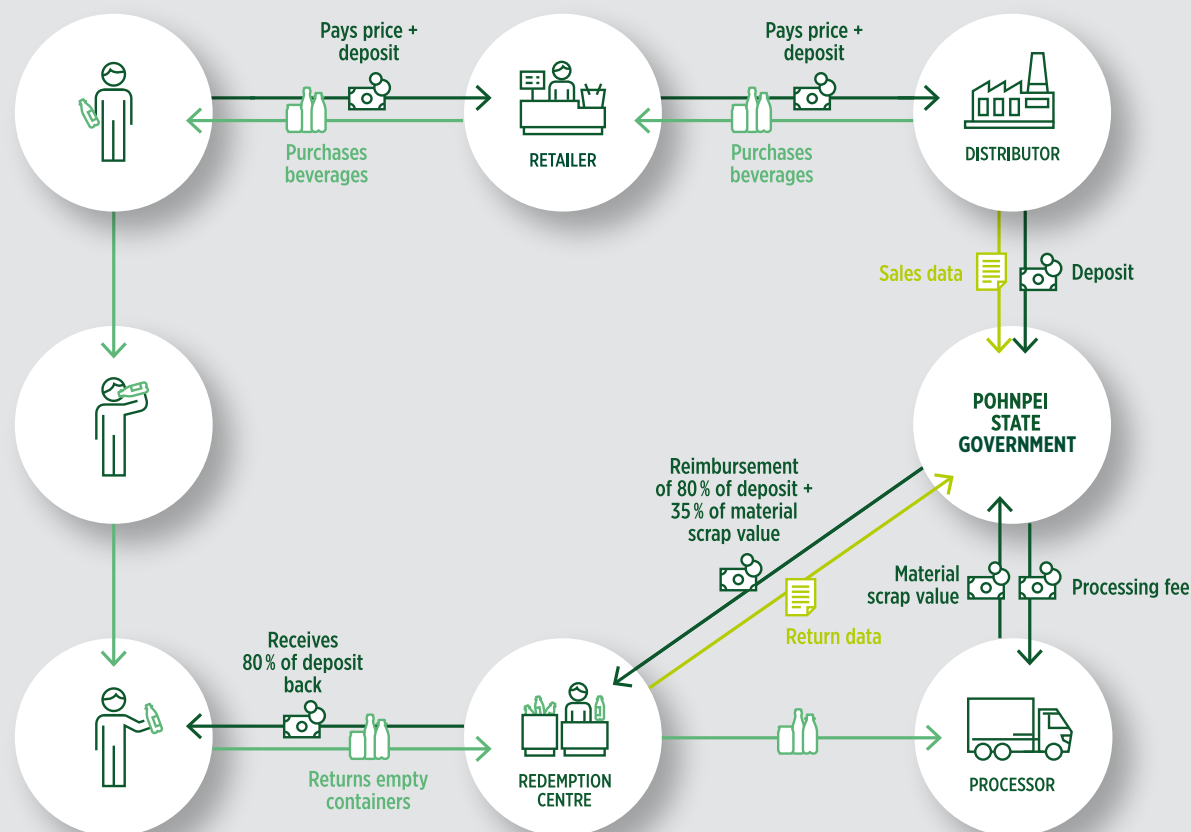
Population per collection point

~18,000

Return rate (2023)

Data not available

Money, material & data flow



Yap

Population: **11,400**

Population density: **116.0/km²**

National (Federated States of Micronesia)

GDP per capita, PPP (international \$): **4,216.5**



Sources

- 1) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries, Phase II (J-PRISM II), Japan International Cooperation Agency (JICA), March 2022. "Container Deposit Schemes in the Pacific Islands: A Guide for Policy Makers." Available at: <https://www.sprep.org/sites/default/files/documents/publications/%E5%88%A5%E6%B7%BB%E3%91%E3%80%80Final%20Copy%20CDS%20Guide.pdf>
- 2) Personal communication with Alice Leney, 17 April 2024
- 3) "Yap State Solid Waste Management Strategy 2018-2027 (Action Plan: 2018-2022)." Available at: <http://extwprlegsl.fao.org/docs/pdf/mic186160.pdf>

Legislative framework

Name of legislation

Recycling Program Regulations, under the Yap State Recycling Act (Yap State Law 7—18)

Legislation enacted

2007

Appointment of system operator

2007

System started¹

November 2008 (initially started in 2003, but collapsed in 2004 after Cyclone Sudal)

Key updates

- › 2008 – expansion to include glass and plastic bottles
- › 2008 – increase to refund value

Regulatory authority

Environmental Protection Agency

Legislated targets

None

Scope

Material type

Plastic (PET), metal (aluminium), glass

Beverage type

All

Size

All

Excluded

None

Is there a DRS for refillables?

No (refillable market share unknown)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit/refund value²

› **Flat rate:** USD\$0.06/\$0.05 (€0.06/€0.05)

Handling fee (2024)

› **Flat rate:** USD\$0.01 (€0.01) (non-refundable portion of the deposit)



System structure & administration

Clearing system

Centralised

System operator

Island Paradise Metals Company (IPMC)
(contracted by the Yap State Government)

System finance

Material revenues, unredeemed deposits, non-refundable portion of deposits

Unredeemed deposits

The Enterprise Fund (a special fund of the state treasury)

Material owner

System operator

Container return & refund points

Collection model

Return-to-Redemption Centre

Number of collection points

1 (open three days/week; located at the MRF)

Population per collection point

~11,400

Method of return

Manual

Container deposit markings

Unknown

Barcode-based system?

No

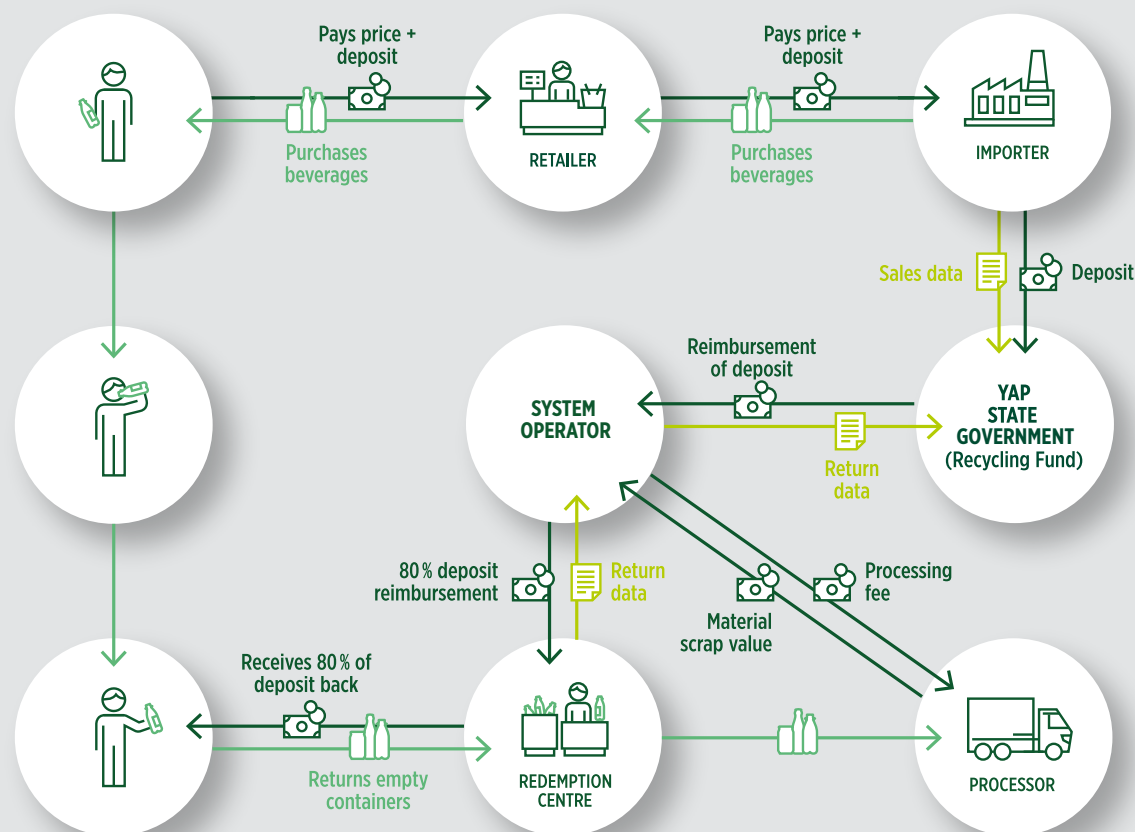
Refund payment options

Cash

Return rate (2023)

Data not available

Money, material & data flow



¹ Yap had a legislated DRS for aluminium beverage cans operating from late 1995, but it collapsed in 2004 after Cyclone Sudal damaged the island. In 2006, UNDP carried out a study to examine the feasibility of introducing DRSs into each of the four states of the Federated States of Micronesia (FSM), and in 2007 it supported Technical Assistance to Yap State to help relaunch the programme. This entailed repealing the existing legislation and replacing it with a new law.

² A minimum quantity of five beverage containers is specified in the Regulation so that the minimum refund payout is USD\$0.25 (€0.23).



Republic of Kiribati

Population: **133,510**

Population density: **164.6/km²**

GDP per capita, PPP (international \$): **3,521.7**

System operator's website:



Sources

- 1) Govan, H. 2011. "Good Coastal Management practices in the Pacific: Experiences from the field." Available at: https://www.icriforum.org/wp-content/uploads/2019/12/ICRI%20Best%20Practice%20in%20Coastal%20Management%20-%20Govan%202011_0_0.pdf
- 2) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries, Phase II (J-PRISM II), Japan International Cooperation Agency (JICA), March 2022. "Container Deposit Schemes in the Pacific Islands: A Guide for Policy Makers." Available at: <https://www.sprep.org/sites/default/files/documents/publications/%E5%88%A5%E6%B7%BB%E7%BC%91%E3%80%80Final%20Copy%20CDS%20Guide.pdf>
- 3) "Kaoki Mangle! Project Annual Report 2004." Available at: <https://www.sprep.org/att/IRC/eCOPIES/Countries/Kiribati/31.pdf>
- 4) Pacific Region Infrastructure Facility. 2018. "Kiribati." Available at: <https://www.theprif.org/sites/default/files/documents/kiribati.pdf>
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Legislative framework

Name of legislation

Special Fund (Waste Material Recovery) Regulations, Special Fund (Waste Materials Recovery) Act, Special Fund (Waste Materials Recovery) Act Deposits Order

Legislation enacted

December 2004

Appointment of system operator

Initial system operator, Kiribati Recycling, was appointed in May 2005. New system operator was appointed 28 October 2022.

System started

February 2005

Key updates

None

Regulatory authority

Ministry of Environment, Lands and Agricultural Development

Legislated targets

None

Scope

Material type

Plastic (PET), metal (aluminium), liquid paperboard¹

Beverage type

Beer, soft drinks, water, milk¹

Size

All

Excluded

Milk in containers other than liquid paperboard

Is there a DRS for refillables?

No (0% refillable market share in 2024)

Deposits & fees

Deposit initiator

Importer

Deposit/refund value¹

› **Flat rate:** AUD\$0.05/\$0.04 (€0.03/€0.02)

Handling fee (2024)

› **Flat rate:** AUD\$0.01 (€0.01) (non-refundable portion of the deposit)



System structure & administration

Clearing system

Centralised

System operator

Clean Spacial Solution (private company; operates the system under contract with the regulatory authority)

System finance

Material revenues, unredeemed deposits, non-refundable portion of deposits

Unredeemed deposits

Waste Material Recovery Special Fund (administered by the Minister of Finance)

Material owner

System operator

Container return & refund points

Collection model

Return-to-Depot

Number of collection points

Seven (the main collection point, open five days/week, is located at the MRF at the Port of Betio. The other six, which are open one day/week for a few hours, are mobile collection points [i.e., a truck])

Population per collection point

~16,801

Method of return

Manual

Container deposit markings

Unknown

Barcode-based system?

No

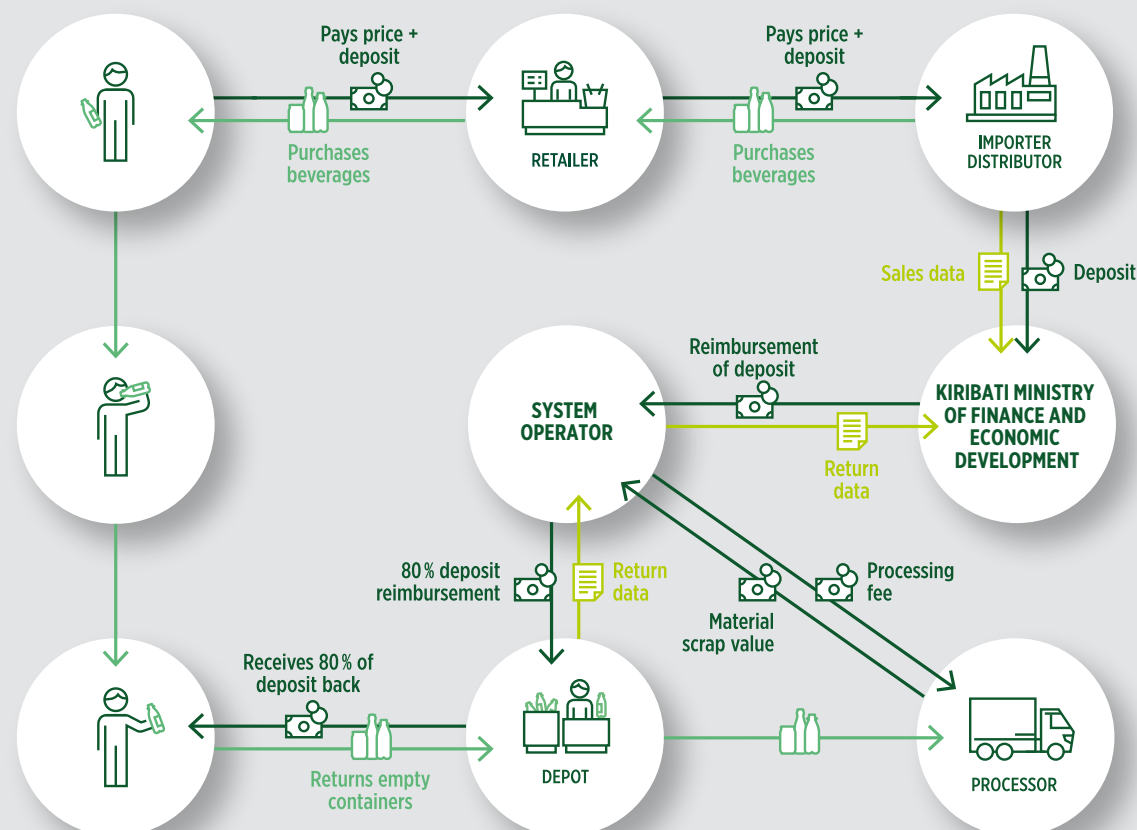
Refund payment options

Cash

Return rate (2023)

Plastic (PET)	Aluminium	Total
0%	75%	N/A

Money, material & data flow



¹ Liquid paperboard is included if it contains milk. Likewise, milk is only included if packaged in liquid paperboard.

² Minimum number of containers required for redemption is 5 units (USD\$0.20 refund) (€0.23).



Republic of Palau

Population: **18,060**

Population density: **39.3/km²**

GDP per capita, PPP (international \$): **17,490.8**

Local government operator's website:



Sources

- 1) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries, Phase II (J-PRISM II), Japan International Cooperation Agency (JICA), March 2022. "Container Deposit Schemes in the Pacific Islands: A Guide for Policy Makers." Available at: <https://www.sprep.org/sites/default/files/documents/publications/%E5%88%A5%E6%B7%BB%E7%91%E3%80%80Final%20Copy%20CDS%20Guide.pdf>
- 2) "National Solid Waste Management Strategy: The Roadmap towards a Clean and Safe Palau 2017 to 2026." Available at: <https://www.sprep.org/attachments/VirLib/Palau/palau-national-solid-waste-management-strategy.pdf>
- 3) Personal communication with Alice Leney, 17 April 2024
- 4) Secretariat of the Pacific Regional Environment Programme (SPREP). June 2020. "Factsheet: Advanced Recovery Fee & Deposit Systems." Available at: <https://www.sprep.org/sites/default/files/documents/publications/advanced-recovery-fee-deposit-factsheet.pdf>

Legislative framework

Name of legislation

Beverage Container Recycling Regulations, made under the Republic of Palau Public Law No. 7-24

Legislation enacted

October 2006

Appointment of system operator

October 2011

System started¹

April 2011

Key updates

› 2019 – lifting of limitation on size of containers

Regulatory authority

Ministry of Public Infrastructure, Industries and Commerce & Ministry of Finance

Legislated targets

None

Scope

Material type

Plastic (all types), metal (aluminium, steel), glass, aseptic containers

Beverage type

All

Size²

All

Excluded

Products ingested for medical purposes

Is there a DRS for refillables?

No (0% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit/refund value³

› **Flat rate:** USD\$0.10/\$0.05 (€0.09/€0.05)

Handling fee (2024)

› **Flat rate:** USD\$0.025 (€0.023)



System structure & administration

Clearing system

Centralised

System operators

Belau Garbage & Scrap Co. (BGSC) (private company)
and Koror State Government (KSG)

System finance

Material revenues, unredeemed deposits, non-refundable portion of deposits

Unredeemed deposits

Recycling Fund (special fund maintained by the Ministry of Finance, separate from other funds of the National Treasury)

Material owner

National government

Container return & refund points

Collection model

Return-to-Redemption Centre

Population per collection point

~9,001

Number of collection points

Two (both redemption centres are in Koror State, home to 2/3 of the population. About 70-80% of containers are returned to the BGSC redemption centre, which accepts all materials except for glass [glass bottles can only be returned to the KSG redemption centre]).

Method of return

BGSC redemption centre: manual
KSG redemption centre: automated

Barcode-based system?

No

Container deposit markings

Unknown

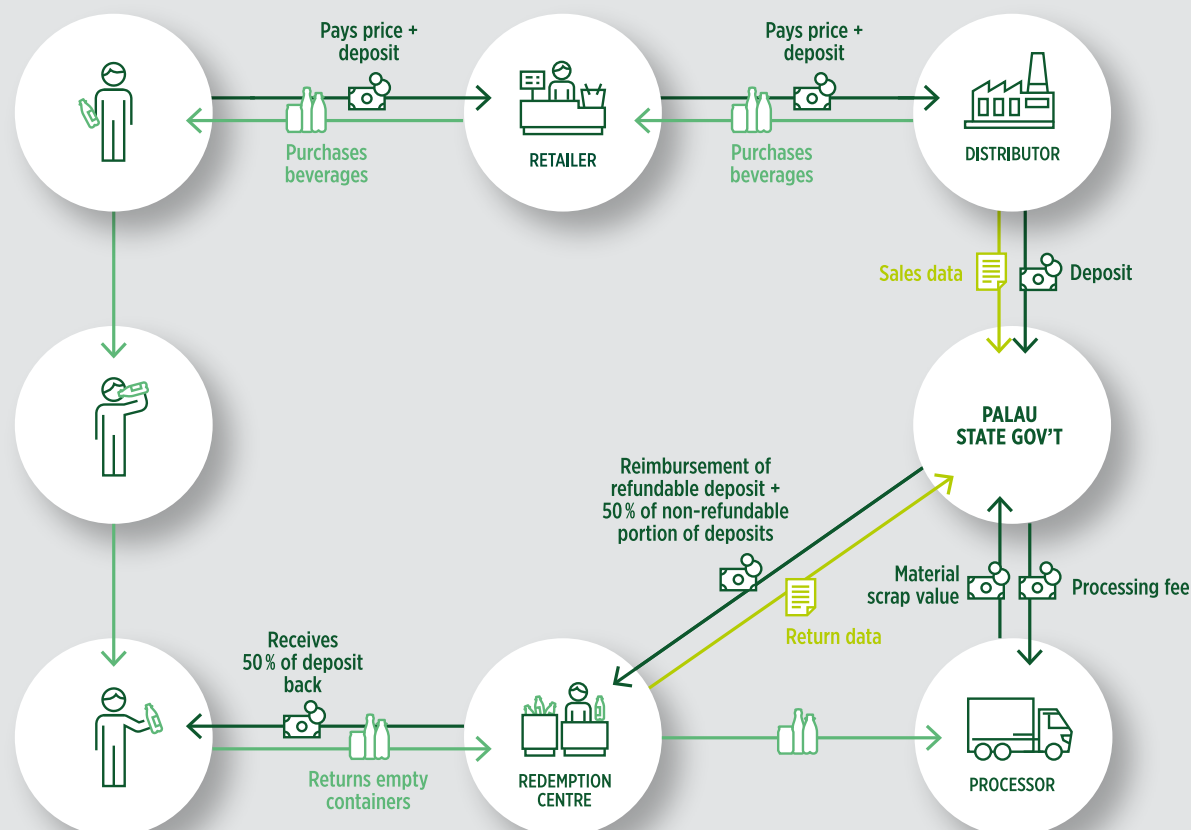
Refund payment options

Cash

Return rate (2023)

Data not available

Money, material & data flow



¹ The legislation establishing a recycling programme and creating a recycling fund (RPPL: The Republic of Palau Public Law No. 7-24) was passed in October 2006. This law enabled Palau to operate a DRS for drinks containers. However, at that time, the regulatory agency had limited capacity to operate the programme as they were only in their second year of operation. In addition, a project for establishing recycling facilities was in progress by Koror State Government, which then became the initial Redemption Centre for the recycling programme. In this context, it was decided to postpone the implementation of the recycling programme until the responsible personnel were well trained, which happened through a three-year JICA project which ended in 2008. In 2009, Beverage Container Recycling Regulations were passed, and Implementation of the DRS started in April 2011.

² Initially, the size of containers was restricted to less than or equal to 32 fl. oz. This size restriction was eliminated through an amendment to the law made in 2018 (RPPL No. 10-31) and an amendment to the regulation in 2019.

³ Of the USD\$0.05 that is not returned to the consumer, \$0.025/container is paid to redemption centres as a handling fee (called 'compensation cost' in Palau), and \$0.025/container goes into the national government's 'Recycling Fund' to cover administrative costs.

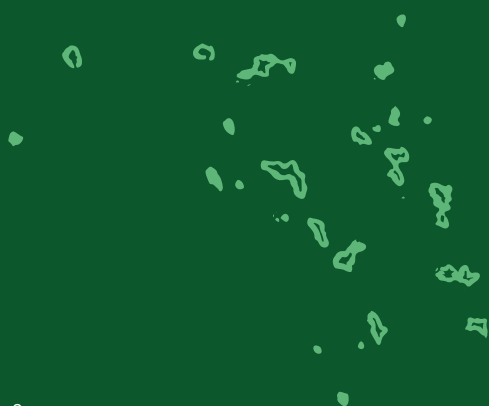


Republic of the Marshall Islands

Population: 42,000

Population density: 232.0/km²

GDP per capita, PPP (international \$): 7,491.4



Sources

- 1) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries, Phase II (J-PRISM II), Japan International Cooperation Agency (JICA), March 2022. "Container Deposit Schemes in the Pacific Islands: A Guide for Policy Makers." Available at: <https://www.sprep.org/sites/default/files/documents/publications/%E5%88%A5%E6%B7%BB%E3%91%E3%80%80Final%20Copy%20CDS%20Guide.pdf>
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- 3) Majuro Atoll Waste Company. "Solid Waste Management Plan for Majuro 2019-2028 (Action Plan: 2019-2023)." Available at: <https://www.sprep.org/sites/default/files/documents/publications/RMI-Solid-Waste-Management-Majuro-2019-2023.pdf>
- 4) "PacWastePlus Project Snapshot – Republic of the Marshall Islands." Available at: <https://pacwasteplus.org/resources/pacwasteplus-project-snapshot-republic-of-marshall-islands/>
- 5) Personal communication with Alice Leney, 17 April 2024
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Legislative framework

Name of legislation

recycling Program Regulations under the Styrofoam Cups, and Plates and Plastic Products Prohibition, and Container Deposit (Amendment) Act

Legislation enacted¹

January 2018

Appointment of system operator

July 2018

System started

August 2018

Key updates

None

Regulatory authority

Environmental Protection Authority (EPA)

Legislated targets

None

Scope

Material type

Plastic (PET), metal (aluminium), glass

Beverage type

All

Size

≤ 946 ml (0.24 gal)

Excluded

Milk and other dairy-derived products (except coffee and tea drinks), syrups, concentrates, nutritional supplements

Is there a DRS for refillables?

No (0% refillable market share in 2024)

Deposits & fees

Deposit initiator

Importer/Distributor

Deposit/refund value

› **Flat rate:** USD\$0.06/\$0.05 (€0.05/€0.045)

Handling fee (2024)

› **Flat rate:** USD\$0.01 (€0.01) (the non-refundable portion of the deposit)



System structure & administration

Clearing system

Centralised

System operators

Majuro Atoll Waste Company (MAWC) (government-owned enterprise, under contract with the EPA) in Majuro Atoll, and Kwajalein Atoll Local Government (KALGOV) (under contract with the EPA) on Ebeye Island

System finance

Material revenues, unredeemed deposits, non-refundable portion of deposits

Unredeemed deposits

Recycling Fund (special revenue account with the National Treasury and under control of the Ministry of Finance)

Material owner

System operator

Container return & refund points

Collection model

Return-to-Redemption Centre

Number of collection points

Two

Barcode-based system?

No

Population per collection point

~29,395

Container deposit markings

Unknown

Method of return

Manual

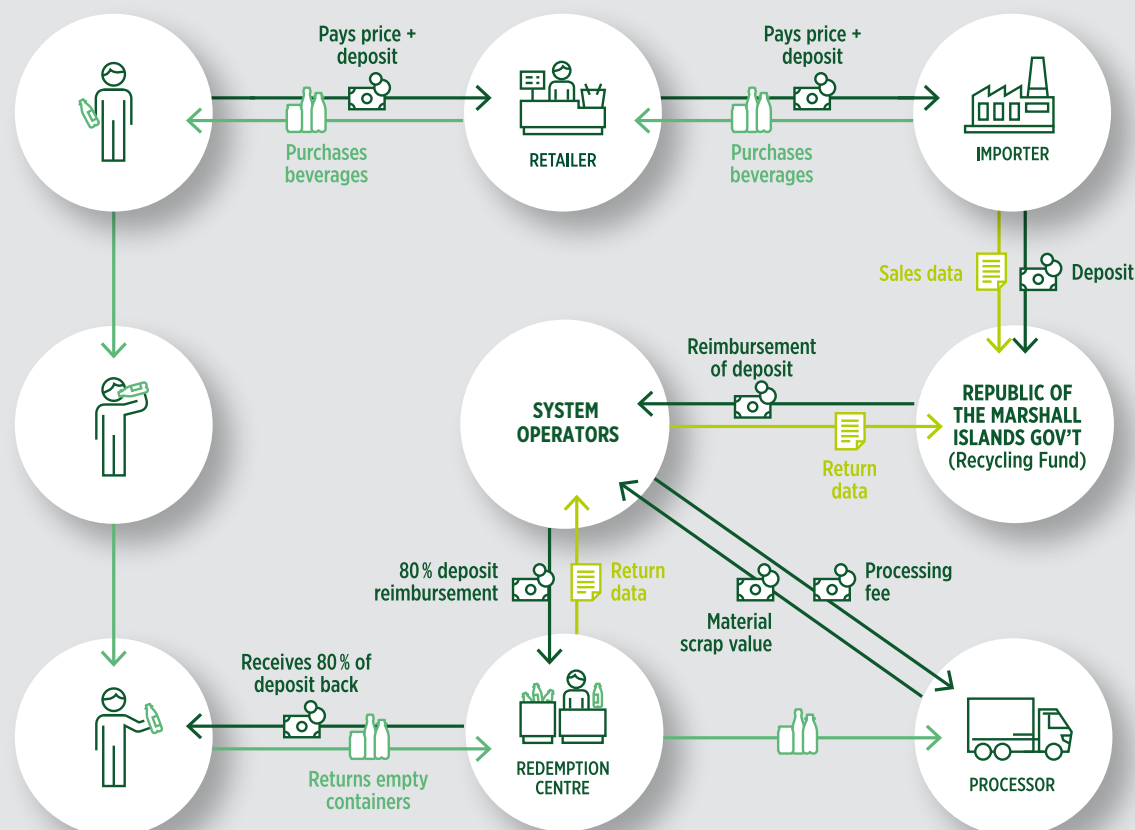
Refund payment options

Cash

Return rate (2023)

Data not available

Money, material & data flow



¹ The Act was passed in 2016 but amended in early 2018 to make implementation more practical. The Amended Act pushed many of the system details into a Recycling Program Regulation, which came into force in July 2018, and which specified what types of material used in drinks containers were covered.



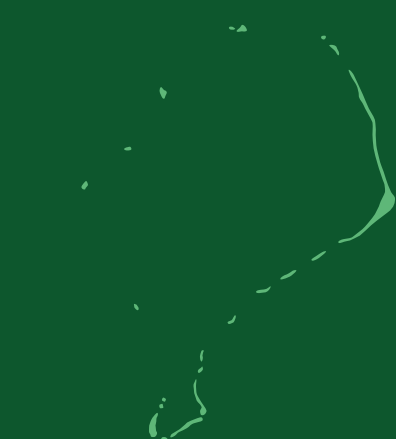
Tuvalu

Population: **11,400**

Population density: **438.5/km²**

GDP per capita, PPP (international \$): **5,763.5**

System operator's website:



Sources

- 1) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries, Phase II (J-PRISM II), Japan International Cooperation Agency (JICA), March 2022. "Container Deposit Schemes in the Pacific Islands: A Guide for Policy Makers." Available at: <https://www.sprep.org/sites/default/files/documents/publications/%E5%88%A5%E6%B7%BB%E3%80%80Final%20Copy%20CDS%20Guide.pdf>
- 2) Personal communication with Fuji Katsuo, Consultant, Solid Waste Management Office, Koror State Government, Republic of Palau, 21 February 2022.
- 3) "Tuvalu: Ban on Single-Use Plastics Commences," 19 August 2019. Available at: <https://www.loc.gov/item/global-legal-monitor/2019-08-19/tuvalu-ban-on-single-use-plastics-commences/>
- 4) Waste Management (Levy Deposit) Regulation 2019. Available at: <https://perma.cc/QVF7-KYZ4>

Legislative framework

Name of legislation

Waste Management (Levy Deposit) Regulation, under the Waste Management Act

Legislation enacted

August 2019

Appointment of system operator

Not applicable

System started

August 2019

Key updates

None

Regulatory authority

Department of Waste Management of the Ministry of Home Affairs and Rural Development and the Treasury Department of the Ministry of Finance

Legislated targets

None

Scope

Material type

Plastic (PET), metal (aluminium), glass

Beverage type

Mineral water (in PET bottles), sweetened drinks (in PET bottles and cans), alcohol drinks (in cans)

Size

All

Excluded

None

Is there a DRS for refillables?

No (refillable market share unknown)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit/refund value

› **Flat rate:** USD\$0.10/\$0.05 (€0.09/€0.045)

Handling fee (2024)

› **Flat rate:** USD\$0.05 (€0.045) (non-refundable portion of the deposit)



System structure & administration

Clearing system

Centralised

System operator

Department of Waste Management (Since 2021, there is no private operator; government is assuming this role until a private operator can be secured)

System finance

Material revenues, unredeemed deposits, non-refundable portion of deposits

Unredeemed deposits

Consolidated Public Fund (general government revenue account)

Material owner

System operator

Container return & refund points

Collection model

Return-to-Redemption Centre

Number of collection points

13, but only one is fully operational (this facility – the Waste Materials Transfer Station in Funafuti – is open during the last week of every month)

Population per collection point

~11,000

Container deposit markings

Unknown

Method of return

Manual

Refund payment options

Cash

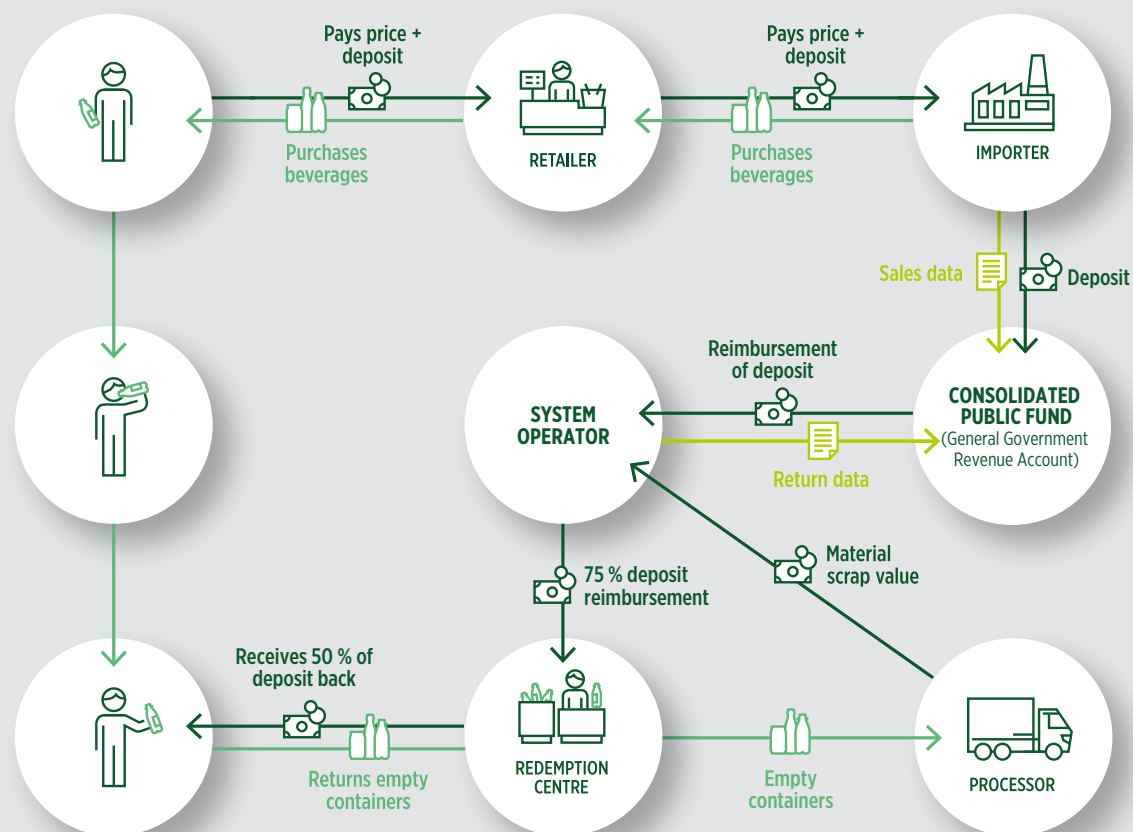
Barcode-based system?

No

Return rate (2023)

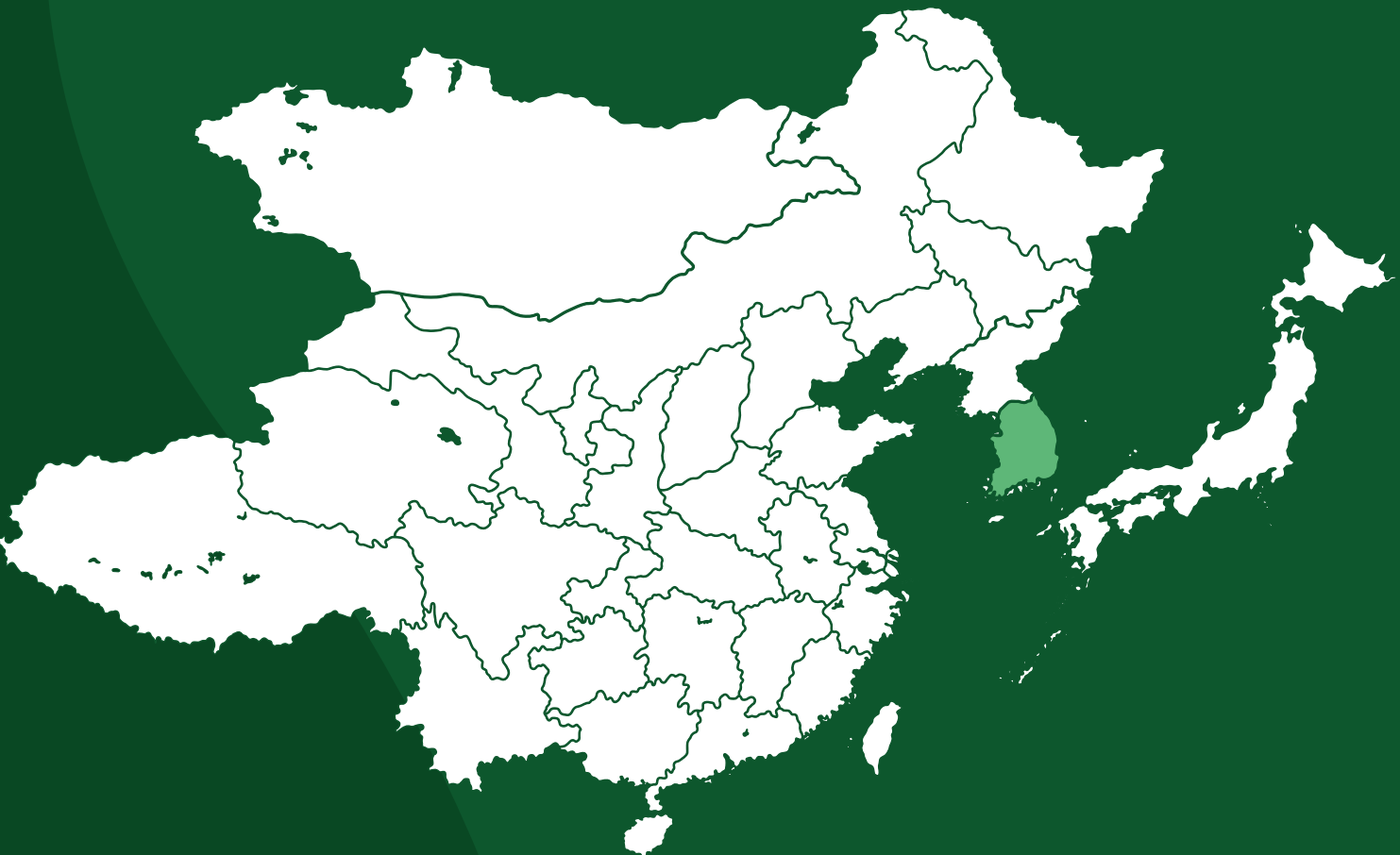
Data not available

Money, material & data flow



ASIA

Country snapshot



Country	Population (millions)	Population Density (population/km ²)	Legislation Enacted	System Started
Jeju Island and Sejong City, Republic of Korea	1.1m	Jeju Island: 316 Sejong City: 848	June 2020	December 2022
Total	1.1m			



Sejong City & Jeju Island, Republic of Korea

Population: **1.0m**

Population density:

Jeju Island: **316/km²**

Sejong City: **848/km²**

GDP per capita, PPP (international \$)
(Republic of Korea): **54,033.2**

System operator's website:



Sources

- 1) Parkinson, L. 28 February 2022. "South Korea implementing deposit scheme for disposable cups." Available at: <https://www.foodpackagingforum.org/news/south-korea-implementing-deposit-scheme-for-disposable-cups>
- 2) Personal communication with Serah Son, Reloop, 4 April 2024
- 3) Yonhap News Agency. "Disposable cup deposit-refund scheme to go into effect December in Jeju, Sejong." 23 September 2022.
- 4) <https://www.law.go.kr/LSW/lsInfoP.do?efYd=20220308&lsiSeq=241301#0000>
- 5) <https://en.yna.co.kr/view/AEN20220923004900315>

Legislative framework

Name of legislation

Amendment to the Act on the Promotion of Saving and Recycling of Resources (Resource Recycling Act), including introduction of DRS for Single-Use Cups

Legislation enacted

June 2020

Appointment of system operator

June 2020

System started

December 2022 (after assessing the results in the two regions, the ministry plans to determine how to gradually roll-out the scheme to other areas)

Regulatory authority

Ministry of Environment

Legislated targets

None

Scope

Material type¹

Single-use plastic and paper cups used for take-away

Beverage type

All hot and cold drinks served in single-use cups

Size

All

Excluded

None

Is there a DRS for refillables?

Yes, for some soft drinks and alcoholic beverages (24% refillable market share across the country in 2024)

Deposits & fees

Deposit initiator

Producer/Distributor

Deposit value

› **Flat rate:** 300 KRW (€0.20, USD\$0.22)

Handling fee (2024)

None

Processing fee (2024)

Paid by retailers (franchises) to collectors (i.e., logistic operators)

› Standard cups*: 4 KRW (€0.003, USD\$0.003)

› Non-standard cups: 10 KRW (€0.007, USD\$0.007)



System structure & administration

Clearing system

Centralised

System operator

Container Deposit System Management Organisation (COSMO)

System finance

Producer fees, unredeemed deposits

Unredeemed deposits

System operator

Material owner

Recyclers

Container return & refund points

Collection model

Hybrid: Cups can be returned to any franchise with over 100 branches nationwide, including cafes (e.g., Ediya, Twosome Place), bakeries (e.g., Dunkin'), fast-food chains (e.g., Lotteria, Mom's Touch, McDonald's), ice cream and shaved ice stores (e.g., Baskin Robbins), and other beverage stores (e.g., Smoothie King, Gongcha). In addition to take-back at stores, RVMs have been installed in public areas, with municipalities able to set up additional collection points if necessary.

Number of collection points

621

Barcode-based system?

Yes

Population per collection point

-1,654

Container deposit markings

Unknown

Method of return

Manual and automated

Refund payment options

Electronic funds transfer

Return rate (2023)

Jeju Island	Sejong City	Total
53%	39%	51%

Money, material & data flow

Not available

¹ The government has prepared a set of production standards for single-use plastic and paper cups to ensure high-quality recycling ability. A "standard" cup is defined as follows:

- Plastic cups: bottom diameter of at least 48mm, top diameter of at least 90mm, height of at least 102mm
- Paper cups: bottom diameter of at least 52mm, top diameter of at least 80mm, height of at least 95mm

According to the Ministry, the main material for plastic cups should be PET (or PET-A), colourless and transparent. It is prohibited to print on the surface. The inner coating for paper cups is permitted at a level that does not cause any issue to paper companies, and surface printing should be minimised.



Upcoming programmes



Upcoming programmes

This section presents the latest available information about upcoming deposit systems. These systems are defined as those in jurisdictions that have passed DRS legislation but are not yet operational due to implementation delays or pending finalisation of specific legislative details. We include all available information about these systems, including their anticipated launch dates, current as of the time of writing.

Jurisdiction	Population (million)	Population Density (population/km ²)	Legislation Enacted	Expected System Start
Czech Republic	10.9m	138.2	Law adoption in progress as of 4 September 2024	2026
England	57.7m	434.0	TBD	October 2027
Goa (India)	1.5m	394.0	August 2024	TBD – 2025
Northern Ireland	1.9m	133.3	TBD	October 2027
Poland	36.6m	121.1	2023	2025
Portugal	10.6m	114.4	December 2018	2026
Scotland	5.4m	69.9	2020	October 2027
Singapore	5.9m	8,058.9	March 2023	1 April 2026
Tasmania (Australia)	0.6m	8.4	2022	2025
Türkiye	85.3m	110.9	June 2021	January 2025
Uruguay	3.4m	19.4	2019	2026
Wales	3.2m	149.1	TBD	October 2027
Total	223.1m			

*Note: Due to rounding, the sum of country and state populations may not exactly match the total population.

Sources for population data:

- European countries: Eurostat. 11/07/2024. "Population on 1 January." Available at: <https://ec.europa.eu/eurostat/databrowser/view/TPS00001/default/table?lang=en>
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- Goa: Government of Goa. "About Goa." Available at: <https://www.goa.gov.in/know-go/about-go-go-state/#:~:text=Goa's%20population%20is%201458545%20with,recorded%20during%201981%20to%201990>
- Tasmania: Australian Bureau of Statistics. June 2024. "National, state and territory population." Available at: <https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/latest-release#data-downloads>
- Singapore: The World Bank. "Population, total." Available at: <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=BB>



Czech Republic

Population: **10.9m**

Population density: **138.2/km²**

GDP per capita, PPP (international \$): **53,816.8**

System operator's website: **TBD**



Sources

1) ODok Portál – VeKLEP – Návrh zákona, kterým se mění zákon č. 477/2001 Sb., o obalech a o změně některých zákonů (zákon o obalech), ve znění pozdějších předpisů, a další související zákony. Available at: <https://odok.cz/portál/veklep/material/ALBSCY4K6RXH/>

Legislative framework

Name of legislation

Law amending Act No. 477/2001 Coll., on packaging and amending certain laws (the Packaging Act) and other related laws

Legislation enacted

Law adoption in progress as of 4 September 2024

Appointment of system operator

TBD

Expected system start

2026

Regulatory authority

Ministry of Environment

Legislated targets

› Collection:

- › 2026: plastic (72% by weight), metal (72% by weight)
- › 2027: plastic (82% by weight), metal (82% by weight)
- › 2028: plastic (87% by weight), metal (87% by weight)
- › 2029 and thereafter: plastic (91.5% by weight), metal (90% by weight)

Scope

Material type

Plastic (PET), metal

Beverage type

Non-alcohol and alcohol beverages including wines, fruit and other wines, cider, perry and mead, beer and beer-based beverages, beverage concentrates including syrups

Size

100ml to 3L (0.03 to 0.79 gal)

Excluded

Milk and milk-based beverages (including yogurt beverages)

Is there a DRS for refillables?

Yes (31% refillable market share in 2024)

Deposits & fees

Deposit initiator

Filler

Deposit value

› **Flat rate:** TBD (expected to be Kč 4 to Kč 5) (€0.16-€0.20, USD\$0.18-\$0.22)

Handling fee

TBD

Producer fee

TBD



System structure & administration

Clearing system

Centralised

System operator

TBD – will be appointed by the Minister of Environment. The law allows for one authorised entity composed of fillers' associations and retailers/retailer associations.

System finance

TBD

Unredeemed deposits

15% will be allocated to municipalities; should the minimum collection targets not be achieved, the system operator is required to transfer 85% of the unredeemed deposits from the shortfall to the State budget

Material owner

System operator

Container return & refund points

Collection model

Return-to-Retail

Online take-back? Yes

Number of collection points

TBD

Barcode-based system?

Yes

Population per collection point

TBD

Container deposit markings

TBD

Method of return

TBD

Refund payment options

Cash

Money, material & data flow

TBD



England

Population: 57.7m

Population density: 434.0/km²

GDP per capita, PPP (international \$): 58,906.2
(United Kingdom)



Sources

- 1) Department for Environment Food & Rural Affairs (DEFRA), Welsh Government, and Department of Agriculture, Environment and Rural Affairs. 30 January 2023. "Introducing a Deposit Return Scheme for drinks containers in England, Wales and Northern Ireland." Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1130296/DRS_Government_response_Jan_2023.pdf
- 2) Department for Environment Food & Rural Affairs (DEFRA). 25 April 2024. "Policy paper - Deposit Return Scheme: glass drinks containers UK government policy statement." Available at: <https://www.gov.uk/government/publications/deposit-return-scheme-for-drinks-containers-policy-statements/deposit-return-scheme-glass-drinks-containers-uk-government-policy-statement>
- 3) Ecoveritas. "Deposit Return Schemes – All You Need To Know." Available at: <https://www.ecoveritas.com/deposit-return-schemes-all-you-need-to-know/#5>
- 4) UK Government, Welsh Government, Scottish Government and DAERA. 25 April 2024. "Policy paper: Deposit Return Scheme for drinks containers: joint policy statement." Available at: <https://www.gov.uk/government/publications/deposit-return-scheme-for-drinks-containers-policy-statements/deposit-return-scheme-for-drinks-containers-joint-policy-statement>

Legislative framework

Name of legislation

TBD – Draft regulations (The Deposit Scheme for Drinks Containers [England and Northern Ireland] Regulations 2024) have been laid before Parliament under section 143(5) of the UK Environment Act 2021, for approval by resolution by each House of Parliament

Legislation enacted

TBD

Appointment of system operator

TBD

Expected system start

October 2027

Regulatory authority

Environment Agency (EA)

Legislated targets

› Collection:

- › Year 1: 70%
- › Year 2: 80%
- › Year 3 and thereafter¹: overall (90%), plastic (85%), metal (85%)

Scope

Material type²

Plastic (PET), metal (steel, aluminium)

Beverage type

All

Size

150ml to 3L (0.04 gal to 0.8 gal) (containers sold both individually and as part of a multipack)

Excluded²

Individual product lines up to 5,000 units, glass

Is there a DRS for refillables?

No (<1% refillable market share across the UK; national market share unknown)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

TBD – the intention is to establish a consistent deposit level across the UK, which could either be a flat or variable rate, and will be determined by the system operator

Handling fee

TBD

Producer fee

TBD

Note: Waste and recycling are devolved responsibilities within the UK, leading to three legally distinct DRSs: one in England and Northern Ireland, one in Wales, and one in Scotland. The UK Government, DAERA in Northern Ireland, the Scottish Government, and the Welsh Government have committed to ensuring these systems are as interoperable and seamless as possible for consumers and businesses across the UK, while respecting the unique requirements and autonomy of each administration. To facilitate this interoperability, the UK Government, Welsh Government, Scottish Government, and the Department of Agriculture, Environment, and Rural Affairs of Northern Ireland (DAERA) released a joint policy paper in April 2024 in which they set out an updated timetable, as well as alignment on key aspects for introducing a DRS. It was followed by a statement on glass by UK Government. The policy paper notes that the final rollout phase will take place from Spring 2026 to Autumn 2027, with separate but interoperable schemes being introduced in Scotland and in Wales as well as a joint scheme for England and Northern Ireland to run from October 2027.

The information presented in this chapter is based on details presented in the joint policy paper as well as written statements published by the UK Government Department for Environment, Food and Rural Affairs (DEFRA). It is current as of the time of writing but is expected to evolve once a deposit management organisation (i.e., system operator) is appointed and once the new UK Government confirms the policy positions for England.



System structure & administration

Clearing system

Centralised

System operator

TBD – separate deposit management organisations (DMOs) will be appointed to manage the schemes in England and Northern Ireland, Scotland, and Wales, each operating under the specific legislation of their respective administration. Although it is not a requirement, the UK Government, DAERA, the Scottish Government, and the Welsh Government recognise the benefits of having a single organisation to administer DRS across the UK and will encourage industry to consider forming a DMO that reflects this model. To support this approach, all four governments are working to coordinate the application process, requiring applicants to demonstrate how they will collaborate with DMOs appointed in other UK jurisdictions.

System finance

Unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Stores that are required to operate a collection point can apply for an exemption based on either health and safety concerns or their proximity to an existing collection point.

Collection points will be required to accept returns of containers purchased from anywhere within the UK. However, they will not be obligated to accept containers that fall outside the scope of the specific administration where they are based (e.g., if glass containers are not part of the DRS in a particular jurisdiction, collection point operators in that area will not be required to accept glass).

Online take-back?

No³

Number of collection points

TBD

Population per collection point

TBD

Method of return

Retailers will be able to decide how containers are accepted (manually or via RVM)

Barcode-based system?

Yes

Container deposit markings

TBD – system operators (DMOs) across the UK are expected to collaborate on creating a unified logo for all DRS containers, along with establishing a consistent system for using identification markers, such as barcodes or QR codes, on these containers.

Refund payment options

TBD

Container return & refund points

Collection model

Return-to-Retail: Eligible supermarkets and convenience stores will be required to take back containers. Other establishments selling in-scope containers (i.e., hospitality venues, food-to-go stores, schools, gyms, sports or recreation centres) will not be obligated to operate a collection point but may apply to do so voluntarily. Additionally, it is planned that retailers $\leq 100\text{m}^2$ ($1,076\text{ ft}^2$) in urban areas will be exempt.

Money, material & data flow

TBD

¹ Each material must achieve a minimum 85% collection rate to prevent one material subsidising the 90% target for others.

² The previous UK Government excluded glass from England's DRS in March 2022, incorporating glass containers in other planned Extended Producer Responsibility legislation. The current UK Government has yet to confirm its policy position for DRS in England.

³ After extensive consultation with industry and analysis of schemes in other countries the UK Government, DAERA, the Scottish Government, and the Welsh Government jointly decided against mandating online take-back. However, they will work with retailers and prospective system operators through an industry working group to explore options, including voluntary solutions.



Goa (India)

Population: **1.5m**

Population density: **394.0/km²**

National (India) GDP per capita,
PPP (international \$): **10,175.8**



Sources

- 1) De Souza, G. 9 August 2023. "Goa amends Bill to impose 'deposit scheme' on single-use plastic purchases." Available at: <https://www.hindustantimes.com/cities/others/lmc-issues-fresh-bills-for-garbagecollection-101706549289263.html>
- 2) Government of Goa. Official Gazette. Series I No. 20. Available at: <https://goaprintingpress.gov.in/downloads/2425/2425-20-SI-OG-0.pdf>
- 3) "Now, pay extra for packaged goods and get refund on returning the plastic back." 1 August 2023. Available at: <https://digitalgoa.com/now-pay-extra-for-packaged-goods-and-get-refund-on-returning-the-plastic-back/>

Legislative framework

Name of legislation

Procedure for collection, deposit of the non-biodegradable garbage, made under the Goa Non-Biodegradable Garbage (Control) (Amendment) Act, 2023

Legislation enacted

16 August 2024

Appointment of system operator

TBD

Expected system start

TBD – 2025

Regulatory authority

Department of Environment, Forest, and Climate Change (Government of Goa)

Legislated targets

TBD

Scope

Material type

› Expected Phase 1:

› Plastic (PET), metal (aluminium), glass

› Expected Phase 2:

› Liquid paperboard, multi-layered packaging

Beverage type

All

Size

All

Excluded

Milk and dairy beverages

Is there a DRS for refillables?

No (13% refillable market share across India in 2024; state-level market share unknown)

Deposits & fees

Deposit initiator

Producers/Distributors/Importers

Deposit value

TBD – likely a variable-rate

› Liquor: INR 5 (€0.05, USD\$0.06)

› Non-alcohol: INR 3 (€0.03, USD\$0.04)

Handling fee

TBD

Producer fee

TBD – will be a combination of Reverse Collection Fee [RCF] and 'Annual Scheme Participation Fee'



System structure & administration

Clearing system

Centralised

System operator

TBD – a private operator will be appointed through a competitive tendering process

System finance

Portion of unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-depot: There will be no legal obligation for retailers to take back containers.

Number of collection points

TBD

Container deposit markings

Containers must be marked (printed or embossed) with a unique serialised identifier (QR code)

Population per collection point

TBD

Method of return

TBD

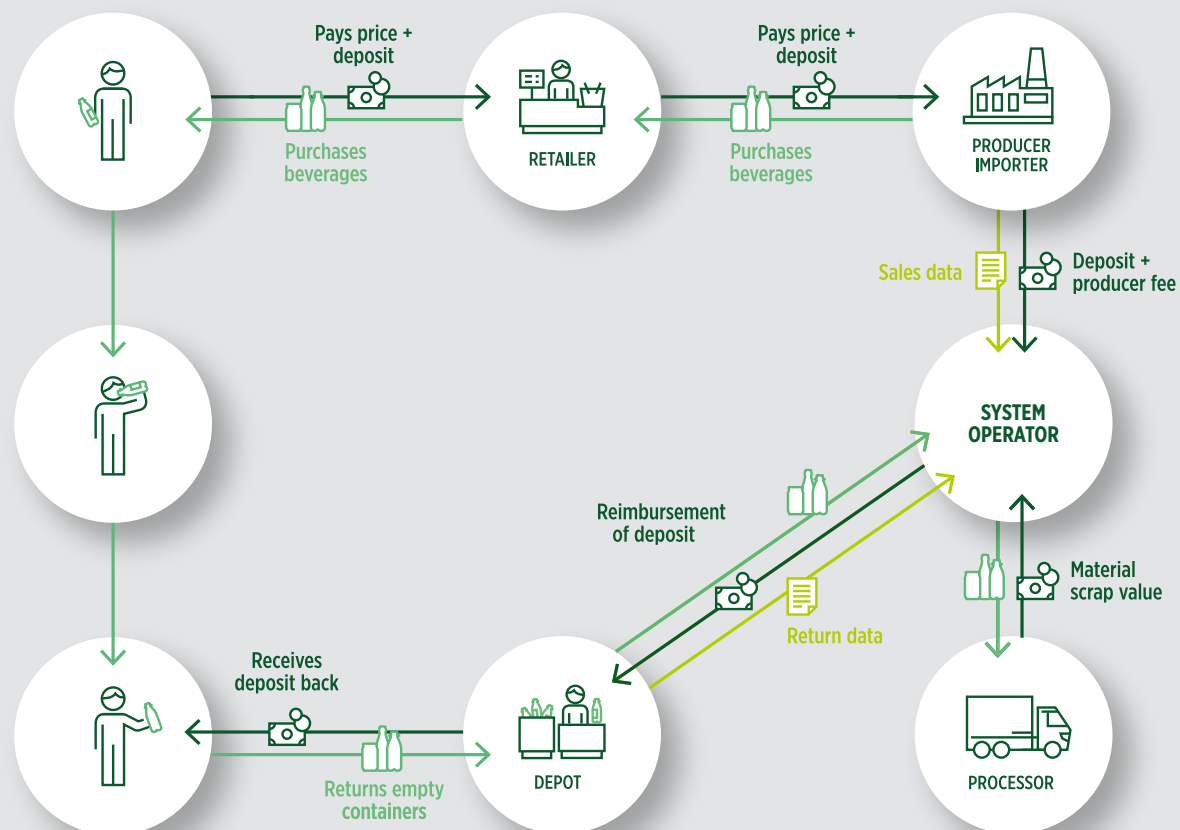
Barcode-based system?

Yes

Refund payment options

Cash, electronic funds transfer (direct credit to account)

Money, material & data flow



Northern Ireland

Population: **1.9m**

Population density: **133.3/km²**

GDP per capita, PPP (international \$): **58,906.2**
(United Kingdom)



Sources

- 1) Ecoveritas. "Deposit Return Schemes – All You Need To Know." Available at: <https://www.ecoveritas.com/deposit-return-schemes-all-you-need-to-know/#5>
- 2) Department for Environment Food & Rural Affairs (DEFRA), Welsh Government, and Department of Agriculture, Environment and Rural Affairs. 30 January 2023. "Introducing a Deposit Return Scheme for drinks containers in England, Wales and Northern Ireland." Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1130296/DRS_Government_response_Jan_2023.pdf
- 3) UK Government, Welsh Government, Scottish Government and DAERA. 25 April 2024. "Policy paper: Deposit Return Scheme for drinks containers: joint policy statement." Available at: <https://www.gov.uk/government/publications/deposit-return-scheme-for-drinks-containers-policy-statements/deposit-return-scheme-for-drinks-containers-joint-policy-statement>

Legislative framework

Name of legislation

TBD – Draft regulations (The Deposit Scheme for Drinks Containers [England and Northern Ireland] Regulations 2024) have been laid before Parliament under section 143(5) of the UK Environment Act 2021, for approval by resolution by each House of Parliament

Legislation enacted

TBD

Appointment of system operator

TBD

Expected system start

October 2027

Regulatory authority

Northern Ireland Environment Agency (NIEA)

Legislated targets

› Collection:

- › Year 1: 70%
- › Year 2: 80%
- › Year 3 and thereafter¹: overall (90%), plastic (85%), metal (85%)

Scope

Material type²

Plastic (PET), metal (steel, aluminium)

Beverage type

TBD

Size

150ml to 3L (0.04 - 0.79 gal) (containers sold both individually and as part of a multipack)

Excluded²

Glass

Is there a DRS for refillables?

No (<1% refillable market share across the UK in 2024; national market share unknown)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

TBD by system operator – the intention is to establish a consistent deposit rate across the UK, which could be flat or variable

Handling fee

TBD

Producer fee

TBD

Note: Waste and recycling are devolved responsibilities within the UK, leading to three legally distinct DRSs: one in England and Northern Ireland, one in Wales, and one in Scotland. The UK Government, DAERA in Northern Ireland, the Scottish Government, and the Welsh Government have committed to ensuring these systems are as interoperable and seamless as possible for consumers and businesses across the UK, while respecting the unique requirements and autonomy of each administration. To facilitate this interoperability, the UK Government, Welsh Government, Scottish Government, and DAERA released a joint policy paper in April 2024 in which they set out an updated timetable, as well as alignment on key aspects for introducing a DRS. The policy paper notes that the final rollout phase will take place from Spring 2026 to Autumn 2027, with separate but interoperable schemes being introduced in Scotland, Wales, as well as a joint scheme for England and Northern Ireland to run from October 2027.

The information presented in this chapter is based on details presented in the joint policy paper as well as written statements published by DAERA. It is current as of the time of writing but is expected to evolve once a deposit management organisation (i.e., system operator) is appointed.



System structure & administration

Clearing system

Centralised

System operator

TBD – separate deposit management organisations (DMOs) will be appointed to manage the schemes in England and Northern Ireland, Scotland, and Wales, each operating under the specific legislation of their respective administration. Although it is not a requirement, the UK Government, DAERA, the Scottish Government, and the Welsh Government recognise the benefits of having a single organisation to administer DRS across the UK and will encourage industry to consider forming a DMO that reflects this model. To support this approach, all four governments are working to coordinate the application process, requiring applicants to demonstrate how they will collaborate with DMOs appointed in other UK jurisdictions.

System finance

Unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Stores that are required to operate a collection point can apply for an exemption based on either health and safety concerns or their proximity to an existing collection point.

Collection points will be required to accept returns of deposit containers purchased from anywhere within the UK. However, they will not be obligated to accept containers that fall outside the scope of the specific administration where they are based (e.g., if glass containers are not part of the DRS in a particular jurisdiction, collection point operators in that area will not be required to accept glass bottles).

Online take-back?

No³

Number of collection points

TBD

Population per collection point

TBD

Method of return

Individual retailers can choose to install a RVM or accept returns manually

Barcode-based system?

Yes

Container deposit markings

TBD – system operators (DMOs) across the UK are expected to collaborate on creating a unified logo for all DRS containers, along with establishing a consistent system for using identification markers, such as barcodes or QR codes, on these containers.

Refund payment options

TBD

Container return & refund points

Collection model

Return-to-Retail: Most supermarkets and convenience stores will be required to take-back containers. Other establishments selling in-scope containers (i.e., hospitality venues, food-to-go stores, schools, gyms, sports or recreation centres) will be exempt but may apply to serve as a collection point voluntarily. Additionally, it is planned that retailers ≤100m² (1,076ft²) in urban areas will be exempt.

Money, material & data flow

TBD

¹ Each material must achieve a minimum 85% collection rate to prevent one material from subsidising the 90% target for others.
² DAERA followed the UK Government's lead in excluding glass for Northern Ireland's DRS in March 2022, incorporating glass containers in other planned Extended Producer Responsibility legislation. However, DAERA has left the door open to revisiting the inclusion of glass in the DRS.
³ After extensive consultation with industry and analysis of schemes in other countries, the UK Government, DAERA, the Scottish Government, and the Welsh Government jointly decided against mandating online take-back for DRS containers. However, they will work with retailers and prospective system operators through an industry working group to explore options, including voluntary solutions.



Poland

Population: **36.6m**

Population density: **121.1/km²**

GDP per capita, PPP (international \$): **49,464.0**

System operator's website:



Sources

- 1) Decyzja Ministra Klimatu i Środowiska o wydaniu zezwolenia dla drugiego operatora systemu kaucyjnego – Ministerstwo Klimatu i Środowiska – Portal Gov.pl (www.gov.pl)
- 2) "Kolejny operator systemu kaucyjnego z oficjalnym zezwoleniem od Ministra Klimatu i Środowiska." 23 July 2024. Available at: <https://www.gov.pl/web/klimat/kolejny-operator-systemu-kaucyjnego-z-oficjalnym-zezwoleciem-od-ministra-klimatu-i-srodowiska>
- 3) Notes from Poland. 14 July 2023. "Polish parliament approves bottle deposit system to boost recycling." Available at: <https://notesfrompoland.com/2023/07/14/polish-parliament-approves-bottle-deposit-system-to-boost-recycling/>
Zmiany w systemie kaucyjnym (prawo.pl)
- 4) Pierwszy operator systemu kaucyjnego z oficjalnym zezwoleniem od Ministra Klimatu i Środowiska – Ministerstwo Klimatu i Środowiska – Portal Gov.pl (www.gov.pl)
- 5) <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20240000927>
- 6) Polish climate ministry postpones deposit-return scheme by 6 months." 18 October 2024. Available at: <https://biznes.pap.pl/wiadomosci/gospodarka/polish-climate-ministry-postpones-deposit-return-scheme-6-months#:~:text=Poland's%20Ministry%20of%20Climate%20and,at%20the%20beginning%20of%202025.>

Legislative framework

Name of legislation

Act of Law on Changes in Act on Packaging and Packaging Waste

Legislation enacted

13 July 2023

Appointment of system operators

- › 18 March 2024 (ZWROTKA S.A.)
- › 10 June 2024 (POLKA S.A.)
- › 17 July 2024 (OK Operator Kaucyjny S.A.)

Expected system start

The scheme was set to begin on 1 January 2025. However, in October 2025, the Ministry of Climate and Environment submitted a draft amendment to the Council of Ministers, which – if adopted – would postpone the start of the scheme to 1 October 2025.

Regulatory authority

Ministry of Climate and Environment

Legislated targets

- › **Collection for recycling:**
- › 2025: 77%
- › 2026: 81%
- › 2027: 87%
- › 2028 and thereafter: 90%

Scope

Material type

Plastic, metal

Beverage type

All

Size

› **Dependent on material:**

- › Plastic ≤ 3L (0.79 gal)
- › Metal ≤ 1L (0.26 gal)

Excluded

Alcohol bottles ≤ 200ml (malpki), cardboard boxes

Is there a DRS for refillables?

Yes (23% refillable market share in 2024)

Deposits & fees

Deposit initiator

TBD

Deposit value¹

› **Flat rate:** 0.50 PLN (€0.12, USD\$0.13)

Handling fee

TBD

Producer fee

TBD (will be confidential)



System structure & administration

Clearing system

Decentralised

System operators

As of August 2024, there are three approved operators: Zwrotka SA, PolKa S.A., and OK Operator Kaucyjny S.A.

System finance

Unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operators

Material owner

System operators

Container return & refund points

Collection model

Return-to-retail: Retailers >200m² (2,153 ft²) must take back containers. Smaller stores can join the scheme voluntarily.

Online take-back? No

Number of collection points

TBD

Container deposit markings

Containers must include information about the deposit amount

Population per collection point

TBD

Refund payment options

Cash

Method of return

TBD

Barcode-based system?

TBD

Money, material & data flow

TBD

¹The legislator stipulates a maximum deposit value of 2 PLN (€0.47, USD\$0.51).



Portugal

Population: **10.6m**

Population density: **114.4/km²**

GDP per capita, PPP (international \$): **48,758.9**

System operator's website:



Sources

- 1) "New recycling refund rule approved." 12 March 2024. The Portugal News. Available at: <https://www.theportugalnews.com/news/2024-03-12/new-recycling-refund-rules-approved/86842#:~:text=The%20Ministry%20of%20the%20Environment,beverage%20packaging%2C%20but%20not%20glass,>
- 2) <https://sdrportugal.pt/en/>

Legislative framework

Name of legislation

Decree-Law no. 24/2024 of March 26, Article 30

Legislation enacted

March 2024

Appointment of system operator

June 2024

Expected system start

TBD – possibly 2026

Regulatory authority

Ministry of Environment (in agreement with the Ministry of Commerce), Agência Portuguesa do Ambiente (APA, Portuguese EPA monitoring body)

Legislated targets

› Collection:

- › 70% by end of 2026
- › 80% by end of 2027
- › 90% by end of 2029

Scope

Material type

Plastic, metal (aluminium, ferrous metal)

Beverage type

Mineral and spring waters, soft drinks (including tea, coffee, and herbal drinks), energy and isotonic drinks, juices, nectars, fruit and vegetable mixes, concentrates for dilution, beer, cider, alcoholic mixes

Size

≤3L (0.79 gal)

Excluded

Beverages containing >25% of ingredients of dairy origin, beverages containing >10% alcohol

Is there a DRS for refillables?

Yes, for the HORECA sector (15% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Distributor/Importer

Deposit value

TBD – likely be a variable rate:

- › Containers <1L (0.26 gal): €0.05-€0.10 (USD\$0.06-\$0.11)
- › Containers ≥1L (0.26 gal): €0.10-€0.15 (USD\$0.11-\$0.17)

Not subject to tax

Handling fee

TBD

Producer fee

TBD

Note: In December 2018, the government announced that from 1 January 2022, a DRS for single-use drinks containers made of plastic, glass, and metal would become mandatory. On 8 March 2024, the President of the Republic of Portugal promulgated the UNILEX decree, which contains the DRS regulation. Depending on the adoption of the relevant by-laws, the system could start in Q1/Q2 2026. All information presented below is simply indicative of what the scheme could likely look like, and as such, should not be taken as the actual law.



System structure & administration

Clearing system

Centralised

System operator

SDR Portugal (non-profit association made up of beverage companies and retailers; members include industry associations such as APIAM [Águas Minerais e de Nascente de Portugal] and PROBEB [Associação Portuguesa das Bebidas Refrescantes Não Alcoólicas], which together form the Circular Drinks Association, representing 90% of the refreshing beverage market. Retail members include major brands like Auchan, Intermarché, Lidl, Pingo Doce, MCSonae, Mercadona, makro, and Dia Portugal, forming the SDRetalhistas Association, which covers over 80% of the Portuguese retail distribution market)

System finance

Unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operator (starting from year 3, if the collection target is not met, the exceeding unredeemed deposits [i.e., the missing 10% to reach the 90% collection target] will be transferred to the Environment Fund and the Fund for Consumer Right)

Material owner

System operator

Container return & refund points

Collection model

Return-to-retail: Stores >400m² (4,306 ft²) must take-back all deposit containers, while stores 50m² to 400m² (538 ft² – 4,306 ft²) are required to collect only the containers they sell. Exemptions exist for stores that demonstrate inadequate facilities for collection, provided there is a sufficient density of alternative collection points nearby. Additionally, stores ≤50m² are exempt from accepting returns; they may, however, opt to establish a collection point in collaboration with the system operator.

Online take-back? TBD

Number of collection points

TBD

Population per collection point

TBD

Method of return

TBD – likely a mix of automated and manual

Barcode-based system?

Yes

Container deposit markings

Containers must be marked with a deposit symbol, including deposit value

Refund payment options

TBD

Money, material & data flow

TBD



Scotland

Population: 5.4m

Population density: 69.9/km²

GDP per capita, PPP (international \$): 58,906.2
(United Kingdom)



Sources

- 1) UK Government, Welsh Government, Scottish Government and DAERA. 25 April 2024. "Policy paper: Deposit Return Scheme for drinks containers: joint policy statement." Available at: <https://www.gov.uk/government/publications/deposit-return-scheme-for-drinks-containers-policy-statements/deposit-return-scheme-for-drinks-containers-joint-policy-statement>
- 2) Zero Waste Scotland. "Scheme Design: How the deposit return scheme will operate across Scotland." Available at: <https://depositreturnscheme.zerowastescotland.org.uk/scheme-design>

Legislative framework

Name of legislation

The Deposit and Return Scheme for Scotland Regulations

Legislation enacted

May 2020 (The Scottish Government will make amendments to the legislation, where required, to give effect to the policy positions set out in the UK's April 2024 Policy Paper. Any such amending legislation will require approval by the Scottish Parliament.)

Appointment of system operator

TBD

Expected system start

October 2027 (Initially scheduled for April 2021, the system faced delays to July 2022 and August 2023. On 2 June 2023, it was announced that the system would be delayed to October 2025 following the UK Government decision on only a partial exclusion from the UK Internal Market Act for the Scottish DRS. In April 2024, it was announced that with the agreement of the devolved governments across the UK, the start date would be pushed further to October 2027.)

Regulatory authority:

Scottish Environment Protection Agency (SEPA)

Legislated targets:

› Collection:

- › Year 1: 70%
- › Year 2: 80%
- › Year 3 and thereafter¹: overall (90%), plastic (85%), metal (85%), glass (85%)

Scope

Material type²

Plastic (PET), metal (steel, aluminium), glass

Beverage type

All

Size

150ml to 3L (0.04 – 0.79 gal) (containers sold both individually and as part of a multipack, the latter to take account of Minimum Unit Pricing requirements)

Excluded²:

Individual product lines up to 5,000 units

Is there a DRS for refillables?

No (<1% refillable market share across the UK in 2024; national market share unknown)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

TBD by system operator (the goal is to establish a consistent deposit rate across the UK, which could be flat or variable)

Handling fee

TBD

Producer fee

TBD

Note: On 7 June 2023, the Scottish Government confirmed that Scotland's planned deposit return scheme – originally slated to launch in August 2023 – would be formally delayed until at least October 2025, to bring it in line with the launch of a UK-wide scheme. In April 2024, the UK Government, Welsh Government, Scottish Government and the Department for Agriculture and Rural Affairs (DAERA) in Northern Ireland released a joint policy paper in which they set out an updated timetable, as well as alignment on key aspects for introducing a DRS. The policy paper notes that the final rollout phase will take place from Spring 2026 to Autumn 2027, with separate but interoperable schemes being introduced in Scotland and in Wales, as well as a joint scheme for England and Northern Ireland to run from October 2027. The information presented in this chapter is based on details presented in the joint policy paper as well as the existing Scottish regulations. It is current as of the time of writing but is expected to evolve once a deposit management organisation (i.e., system operator) is appointed and once the new UK Government confirms the policy positions for England.



System structure & administration

Clearing system

Centralised

System operator

TBD – separate deposit management organisations (DMOs) will be appointed to manage the schemes in England and Northern Ireland, Scotland, and Wales, each operating under the specific legislation of their respective administration. Although it is not a requirement, the UK Government, DAERA, the Scottish Government, and the Welsh Government recognise the benefits of having a single organisation to administer DRS across the UK and will encourage industry to consider forming a DMO that reflects this model. To support this approach, all four governments are working to coordinate the application process, requiring applicants to demonstrate how they will collaborate with DMOs appointed in other UK jurisdictions.

System finance

Unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Additionally, it is planned that retailers $\leq 100\text{m}^2$ (1,076ft²) in urban areas will be exempt.

Stores that are required to operate a collection point can apply for an exemption based on either health and safety concerns or their proximity to an existing collection point.

Collection points will be required to take back containers purchased from anywhere within the UK. However, they will not be obligated to accept containers that fall outside the scope of the specific administration where they are based (e.g., if glass containers are not part of the DRS in a particular jurisdiction, collection point operators in that area will not be required to accept glass bottles).

Online take-back?

No³

Number of collection points

TBD

Population per collection point

TBD

Method of return

Retailers will have the choice of whether to install an RVM or accept returns manually

Barcode-based system?

Yes

Container deposit markings

TBD – system operators (DMOs) across the UK are expected to collaborate on creating a unified logo for all DRS containers, along with establishing a consistent system for using identification markers, such as barcodes or QR codes, on these containers.

Refund payment options

TBD

Container return & refund points

Collection model

Return-to-Retail: Most supermarkets and convenience stores will be required to take back containers. Other establishments selling in-scope containers (i.e., hospitality venues, food-to-go stores, schools, gyms, sports or recreation centres) will not be obligated to operate a collection point but may apply to do so voluntarily.

Money, material & data flow

TBD

¹ Each material must achieve a minimum 85% collection rate to prevent one material from subsidising the 90% target for others.

² Scotland remains committed to the inclusion of glass containers as soon as possible. Its position will be updated once the new UK Government confirms the material scope for England.

³ After extensive consultation with industry and analysis of schemes in other countries, the UK Government, DAERA, the Scottish Government, and the Welsh Government jointly decided against mandating online take-back for DRS containers. However, they will work with retailers and prospective system operators through an industry working group to explore options, including voluntary solutions. Further consultation is planned with protected characteristics groups.



Singapore

Population: **5.9m**

Population density: **8,058.9/km²**

GDP per capita, PPP (international \$): **141,500.2**

System operator's website: **TBD**



Sources

- (1) Hicks, R. 29 April 2024. "Singapore's polluter-pays scheme faces further delay amid concern over industry stalling tactics." Eco-Business. Available at: <https://www.eco-business.com/news/singapores-polluter-pays-scheme-faces-further-delay-amid-concern-over-industry-stalling-tactics/>
- (2) National Environment Agency. "Beverage Container Return Scheme." Available at: <https://www.nea.gov.sg/our-services/waste-management/beverage-container-return-scheme>
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Legislative framework

Name of legislation

Resource Sustainability (Producer Responsibility Schemes) Regulations (2021), made under the Resource Sustainability (Amendment) Act (2023)

Legislation enacted

22 March 2023

Appointment of system operator

29 July 2024

Expected system start

1 April 2026 (initially scheduled for mid-2024, first delay to April 2025, second delay to April 2026; there will be a transition period until 30 June 2026 to allow the beverage and retail industry to clear older stocks, which are ineligible for refunds)

Regulatory authority

National Environment Agency

Legislated targets

› Collection:

- › Year 1: 60%
- › Year 2: 70%
- › Year 3 and thereafter: 80%

Scope

Material type

Plastic, metal

Beverage type

All sealed beverages

Size

150ml to 3L (0.04 – 0.79 gal)

Excluded

None

Is there a DRS for refillables?

No (8% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producers/Importers

Deposit value

› **Flat rate:** SGD\$0.10 (€0.07, USD\$0.08) (not subject to GST)

Handling fee

TBD

Producer fee

TBD



System structure & administration

Clearing system

Centralised

System operator

Beverage Container Return Scheme Ltd (BCRS Ltd.) (not-for-profit company formed by a consortium of beverage producers comprising Coca-Cola Singapore Beverages, F&N Foods and Pokka)

System finance

Unredeemed deposits, producer fees, material revenues

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Retail: Supermarkets >200m² (2,153 ft²) will be required to establish collection points. Additional return points in community spaces (e.g., community clubs, town centres) will also be explored.

Online take-back? Unknown

Number of collection points

TBD – the system operator is required to establish more than 1,000 return points prior to system start

Population per collection point

TBD

Barcode-based system?

Yes

Method of return

TBD

Container deposit markings:

TBD

Refund payment options

Cash

Money, material & data flow

TBD



Tasmania (Australia)

Population: **0.6m**

Population density: **8.4/km²**

National (Australia) GDP per capita,
PPP (international \$): **69,114.7**

Regulator's website:



Sources

- (1) Korycki, L. 25 September 2024. "TasRecycle, TOMRA Cleanaway appointed to Tasmanian container refund scheme." Waste Management Review. Available at: <https://wastemanagementreview.com.au/tasrecycle-tomra-cleanaway-appointed-to-tasmanian-container-refund-scheme/>
- (2) Office of Parliamentary Counsel. "Tasmania – Container Refund Scheme Regulations 2023, Statutory Rules 2023. Consultation Draft." Available at: <https://nre.tas.gov.au/Documents/Container%20Refund%20Scheme%20Regulations%20-%20Consultation%20Draft%202023.pdf>
- (3) Tasmanian Government. "Draft Container Refund Regulations 2023 – Explanatory Paper." Available at: <https://nre.tas.gov.au/Documents/Explanatory%20Paper%20-%20Draft%20Container%20Refund%20Scheme%20Regulations.pdf>
- (4) Tasmanian Government Department of Natural Resources and Environment Tasmania. April 2022. "Refund Point Infrastructure – Tasmania's Container Refund Scheme – Background document." Available at: https://planningreform.tas.gov.au/_data/assets/pdf_file/0005/706901/Refund-Point-Infrastructure-Tasmanias-Container-Refund-Scheme-April-2022.pdf

Legislative framework

Name of legislation

Container Refund Scheme Regulations 2023, under the Container Refund Scheme Act 2022

Legislation enacted

10 March 2022

Appointment of scheme coordinator and network operator

25 September 2024

Expected system start

Initially scheduled for 2022, but was delayed to 2023, and subsequently postponed to 2024. It is now expected to launch by mid-2025.

Regulatory authority

Department of Natural Resources and Environment Tasmania

Legislated targets

Accessibility: TBD – the minimum 'Community Access Standard' will set out a minimum number of collection points together with stipulations around distance between collection points and population size

Scope

Material type

Plastic, metal (aluminium), glass, liquid paperboard

Beverage type

Sealed, ready-to-serve drinks including soft drinks, juice, bottled waters, small flavoured milk drinks, beer and cider, sports drinks, and spirit-based mixed drinks

Size

150ml to 3L (0.04 – 0.79 gal)

Excluded

Plain milk (or milk substitutes), flavoured milk \geq 1L, pure fruit or vegetable juice \geq 1L, glass wine and spirit bottles, bag-in-box containers for wine and water \geq 1L, sachets for wine \geq 250L, cordials, concentrated juices, registered health tonics

Is there a DRS for refillables?

No (0% refillable market share in 2024)

Deposits & fees

Deposit initiator

Producer/Importer

Refund value

› **Flat rate:** AUD\$0.10 (€0.06, USD\$0.07)

Handling fee

TBD

Producer fee

TBD

Processing refund

AUD\$0.10 (€0.06, USD\$0.07) (Paid to MRF operators for each deposit container collected via kerbside recycling; MRFs must negotiate a refund sharing agreement with local councils supplying the kerbside material. This arrangement must be approved by the local council. The scheme coordinator is not obliged to pay refunds to a MRF operator unless such an arrangement is in place.)

Note: The draft Container Refund Scheme Regulations 2023 were released for public consultation on 3 May 2023, outlining key operational details stemming from the Container Refund Scheme Act 2022. The consultation period concluded in June 2023, with the state government subsequently committing to implementing the scheme in 2024, though a specific start date has yet to be announced.



System structure & administration

Clearing system

Centralised

Scheme coordinator¹

TasRecycle Limited (not-for-profit entity formed by Lion Pty Ltd, Coca-Cola Europacific Partners and Asahi Beverages)

Network operator¹

TOMRA Cleanaway (50/50 joint venture partnership between TOMRA, a provider of advanced sorting technologies and RVMs, and Cleanaway, a waste and resource recovery company)

System finance

Producer fees, material revenues

Unredeemed deposits²

Not applicable

Material owner

Network operator

Container return & refund points

Collection model

TBD – a range of collection point types is expected, including RVMs, depots, and over-the-counter services in existing shops.

Online take-back? No

Number of collection points

TBD – 49 collection points are expected, including in every city, and on King and Flinders Islands.

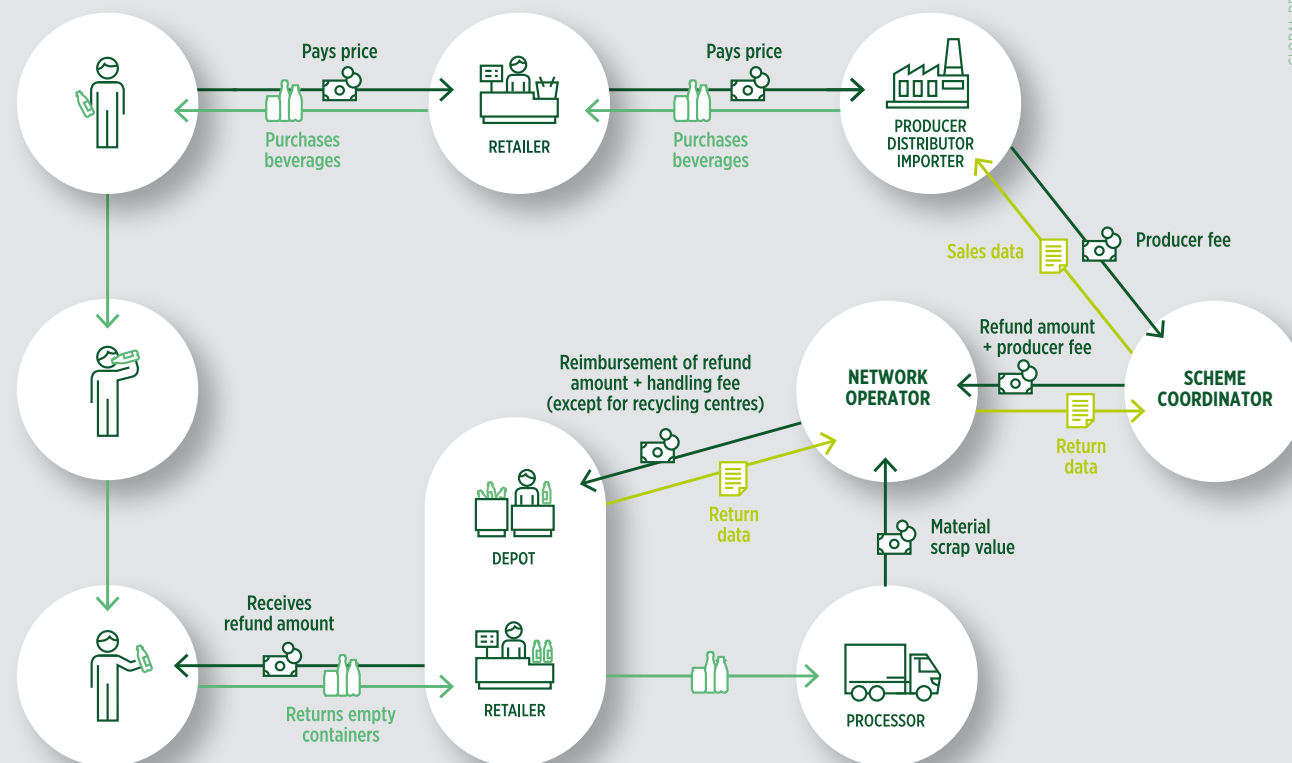
Population per collection point

TBD

Method of return

TBD

Money, material & data flow



Barcode-based system?

Partial – While containers will be required to have barcodes on the label (after a transition period), this is primarily for quality control during audits rather than for tracking or verification. Other methods of container tracking, such as manual counts, can also be employed.

Container deposit markings

Containers must display the following words “10c refund at collection depots/points in participating State/Territory of purchase”

Refund payment options

TBD

¹ Tasmania's split-responsibility governance model will involve both a scheme coordinator and network operator(s) jointly managing the system. The scheme coordinator handles financial management, auditing, fraud identification, verification, community education and marketing services, supplier management, and ensures the scheme meets state-wide performance targets. Meanwhile, the network operator is responsible for establishing and managing return points, overseeing logistics, and selling collected materials to ensure containers are recycled.

² The law does not mandate a specific 'deposit' be paid on beverage containers but requires that refunds be provided to consumers who return containers at refund points. Consequently, there is no accumulation of unredeemed deposits. Instead, the scheme coordinator will charge producers a 'producer fee,' which is calculated based on the number of containers returned and the revenues generated from selling the recycled materials.



Türkiye

Population: **85.3m**

Population density: **110.9/km²**

GDP per capita, PPP (international \$): **44,151.0**

Regulatory authority's website:



Sources

- (1) CMS-Law Now. 17 September 2021. "Turkey introduces new Packaging Waste Management Regulation." Available at: <https://www.cms-lawnow.com/ealerts/2021/09/turkey-introduces-new-packaging-waste-management-regulation>
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- (3) "Türkiye to launch \$149.14M deposit return system in 2025." 14 August 2024. Available at: <https://www.turkiyetoday.com/lifestyle/turkiye-to-launch-149-14m-deposit-return-system-in-2025-39794/>
- (4) https://portal.dbys.gov.tr/doc/DBY_2613_DYS_Isaretli_Etiket_Ambalaj_ve_Ozel_Murekkep_Fire_ve_Atik_Yonetimi_Proseduru.pdf

Legislative framework

Name of legislation

Regulation on The Control of Packaging Wastes

Legislation enacted

26 June 2021

Appointment of system operator

TBD

Expected system start

January 2025 (originally scheduled for 2021; subsequently deferred to January 2022. A second, third, and fourth postponement pushed the date to January 2023, January 2024, and now January 2025)

Regulatory authority

Turkish Environment Agency

Legislated targets

None (although the law includes targets for recovery and recycling of various packaging materials, there are no targets specific to deposit containers)

Scope

Material type¹

Plastic (PET), metal (aluminium), glass

Beverage type¹

Beer (alcoholic and non-alcoholic), malt beverages, wine, soft drinks (carbonated and non-carbonated), water (carbonated and non-carbonated), energy drinks, sports drinks, juices/nectars, milk

Size

100ml to 3.01L (0.03 – 0.79 gal)

Excluded

None

Is there a DRS for refillables?

Yes (8% refillable market share in 2024)

Deposits & fees

Deposit initiator

TBD

Deposit value

TBD – likely a flat rate of 0.25 TRY (€0.01, USD\$0.01)

Handling fee

TBD

Producer fee

TBD



System structure & administration

Clearing system

TBD – likely centralised

System administrator

Türkiye Çevre Ajansı (TÜÇA) (government agency)

System operator

TBD

Network operator

TBD

System finance

TBD – likely producer fees and material revenues

Unredeemed deposits

TBD

Material owner

TBD

Container return & refund points

Collection model

Return-to-Retail: Shopping malls, stores, and chain markets with sales area >400m² (4,306ft²) that sell in-scope containers will be required to take them back. Chain markets <400m² (4,306ft²) must establish a collection point if the system operator requires it.

Number of collection points

TBD – there are plans to establish 5,000 collection points in 2025, expanding to 30,000 collection points by 2028

Population per collection point

TBD

Method of return

Unknown

Money, material & data flow

TBD

Barcode-based system?

TBD

Container deposit markings

Containers will be marked with the DYS logo, which is printed with special, non-reproducible ink, controlled by authorised manufacturers to prevent counterfeiting

Refund payment options

Mobile app/e-wallet (facilitated by the Real Estate Participation Bank of Türkiye)

¹ The system is expected to expand to HDPE plastic, composite, and other container types at a later date, which will be decided upon by the regulatory authority. The types of beverages covered will also expand as per a date set by the authority.



Uruguay

Population: **3.4m**

Population density: **19.4/km²**

GDP per capita, PPP (international \$): **34,061.5**

Website:



Sources

- 1) "Plan Vale Uruguay." <https://www.ciu.com.uy/wp-content/uploads/2023/06/Plan-Vale--Resumen-web.pdf>
- 2) "Plan Vale Uruguay." <https://www.ciu.com.uy/wp-content/uploads/2022/11/Informacion-Plan-Vale.pdf>
- 3) "Uruguay finalizes details of the incentive plan for packaging recycling." 29 November 2022. <https://www.bnamerica.com/en/news/uruguay-finalizes-details-of-the-incentive-plan-for-packaging-recycling>

Legislative framework

Name of legislation

Government Law 19,829 and Ministerial Resolution 271 of 2021

Legislation enacted

30 September 2019

Appointment of system operator

10 November 2023

Expected system start

TBD – 2026

Key updates

None

Regulatory authority

Environment Ministry

Legislated targets

Recycling: 50% of all single-use packaging material by December 2025

Scope

Material type

Plastic, metal, glass, liquid paperboard

Beverage type

Beer, beer mixes, alcohol beverage mixes, cider, wines and spirits, other fermented beverages, juices, nectars, soft drinks, water

Size

100ml to 3L (0.03 – 0.79 gal) plus Bidons (6 or 6.25L PET water bottles)

Excluded

Milk and dairy

Is there a DRS for refillables?

Yes (21% refillable market share in 2022)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

› **Flat rate:** 0.3 UYU (€0.01, USD\$0.01)

Handling fee

TBD



System structure & administration

Clearing system

TBD

System operator

Cámara de Industrias (Chamber of Industry)

System finance

TBD

Unredeemed deposits

Plan Vale Trust (commercial entity linked to the Chamber of Industry)

Material owner

Plan Vale Trust (commercial entity linked to the Chamber of Industry)

Container return & refund points

Collection model

Return-to-retail

Online take-back? TBD

Number of collection points

TBD

Barcode-based system?

TBD

Population per collection point

TBD

Container deposit markings

TBD

Method of return

Mix of manual and automated

Refund payment options

Cash, voucher

Money, material & data flow

TBD



Wales

Population: 3.2m

Population density: 149.1/km²

GDP per capita, PPP (international \$): 58,906.2 (UK)



Sources

- 1) Ecoveritas. "Deposit Return Schemes – All You Need To Know." Available at: <https://www.ecoveritas.com/deposit-return-schemes-all-you-need-to-know/#5>
- 2) UK Government Department for Environment Food & Rural Affairs (DEFRA), Welsh Government, and Department of Agriculture, Environment and Rural Affairs (DAERA). 30 January 2023. "Introducing a Deposit Return Scheme for drinks containers in England, Wales and Northern Ireland." Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1130296/DRS_Government_response_Jan_2023.pdf
- 3) UK Government, Welsh Government, Scottish Government and DAERA 25 April 2024. "Policy paper: Deposit Return Scheme for drinks containers: joint policy statement." Available at: <https://www.gov.uk/government/publications/deposit-return-scheme-for-drinks-containers-policy-statements/deposit-return-scheme-for-drinks-containers-joint-policy-statement>
- 4) Welsh Government. 25 April 2024. "Written Statement: Update on the Development of a Deposit Return Scheme." Available at: <https://www.gov.wales/written-statement-update-development-deposit-return-scheme>

Legislative framework

Name of legislation

TBD – The Welsh Government announced on 18 November 2024 its withdrawal from the 4 nation approach to appoint a Deposit Management Organisation in the UK due to issues relating to the UK Internal Market Act over the inclusion of glass. Instead the Welsh Government will bring forward legislation to the Senedd for a wider drinks container scheme intended to also include a plan for reuse.

Legislation enacted

TBD

Appointment of system operator

TBD

Expected system start

TBD

Regulatory authority

Natural Resources Wales (NRW)

Legislated targets

- › Year 1: 70%
- › Year 2: 80%
- › Year 3 and thereafter¹: overall (90%), plastic (85%), metal (85%)

Scope

Material type²

Plastic (PET), metal (steel, aluminium), glass

Beverage type

All

Size

150ml to 3L (0.04 gal to 0.8 gal) (containers sold both individually and as part of a multipack; the latter to take account of Minimum Unit Pricing requirements)

Excluded²

Individual product lines up to 5,000 units

Is there a DRS for refillables?

TBD (<1% refillable market share across the UK in 2024; national market share unknown)

Deposits & fees

Deposit initiator

Producer/Importer

Deposit value

TBD by system operator – the intention is to establish a consistent deposit rate across the UK, which could be flat or variable

Handling fee

TBD

Producer fee

TBD

Note: Waste and recycling are devolved responsibilities within the UK, leading to three legally distinct DRSs: one in England and Northern Ireland, one in Wales, and one in Scotland. The UK Government, DAERA in Northern Ireland, the Scottish Government, and the Welsh Government have committed to ensuring these systems are as interoperable and seamless as possible for consumers and businesses across the UK, while respecting the unique requirements and autonomy of each administration. To facilitate this interoperability, the UK Government, Welsh Government, Scottish Government, and DAERA released a joint policy paper in April 2024 in which they set out an updated timetable, as well as alignment on key aspects for introducing a DRS. It was followed by a statement on glass by the Welsh Government. The policy paper notes that the final rollout phase will take place from Spring 2026 to Autumn 2027, with separate but interoperable schemes being introduced in Scotland, Wales, as well as a joint scheme for England and Northern Ireland to run from October 2027.

The information presented in this chapter is based on details presented in the joint policy paper as well as written statements published by the Welsh Government. It is current as of the time of writing but is expected to evolve once a deposit management organisation (i.e., system operator) is appointed and once the new UK Government confirms the policy positions for England.



System structure & administration

Clearing system

Centralised

System operator

TBD – separate deposit management organisations (DMOs) will be appointed in England and Northern Ireland, Scotland, and Wales, each operating under the specific legislation of their respective administration. Although it is not a requirement, the UK Government, DAERA, the Scottish Government, and the Welsh Government recognise the benefits of having a single organisation to administer DRS across the UK and will encourage industry to consider forming a DMO that reflects this model. To support this approach, all four governments are working to coordinate the application process, requiring applicants to demonstrate how they will collaborate with DMOs appointed in other UK jurisdictions.

System finance

Unredeemed deposits, material revenues, producer fees

Unredeemed deposits

System operator

Material owner

System operator

Container return & refund points

Collection model

Return-to-Retail: Eligible supermarkets and convenience stores will be required to take back containers. Other establishments selling in-scope containers (i.e., hospitality venues, food-to-go stores, schools, gyms, sports or recreation centres) will not be obligated to operate a collection point but may apply to do so voluntarily. Additionally, it is planned that retailers $\leq 100\text{m}^2$ (1,076ft²) in urban areas will be exempt.

Money, material & data flow

TBD

Stores that are required to operate a collection point can apply for an exemption based on either health and safety concerns or their proximity to an existing collection point.

Collection points will be required to take back containers purchased from anywhere within the UK. However, they will not be obligated to accept containers that fall outside the scope of the specific administration where they are based (e.g., if glass containers are not part of the DRS in a particular jurisdiction, collection point operators in that area will not be required to accept glass).

Online take-back? No³

Number of collection points

TBD

Population per collection point

TBD

Method of return

Retailers will be able to choose how containers are accepted (manually or via RVM)

Barcode-based system?

Yes

Container deposit markings

TBD - system operators (DMOs) across the UK are expected to collaborate on creating a unified logo for all DRS containers, along with establishing a consistent system for using identification markers, such as barcodes or QR codes, on these containers.

Refund payment options

TBD

¹ Each material must achieve a minimum 85% collection rate to prevent one material from subsidising the 90% target for others.

² The Welsh Government remains committed to the inclusion of glass containers as soon as possible. Its position will be updated once the new UK Government confirms the material scope for England.

³ After extensive consultation with industry and analysis of schemes in other countries, the UK Government, DAERA, the Scottish Government, and the Welsh Government jointly decided against mandating online take-back for DRS containers. However, they will work with retailers and prospective system operators through an industry working group to explore options, including voluntary solutions. Further consultation is planned with protected characteristics groups.





Proposed programmes

Proposed programmes

This section provides a summary of jurisdictions that have either formally committed to implement a DRS or that have plans to do so, as of the time of writing.

Europe

Belgium

Belgium is actively moving towards the introduction of a DRS for beverage containers, driven by a collective decision among its three regions: Flanders, Wallonia, and Brussels. The Interregional Packaging Commission (IRPC) has been tasked with preparing a working plan by the end of 2024 to facilitate this introduction. This plan will include a draft for revising the Packaging Cooperation Agreement to align with the revision of the PPWR, which currently governs packaging and packaging waste management in the country.

In Flanders, the former Minister of the Environment, Zuhal Demir, emphasised the necessity of a DRS due to the industry's insufficient progress in reducing litter. The Flemish Local material plan ("Lokaal Materialenplan") for 2023-2030⁷ further anchors the introduction of DRS. The Walloon government, after completing a feasibility study exploring various DRS scenarios for plastic bottles and cans, granted a mandate in April 2024 to further pursue DRS implementation in coordination with the other regions.⁸ Similarly, Brussels' region followed suit, with its previous minister, Alain Maron, receiving a similar mandate in May 2024 to work out the DRS plans at the interregional level.

Following regional elections in June 2024, the formation of new governments in all three regions is underway. Following previous governmental decisions, it is expected that DRS will feature in the coalition agreements of these regions, with details on the system's format to be determined. Additionally, DRS has been incorporated into the Accreditation of Household Waste Producer Responsibility Organisation (PRO) Fost Plus for 2024-2028⁹, underscoring the commitment at both regional and interregional levels to continue progressing toward a unified DRS approach.

⁷ OVAM. "Lokaal Materialenplan 2023-2030." Available at: <https://ovam.vlaanderen.be/lokaal-materialenplan-2023-2030#>

⁸ Munster, J-F., 25 April 2024. "Déchets sauvages : la Wallonie accorde ses violons sur le type de consigne." Available at: <https://www.lesoir.be/583674/article/2024-04-25/dechets-sauvages-la-wallonie-accorde-ses-violons-sur-le-type-de-consigne>

⁹ Interregional Packaging Commission. "Decision of the Interregional Packaging Commission of 2 February 2024 concerning accreditation of the non-profit association Fost Plus Olympiadenlaan 2, 1140 Evere, as a packaging waste compliance organisation." Available at: <https://www.ivcie.be/wp-content/uploads/2020/02/ACCREDITATION-FOST-PLUS-2024-online.pdf>



France

On 10 February 2020, the Anti-Waste Law for a Circular Economy, known as the “Loi anti-gaspillage pour une économie circulaire” in French (AGEC for short) was passed into law.¹⁰ The law establishes some concrete goals, including 100% recycling of plastics by 2025, the end of single-use plastic packaging by 2040, a 20% reduction of single-use plastic packaging by 2025 (half of which must be achieved through reuse), and a 50% reduction in the use of single-use plastic bottles by 2030. To achieve these goals, the law includes specific measures, including the option to “set up of a mixed deposit system for recycling and reuse” (Article 66).

On 30 January 2023, France’s Secretary of State for Ecology, Bérangère Couillard, launched a six-month consultation on the introduction of a DRS for plastic bottles.¹¹ The consultation brought together more than 70 stakeholders from industry, NGOs, and local authorities to discuss the proposed system, which would charge an additional €0.15 or €0.20 for drinks sold in plastic bottles. A decision on the DRS, initially expected by the end of June 2023, was postponed to the Fall. Then, on 27 September 2023, French Ecological Transition Minister Christophe Béchu announced¹² that the government would not introduce a deposit scheme, saying “it is clear that the necessary consensus is not there” and “if we continue to lag behind despite the activation of the levers identified by ADEME and the collective mobilisation, the question of implementing a deposit return system would inevitably arise.”

As of August 2024, France has yet to implement the identified levers, resulting in another year of stagnation. This delay further distances the country from meeting the European objectives set by the SUPD and the upcoming PPWR.

The AGECE law is available here (in French only):

Greece

In October 2020, Law 4736/2020 concerning the reduction of the impact of certain plastic products on the environment was published in the Official Gazette. This law transposed the EU’s Single-Use Plastics Directive (SUPD) into Greek national law and introduced a DRS for single-use PET drinks bottles. Less than a year later, in July 2021, Law 4819/2021 entered into force, expanding the system to include aluminium cans and single-use glass beverage bottles.

In July 2022, the DRS ordinance was adopted (Joint Ministerial Decision), but there have been discussions about revising both the primary and secondary laws to ensure a more efficient system. As of August 2024, the primary law is undergoing public consultation, with the consultation period closing on 12 September 2024.

Although many details have yet to be confirmed, the proposed mandatory DRS is expected to be managed by the private sector (producers and retailers) through a single system operator and to employ a return-to-retail collection model. The system is likely to include mineral water, carbonated soft drinks, energy drinks, beer, cider and other fermented drinks, juices, and nectars in single-use plastic and metal containers up to 3L (0.79 gal). The deposit value is still under discussion and will be set in the DRS ordinance. According to the primary law, the system should start on 1 December 2025.

The relevant legislation can be seen here (in Greek only):

› Law 4736/2020 concerning the reduction of the impact of certain plastic products on the environment:

› Law 4819/2021 transposing Directive (EU) 2018/852 on packaging and packaging waste:

¹⁰ CMS. “Plastics and Packaging Laws in France.” Available at: <https://cms.law/en/int/expert-guides/plastics-and-packaging-laws/france>

¹¹ Palierse, C., and A. Feitz. 28 January 2023. “Le gouvernement relance le débat sur la consigne des bouteilles en plastique.” Available at: <https://www.lesechos.fr/industrie-services/energie-environnement/le-gouvernement-relance-le-debat-sur-la-consigne-des-bouteilles-en-plastique-1901469>

¹² YouTube video titled Christophe Béchu - Discours aux Assises des déchets de Nantes - 27 septembre 2023. Available at: https://www.youtube.com/watch?v=wt2KOaj_CQ0



Slovenia

The Environmental Protection Act represents the general legislative framework for waste management in Slovenia. On 16 March 2022, the Slovenian Parliament adopted amendments to the Environmental Protection Act to introduce a DRS for drinks containers.¹³ The Environmental Protection Act stipulates that the system operator will be founded by producers and retailers. The law also stipulates that the system will be financed through unredeemed deposits and material revenues.

Based on the appeal of one of the producer responsibility organisations (PROs), the Constitutional Court of the Republic of Slovenia halted the implementation of several articles of the Environmental Protection Act which indirectly affected the deposit system and has delayed its implementation. As of the time of writing, the Constitutional Court is awaiting ruling of Court of Justice of the European Union, necessary for final decision of the Slovenian Constitutional Court.

The relevant legislation is available here:

Relevant articles include: Article 35, paragraph (7); Article 39, paragraph (11); Article 40, paragraph (3) line 2; Article 164, paragraph (5).

¹³ Relevant DRS articles of the Environmental Protection Act include: Article 35, paragraph (7); Article 39, paragraph (11); Article 40, paragraph (3) line 2; Article 164, paragraph (5).



Asia

Hong Kong

From February to May 2021, the Hong Kong Government carried out a public consultation on the introduction of a producer responsibility scheme (PRS) for plastic beverage bottles.

Details of the consultation can be found here:

Of the more than 4,600 submissions received, more than 95% supported the implementation of the PRS on plastic beverage containers.¹⁴ Having considered the feedback received, the experience of other jurisdictions, and the development of the local recycling market, the Government has decided to adopt a “market-based model” for the implementation of the scheme and will include beverage cartons in the scheme.

As of August 2024, the Government is in the process of formulating the legislative proposal for the PRS on Plastic Beverage Containers and Beverage Cartons.¹⁵ As part of the preparatory phase, the Government initiated two stages of a RVM Pilot scheme in 2021 and 2022. These pilots aimed to assess the practical application of RVMs in the local environment, specifically focusing on the collection of plastic beverage bottles. The positive responses from the public following the rollout of the RVM pilot scheme have influenced the Government’s decision to extend the programme. This extension is geared towards maintaining the continuity of RVM services to the public, bridging the interim period until the formal commencement of the PRS. The tendering exercise for Stage 3 of the Pilot Scheme is complete, and the contract was awarded in August 2023.

According to an administration paper prepared by the Legislative Council Panel on Environmental Affairs in November 2023,¹⁶ the proposed scheme will include ready-to-serve beverage products with volume ranging from 100ml to 2L that are packaged in plastic bottles or beverage cartons. Beverages that are packaged in refillable plastic containers

would be excluded from the system, as would single-use plastic cups and drink pouches. The operational details of the proposed scheme, which will be prescribed in the subsidiary legislation, are mainly as follows:

1. The Government will prescribe legislated recovery targets for both types of eligible containers (presently drafted at 40% recovery in Year 1 and 75% within five years of scheme commencement)
2. Registered beverage suppliers will have to meet the recovery targets set by the Government;
3. Registered beverage suppliers may arrange recovery on their own, or engage registered scheme operators with recovery services from the market and pay them a recycling fee (with rebates included)
4. Registered suppliers or registered scheme operators are required to provide rebates to incentivise the public to return plastic beverage containers and beverage cartons to designated collection points; and
5. Retailers selling eligible beverages that have a retail floor area of at least 200m² (2,153 ft²) must serve as designated collection points and provide takeback and rebate services.

A significant aspect of the scheme, namely the rebate (refund) value, remains uncertain, with speculation ranging between HK\$0.10 (~€0.012, ~USD\$0.013) and HK\$1 (~€0.12, ~USD\$0.13) per container, irrespective of size or content.

With regards to the implementation timeline, the Government has noted that it expects to implement the system in 2025 at the earliest, subject to the progress of the legislative process and the relevant preparatory work.

More information is available here:

¹⁴ Government of Hong Kong. “Producer Responsibility Scheme on Plastic Beverage Containers and Beverage Cartons.” Available at: <https://www.gov.hk/en/residents/environment/waste/management/prsplastic.htm>

¹⁵ Government of Hong Kong. “Producer Responsibility Scheme on Plastic Beverage Containers and Beverage Cartons.” Available at: <https://www.gov.hk/en/residents/environment/waste/management/prsplastic.htm>

¹⁶ Legislative Council Panel on Environmental Affairs. 28 November 2023. “Establishment of a Common Legislative Framework for Producer Responsibility Schemes.” Available at: <https://www.legco.gov.hk/yr2023/english/panels/ea/papers/ea20231128cb1-1032-3-e.pdf>



Central America & the Caribbean

Republic of Trinidad and Tobago

On 26 July 2024, the Government of the Republic of Trinidad and Tobago released its 2024 Revised Municipal Solid Waste Sector Framework, which sets the policy framework for the Government to develop and administer a national DRS for beverage containers. According to the Beverage Containers Deposit Return Policy, the system will apply to sealed, single-use beverage containers $\leq 5\text{L}$ (1.32 gal) that are made of metal, plastic, paper, glass or other material, or a combination of those materials, with two deposit levels based on container size (one deposit for containers $\leq 0.7\text{L}$ and one deposit for containers 0.7L-5L).

With regard to system operation and administration, the policy states that the Trinidad and Tobago Solid Waste Management Company Limited (SWMCOL) will administer the system in collaboration with the Beverage Industry Committee (BIC), which will advise on deposit values, handling fees, and other key procedures. A common collection system will be established to manage the return and recycling of beverage containers from registered redemption depots. Participation by wholesalers and retailers in the system will be voluntary, subject to registration and compliance with set criteria. Redemption depot operators will be required to accept all eligible beverage containers, while wholesalers and retailers who decide to voluntarily take back containers will only be required to accept used containers for beverages of the same brand, type and size that they sell.

Under the Solid Waste Management Corporation Act, a special Trust Fund – the Resource Recovery Fund – will be established as the financial mechanism to support the DRS. This fund, protected from comingling with other SWMCOL finances, will be supported by deposits, handling fees, unredeemed deposits, and additional financial measures.

The policy does not specify an expected launch date for the system, nor have any regulations been developed yet.

For more information, the full policy document can be accessed here:



Oceania

Nieu

As of October 2023, the government of Nieu is progressing with the development of an Advanced Recovery and Disposal Fee (ARFD) Regulation, which would build on and formalise an existing voluntary aluminium can collection scheme undertaken in partnership between the government and the Catholic Church Mission.¹⁷ A multi-agency Working Group has been tasked by the cabinet to design the scheme. The Working Group has researched and considered options for the operation of the scheme, including determining an appropriate arrangement for the scheme operator, administration of scheme finances, collection depots, and the role of a Governance Board. The results from the Working Group and the proposed design of the Nieu ARFD scheme will form a Cabinet Paper to be submitted for consideration by elected members.

¹⁷ "PacWastePlus. 3 October 2023. Regulation to Advance Waste Management in Nieu."
Available at: <https://pacwasteplus.org/news/regulation-to-advance-waste-management-in-nieu/>



Appendix – Links to legislation

Existing programmes

Jurisdiction	Links to relevant legislation and regulations
Europe	
Austria	Austrian version: › https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2023_II_283/BGBLA_2023_II_283.pdfsig
Croatia	Croatian version › https://mingor.gov.hr/UserDocImages/NASLOVNE%20FOTOGRAFIJE%20I%20KORIŠTENI%20LOGOTIPOVI/doc/20032013 - informacija o zah_tjevu_za_provedbu_postupka_utvrdivanja_objedinjenih_uvjeta_zastite_okolisa.pdf › https://narodne-novine.nn.hr/clanci/sluzbeni/2020_01_7_93.html › https://narodne-novine.nn.hr/clanci/sluzbeni/2015_09_97_1872.html › https://narodne-novine.nn.hr/clanci/sluzbeni/2020_12_140_2703.html › extwprlegs1.fao.org/docs/pdf/cro166577.pdf
Denmark	English version: › https://mst.dk/media/133287/statutory-order-on-deposits-on-and-the-collection-etc-of-packaging-for-certain-beverages.pdf
Estonia	Estonian version: › https://www.riigiteataja.ee/akt/13328507?leiaKehtiv › https://www.riigiteataja.ee/akt/13328511?leiaKehtiv English version: › https://www.riigiteataja.ee/en/eli/504072017009/consolide › https://www.riigiteataja.ee/en/eli/527122023010/consolide
Finland	English version: › https://www.finlex.fi/en/laki/kaannokset/2011/en20110646.pdf › https://www.finlex.fi/en/laki/kaannokset/2013/en20130526.pdf
Germany	German version › https://www.gesetze-im-internet.de/verpackg/BJNR223410017.html#BJNR223410017BJNG000400000



Jurisdiction	Links to relevant legislation and regulations
Greenland	Not available
Hungary	Hungarian version: › https://njt.hu/jogszabaly/2023-450-20-22
Iceland	Icelandic version: › https://www.althingi.is/lagas/nuna/1989052.html
Latvia	Latvian version: › https://likumi.lv/ta/id/316731-depozita-sistemas-darbibas-noteikumi English version: › https://likumi.lv/ta/en/en/id/316731
Lithuania	Lithuanian version: › https://www.e-tar.lt/portal/lt/legalAct/TAR.9D1ADB9E1518/asr
Malta	English version: › https://legislation.mt/eli/sl/549.134/20211231/eng
The Netherlands	Dutch version: › https://wetten.overheid.nl/BWBR0014230/2008-11-01 › https://wetten.overheid.nl/BWBR0035711/2022-01-01 English version: › https://www.interseroh.eu/check-the-pack/wp-content/uploads/2017/12/Netherlands_law_packaging-ENG.pdf
Norway	Norwegian version: › https://lovdata.no/dokument/SFO/forskrift/1993-12-10-1182 English version: › https://www.environmentagency.no/legislation/waste-regulations/chapter6-take-back-systems-for-beverage-packaging/ › https://www.regjeringen.no/en/dokumenter/product-control-act/id172150/

Jurisdiction	Links to relevant legislation and regulations
Republic of Ireland	› https://www.irishstatutebook.ie/eli/2021/si/599/made/en/pdf
Romania	Romanian version: › http://mmediu.ro/app/webroot/uploads/files/hotararea-nr-1074-2021-privind-stabilirea-sistemului-de-garantie-returnare-pentru-ambalaje-primare-nereutilizabile%281%29.pdf › https://legislatie.just.ro/Public/DetaliuDocument/247209
Slovakia	Slovakian version: › https://www.slov-lex.sk/static/pdf/2019/302/ZZ_2019_302_20220101.pdf English version: › https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKewjvuNbjq9_1AhXRVt8KHc08BdMQFnoECAUQAQ&url=https%3A%2F%2Fec.europa.eu%2Fgrowth%2Ftools-databases%2Ftris%2Findex.cfm%2Fen%2Fsearch%2F%3Ftrisaction%3Dsearch.detail%26year%3D2019%26num%3D115%26fLang%3DEN%26dNum%3D1&usg=AOvVaw2ZCVFVfaBCL4tP8BibQ669
Sweden	Swedish version: › http://klevringsjuridik.se/law/lag-1982-349/



Jurisdiction	Links to relevant legislation and regulations
North America	
United States of America (USA)	
California	› https://www2.calrecycle.ca.gov/Publications/Details/1478
Connecticut	› https://www.cga.ct.gov/2021/SUM/PDF/2021SUM00058-R02SB-01037-SUM.PDF
Hawaii	› https://www.capitol.hawaii.gov/session2002/bills/HB1256_cd1_.htm
Iowa	› https://www.legis.iowa.gov/DOCS/ACO/IC/LINC/Chapter.455c.pdf › https://www.legis.iowa.gov/docs/ico/chapter/123.pdf › https://www.legis.iowa.gov/legislation/BillBook?ga=89&ba=SF%202378
Maine	› https://legislature.maine.gov/legis/statutes/38/title38ch33.pdf
Massachusetts	› https://www.mass.gov/doc/301-cmr-400-provisions-for-recycling-beverage-containers-bottle-bill/download
Michigan	› http://www.legislature.mi.gov/(S(qtbq0epq3wqug22mqd1nf42w))/mileg.aspx?page=getObject&objectName=mcl-Initiated-Law-1-of-1976
New York	› https://www.dec.ny.gov/docs/materials_minerals_pdf/rca2017.pdf › https://govt.westlaw.com/nycrr/Browse/Home/NewYork/NewYorkCodesRulesandRegulations?guid=Icfeeee40b5_a011dda0a4e17826ebc834&originatio nContext=documenttoc&transitionType=Default&contextData=(sc.Default)
Oregon	› https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3872
Vermont	› https://legislature.vermont.gov/statutes/chapter/10/053



Jurisdiction	Links to relevant legislation and regulations
North America	
Canada	
Alberta	› https://www.canlii.org/en/ab/laws/regu/alta-reg-101-1997/latest/alta-reg-101-1997.html
British Columbia	› https://www.bclaws.gov.bc.ca/civix/document/id/crbc/crbc/449_2004
Newfoundland and Labrador	› https://www.assembly.nl.ca/legislation/sr/regulations/rc030059.htm
New Brunswick	› https://laws.gnb.ca/en/document/cr/2008-54?langCont=en#ga:l_5_5-h1
Northwest Territories	› https://www.justice.gov.nt.ca/en/files/legislation/waste-reduction-recovery/waste-reduction-recovery.r1.pdf
Nova Scotia	› https://novascotia.ca/just/regulations/regs/envsolid.htm
Ontario	› https://www.thebeerstore.ca/api/images/wyfly6ekqxs8/766M4WQPRnnbatFwMQl63/3ec69a0d86990d65a0c7e28436035524/Master_Framework_Agreement.pdf › https://www.ontario.ca/document/beer-alcohol-master-framework-agreement-september-2015/exhibit-b-ontario-deposit-return-program › https://www.ontario.ca/files/2024-05/mof-early-implementation-agreement-2024-05-23.pdf
Prince Edward Island	› https://www.princeedwardisland.ca/sites/default/files/legislation/B&02-1G-Beverage%20Containers%20Act%20General%20Regulations.pdf
Quebec	› http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=5&file=2021C5A.PDF › https://www.legisquebec.gouv.qc.ca/en/document/cr/Q-2.%20r.%2016.1 › https://www.environnement.gouv.qc.ca/matieres/consigne-collecte/reglement-modifiant-consigne-va.pdf
Saskatchewan	› https://publications.saskatchewan.ca/#/products/31893 › https://publications.saskatchewan.ca/#/products/84999 › https://publications.saskatchewan.ca/#/products/1493
Yukon	› https://laws.yukon.ca/cms/images/LEGISLATION/SUBORDINATE/1992/1992-0136/1992-0136.pdf?zoom_highlight=beverage+container+regulations#search=%22beverage%20container%20regulations%22



Jurisdiction	Links to relevant legislation and regulations
Central America & Caribbean	
Barbados	<ul style="list-style-type: none"> › https://www.bottlebill.org/assets/pdfs/legis/world/Barbados1986-RCA.pdf › https://www.barbadosparliament.com/uploads/bill_resolution/3d13b5bff70170a303ba1a28b375550e.pdf
Belize	<ul style="list-style-type: none"> › https://elaw.org/system/files/attachments/publicresource/Cap%20328.01%20Returnable%20Containers%20Act.pdf
Africa	
Republic of Seychelles	<p>Environment Protection (Environmental Levies on PET, Plastic and Glass Bottles and Cans) Regulations, 2020.</p> <ul style="list-style-type: none"> › https://www.nationalassembly.sc/sites/default/files/2020-10/SI-81-2020-Environment-Levies-on-PET-Plastic-Glass-Bottles-Cans.pdf › https://faolex.fao.org/docs/pdf/sey79306.pdf › https://seylil.org/sc/legislation/si/2020/8/SI%208%202020%20-%20Environment%20Protection%20%28Environmental%20Levies%29%20%28Amendment%29.pdf
Middle East	
Israel	<ul style="list-style-type: none"> › https://www.gov.il/BlobFolder/legalinfo/beverage_container_deposit_law_1999/he/waste_beverage_container_deposit_law_amendment4_2010.pdf
Oceania	
Australia	
Australian Capital Territory (ACT)	<ul style="list-style-type: none"> › https://www.legislation.act.gov.au/si/2018-9/20180630-68997/pdf/2018-9.pdf
New South Wales (NSW)	<ul style="list-style-type: none"> › https://legislation.nsw.gov.au/view/whole/html/inforce/current/act-2016-057 › https://legislation.nsw.gov.au/view/html/inforce/current/si-2017-0066
Northern Territory	<ul style="list-style-type: none"> › https://legislation.nt.gov.au/Legislation/ENVIRONMENT-PROTECTION-BEVERAGE-CONTAINERS-AND-PLASTIC-BAGS-ACT-2011 › https://legislation.nt.gov.au/Legislation/ENVIRONMENT-PROTECTION-BEVERAGE-CONTAINERS-AND-PLASTIC-BAGS-REGULATIONS-2011
Queensland	<ul style="list-style-type: none"> › https://www.legislation.qld.gov.au/view/pdf/asmade/si-2018-0167
South Australia	<ul style="list-style-type: none"> › https://www.legislation.sa.gov.au/_/legislation/lz/c/r/environment%20protection%20regulations%202009/current/2009.227.auth.pdf
Victoria	<ul style="list-style-type: none"> › https://content.legislation.vic.gov.au/sites/default/files/2021-12/591274bs1_0.pdf › https://engage.vic.gov.au/download/document/27085



Jurisdiction	Links to relevant legislation and regulations
Oceania	
Australia	
Western Australia	<ul style="list-style-type: none"> › https://www.legislation.wa.gov.au/legislation/prod/filestore.nsf/FileURL/mrdoc_41821.pdf/\$FILE/Waste%20Avoidance%20and%20Resource%20Recovery%20Amendment%20(Container%20Deposit)%20Act%202019%20-%20%5B00-00-01%5D.pdf?OpenElement › https://www.legislation.wa.gov.au/legislation/prod/filestore.nsf/FileURL/mrdoc_43335.pdf/\$FILE/Waste%20Avoidance%20and%20Resource%20Recovery%20(Container%20Deposit%20Scheme)%20Regulations%202019%20-%20%5B00-c0-00%5D.pdf?OpenElement
Federated States of Micronesia	
Kosrae	<ul style="list-style-type: none"> › https://www.bottlebill.org/assets/pdfs/legis/world/micronesia/kosraeCDLRegulations.pdf › https://www.bottlebill.org/assets/pdfs/legis/world/micronesia/kosraeCDL.pdf
Pohnpei	Not available
Yap	Not available
Other Oceania	
Republic of Kiribati	› https://fsm-data.sprep.org/system/files/Kiribati-CDL-Act-2004.pdf
Republic of Palau	› https://countrysafeguardsystems.net/sites/default/files/Palau%20Beverage%20Container%20Recycling%20Regs%202009.pdf
Republic of the Marshall Islands (RMI)	<ul style="list-style-type: none"> › https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/109300/135546/F778059209/MHL109300.pdf › https://rmiparliament.org/cms/images/LEGISLATION/BILLS/2018/2018-0103/StyrofoamCupsandPlatesandPlasticProductsProhibitionContainerDepositAmendmentAct2018.pdf
Tuvalu	› https://perma.cc/QVF7-KYZ4
Asia	
Regions of Sejong City and Jeju Island, Republic of Korea	Korean version: <ul style="list-style-type: none"> › https://www.law.go.kr/LSW/lsInfoP.do?efYd=20220308&lsiSeq=241301#0000



Upcoming programmes

Jurisdiction	Links to relevant legislation and regulations
Czech Republic	Czech version: › https://odok.cz/portal/veklep/material/ALBSCY4K6RXH/
England (UK)	› https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted › https://members.wto.org/crnattachments/2024/TBT/GBR/24_02786_00_e.pdf
Goa (India)	› https://goaprintingpress.gov.in/downloads/2425/2425-20-SI-OG-0.pdf › https://goaprintingpress.gov.in/downloads/2324/2324-32-SI-EOG-1.pdf
Northern Ireland (UK)	› https://members.wto.org/crnattachments/2024/TBT/GBR/24_02786_00_e.pdf
Poland	Polish version: › https://legislacja.rcl.gov.pl/projekt/12356003/katalog/12851453#12851453 › https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20240000927
Portugal	Portuguese version: › https://diariodarepublica.pt/dr/detalhe/decreto-lei/24-2024-857366010
Scotland (UK)	› https://www.legislation.gov.uk/ssi/2020/154/contents/made
Singapore	› https://sso.agc.gov.sg/Acts-Supp/14-2023/Published/20230428?DocDate=20230428 › https://sso.agc.gov.sg/SL-Supp/S96-2021/Published/20210211170000?DocDate=20210211170000
Tasmania (Australia)	› https://www.legislation.tas.gov.au/view/html/asmade/act-2022-005
Türkiye	Turkish version: › https://www.resmigazete.gov.tr/eskiler/2021/06/20210626-18.htm › https://dbys.gov.tr/en/mevzuat



Upcoming programmes

Jurisdiction	Links to relevant legislation and regulations
Uruguay	English version: › https://www.global-regulation.com/translation/uruguay/39871856/residues.-integral-management.html Spanish version: › https://www.gub.uy/ministerio-ambiente/institucional/normativa/resolucion-n-271021-objetivos-minimos-recuperacion-valorizacion-envases
Wales (UK)	Not published





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