

Table 1 Deposit Return Systems (DRSs) for Single-use Drinks Containers in Europe: Comparison of Key Features

Country (Population)	Containers Covered	Refund Value	Unredeemed Deposits	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
Croatia (4.1m)	Plastic, metal, glass	<i>Fixed:</i> 0.50 HRK	System operator	Return-to-retail	Centralised	91% (2020)	88%	81%	93%
Denmark (5.8m)	Plastic, metal, glass	<i>Variable:</i>  Metal, glass <1L: 1 DKK  Plastic <1L: 1.5 DKK  Metal, glass, plastic 1-20L: 3 DKK	System operator	Return-to-retail	Centralised	93% (2021)	95%	92%	93%
Estonia (1.3m)	Plastic, metal, glass	<i>Fixed:</i> €0.10	System operator	Return-to-retail	Centralised	89% (2020)	91%	94%	87%
Finland (5.5m)	Plastic, metal, glass	<i>Variable:</i>  Plastic ≤ 350ml: €0.10  Plastic 351ml-999ml: €0.20  Plastic ≥ 1L: €0.40  Metal: €0.15  Glass: €0.10	System operator	Return-to-retail	Centralised	96% (2021)	90%	97%	98%
Germany (83.2m)	Plastic, metal, glass	<i>Fixed:</i> €0.25	Producers and retailers (in the case of private labels)	Return-to-retail	Decentralised	98% (2021) (estimate)	N/A	N/A	N/A
Iceland (0.4m)	Plastic, metal, glass	<i>Fixed:</i> 18 ISK	System operator	Return-to-depot	Centralised	91% (2021)	92%	93%	83%
Latvia (1.9m)	Plastic, metal, glass	<i>Fixed:</i> €0.10	System operator	Return-to-retail	Centralised	N/A			

Country (Population)	Containers Covered	Refund Value	Unredeemed Deposits	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
Lithuania (2.8m)	Plastic, metal, glass	<i>Fixed:</i> €0.10	System operator	Return-to-retail	Centralised	90% (2021)	90%	92%	84%
Malta (0.5m)	Plastic, metal, glass	<i>Fixed:</i> €0.10	System operator	Return-to-retail	Centralised	N/A			
The Netherlands (17.5)	Plastic <i>(expansion to cans 31/12/2022)</i>	<i>Fixed:</i> €0.25	Producers/ Distributors/Imp orters	Return-to-retail	Centralised	70% (2021)	Plastic <1L: 57% Plastic 1-3L: 90%	Not applicable	Not applicabl e
Norway (5.4m)	Plastic, metal	<i>Variable:</i> Plastic, metal <0.5L: 2 NOK  Plastic, metal ≥0.5L: 3 NOK	System operator	Return-to-retail	Centralised	92% (2021)	93%	92%	Not applicabl e
Slovakia (5.5m)	Plastic, metal	<i>Fixed:</i> €0.15	System operator	Return-to-retail	Centralised	N/A			
Sweden (10.4m)	Plastic, metal	<i>Variable:</i> Metal: 1 SEK (VAT incl.) Plastic ≤ 1L: 1 SEK (VAT incl.) Plastic >1L: 2 SEK (VAT incl.)	System operator	Return-to-retail	Centralised	88% (2021)	86%	89%	Not applicabl e

Table 2 Deposit Return Systems (DRSs) for Single-use Drinks Containers in the USA: Comparison of Key Features

State (Population)	Containers Covered	Refund Value (USD\$)	Unredeemed Deposits	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
California (39.2m) (see notes)	Plastic, metal, glass	<i>Variable:</i> Containers <24oz: \$0.05 Containers ≥24oz \$0.10	System operator	Hybrid	Centralised	68% (2021)	PET: 66% HDPE: 53%	Alum: 73%	64%
Connecticut (3.6m)	Plastic, metal, glass, carton	<i>Fixed:</i> \$0.05	Escheated to State	Hybrid	Decentralised	46% (2021)	Data not available		
Hawaii (1.4m)	Plastic, metal, glass	<i>Fixed:</i> \$0.05	System operator	Return-to-redemption centre	Centralised	63% (2020/21)	58%	Alum: 68% Bi-metal: 57%	61%
Iowa (3.2m) (see notes)	Plastic, metal, glass	<i>Fixed:</i> \$0.05	Producer / Distributor/ Importer	Hybrid	Decentralised	65% (2016)	53%	62%	76%
Maine (1.4m)	Plastic, metal, glass	<i>Variable:</i> Wine and spirits >50ml: \$0.15 Other drinks (incl. wine and spirits ≤50mL): \$0.05	Escheated to State <sup>1</sup>	Hybrid	Decentralised	76% (2020)	Data not available		
Massachusetts (7.0m)	Plastic, metal, glass	<i>Fixed:</i> \$0.05	Escheated to State	Hybrid	Decentralised	38% (2021)	Data not available		
Michigan (10.1m) (see notes)	Plastic, metal, glass, liquid paperboard	<i>Fixed:</i> \$0.10	75% Escheated to State / 25% to Retailers	Return-to-retail	Decentralised	75% (2021)	Data not available		
New York (19.8m)	Plastic, metal, glass	<i>Fixed:</i> \$0.05	80% Escheated to State / 20% to Producer/ Distributor/ Importer	Hybrid	Decentralised	70% (2021)	Data not available		

<sup>1</sup> Escheated to State, however deposit initiators that sell a majority of the deposit containers are allowed to form a 'Commingling Group' and recoup unredeemed deposits associated with the sale of their containers.

State (Population)	Containers Covered	Refund Value (USD\$)	Unredeemed Deposits	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
Oregon (4.2m) (see notes)	Plastic, metal, glass	Fixed: \$0.10	Producer / Distributor/ Importer	Hybrid	Centralised	81% (2021)	78%	83%	74% (including refillables)
Vermont (0.6m)	Plastic, metal, glass	Variable: Liquor >50ml: \$0.15 Other drinks: \$0.05	In the case of liquor containers, unredeemed deposits are retained by the Department of Liquor Control. For all other containers, unredeemed deposits are escheated to the State (for use on clean water programmes).	Hybrid	Decentralised	78% (2021)	Liquor containers: 81% Non-liquor containers: 78% <i>Data on material-specific return rates are not available</i>		

**Notes:**

**California:** California includes kerbside collection in the “recycling rate” (most other states report a “redemption” or “return” rate), therefore, the return rates presented in include CRV containers collected through kerbside collection and drop-off programmes in addition to certified recycling centres. If these containers are excluded from the calculation, the overall “redemption” rate is 61%.

**Iowa:** The State of Iowa does not collect sales or returns data on deposit-bearing containers. Material-specific redemption rates were calculated by the Container Recycling Institute (CRI) and the DNR while analysing "Final 2017 Iowa Statewide Waste Characterization Study," SCS Engineers for Iowa DNR, 12/28/17. This study reported a 71% overall recycling rate for deposit-bearing containers.

**Michigan:** Redemption rates were unnaturally low during 2020 and 2021. Prior to COVID-19 in 2019, Michigan’s redemption rate was at 89%, the highest of all US deposit return programmes. However, during the onset of the pandemic, the Governor mandated all redemption locations to cease redemption for multiple months, eventually authorising a transitional period of redemption though only at locations with RVMs. Whereas Michigan made it illegal to redeem containers during this time, all other US states simply allowed retailers to stop redeeming containers.

Table 3 Deposit Return Systems (DRSs) for Single-use Drinks Containers in Canada: Comparison of Key Features

Province / Territory (Population)	Containers Covered	Refund Value (CAD\$)	Unredeemed Deposits	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
Alberta (4.3m)	Plastic, metal, glass, polycoat	<i>Variable:</i> Containers ≤1L: \$0.10 Containers >1L: \$0.25	System operator	Return-to-depot	Centralised	84% (2021)	81%	Alum: 88% Bimetal: 81%	88%
British Columbia (5.0m) (see notes)	Plastic, metal, glass, polycoat	<i>Fixed:</i> \$0.10	System operator	Hybrid	Centralised	80% (2021)	73%	85%	87%
Newfoundland & Labrador (0.5m) (see notes)	Plastic, metal, glass, polycoat	<i>Variable:</i> Non-alcohol: \$0.05 Wine and spirits: \$0.10	System operator	Return-to-depot	Centralised	60% (2020/21)	PET: 64%	Alum: 61%	64%
New Brunswick (0.8m) (see notes)	Plastic, metal, glass, polycoat	<i>Variable:</i> Non-alcohol ≤5L: \$0.05 Alcohol ≤500ml: \$0.05 Alcohol >500ml: \$0.10	System operator	Return-to-depot	Centralised	70% (2018/19)	PET: 74%	Alum: 71% Steel: 46%	60%
Northwest Territories (0.04m) (see notes)	Plastic, metal, glass, polycoat	<i>Variable</i> Containers ≤1L: \$0.10 Containers >1L: \$0.25:	System operator	Return-to-depot	Centralised	61% (2020/21)	PET: 61%	Alum: 64% Bi-metal: 45%	84%
Nova Scotia (1.0m)	Plastic, metal, glass, polycoat	<i>Variable:</i> Non-alcohol <5L: \$0.05 Alcohol ≤500ml: \$0.05	System operator	Return-to-depot	Centralised	82% (2021/22)	81%	Alum: 88% Steel: 55%	81%

Province / Territory (Population)	Containers Covered	Refund Value (CAD\$)	Unredeemed Deposits	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
		Alcohol >500ml: \$0.10							
Ontario (14.2m)	Plastic, metal, glass, polycoat	<i>Variable:</i> Wine & spirits ≤630ml: \$0.10 Wine & spirits >630ml: \$0.20 Beer ≤1L: \$0.10 Beer >1L: \$0.20	Beer distributors / bottlers & the Liquor Control Board of Ontario	Return-to-retail	Centralised	74% (2021)	PET: 46%	75%	73%
Prince Edward Island (0.2m)	Plastic, metal, glass, polycoat	<i>Variable:</i> Non-alcohol ≤5L: \$0.05 Alcohol ≤500ml: \$0.05 Alcohol >500ml: \$0.10	Provincial government (treasury)	Return-to-depot	Centralised	85% (2021)	PET: 88%	Alum: 86% Steel: 105.4%	89%
Quebec (8.5m)	Plastic, metal, glass	<i>Variable:</i> Soft drinks: \$0.05 Beer cans ≤450ml: \$0.05 Beer cans >450ml: CAD\$0.20 Beer glass ≤450ml: \$0.10 Beer glass >450ml: \$0.20	<i>Soft drinks:</i> The system operator gives 50% (or a minimum fee of \$700K/year) to Recyc-Québec (2021 Agreement); the rest stays with BGE.  <i>Beer:</i> The system operator keeps 33% of unredeemed deposits on beer cans and gives the rest (66%) back to members of the collection agreement for brewers.	Return-to-retail	Centralised	67% (2021)	57%	69%	55%

Province / Territory (Population)	Containers Covered	Refund Value (CAD\$)	Unredeemed Deposits	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
Saskatchewan (1.1m)	Plastic, metal, glass, some polycoat	<i>Variable:</i> Plastic, metal, polycoat <1L: \$0.10 Plastic, metal, polycoat ≥1L: \$0.25 Glass ≤300ml: \$0.10 Glass 301-999ml: \$0.20 Glass ≥1L: \$0.40	Provincial government	Return-to-depot	Centralised	82% (2021/22)			Data not available
Yukon (0.04m)	Plastic, metal, glass, polycoat	<i>Variable:</i> Milk & milk substitutes: \$0.05 Non-milk drinks <750ml: \$0.05 Non-milk drinks ≥750ml: \$0.25	Territorial government	Return-to-depot	Centralised	65% (2020/21)			Data not available
<p><b>Notes:</b></p> <p><b>Newfoundland and Labrador, Prince Edward Island, Nova Scotia, Saskatchewan:</b> Data on beer container return rates is not included in the results as these were not available.</p> <p><b>New Brunswick:</b> The data excludes all beer, wine, and spirits as return rates for these containers were not available. More recent data was not available.</p> <p><b>Northwest Territories:</b> The system operator suspects the high return rate for glass bottles may be the result of containers purchased outside the territory being returned to the programme. Also, data on beer container return rates is not included in the results as these were not available.</p>									

Table 4 Deposit Return Systems (DRSs) for Single-use Drinks Containers in Oceania: Comparison of Key Features

State (Population)	Containers Covered	Refund Value	Unredeemed Deposits <sup>2</sup>	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
Australian Capital Territory (0.4m) (see notes)	Plastic, metal, glass, liquid paperboard	<i>Fixed:</i> AUD\$0.10 (€0.07, USD\$0.08)	Not applicable	Return-to-depot	Centralised	68% (2020/21)	PET: 74% HDPE: 39%	Alum: 77% Steel: 4%	67%
New South Wales (8.2m) (see notes)	Plastic, metal, glass, liquid paperboard	<i>Fixed:</i> AUD\$0.10 (€0.07, USD\$0.08)	Not applicable	Hybrid	Centralised	67% (2020/21)	PET: 64% HDPE: 45%	Alum: 71% Steel: 35%	76%
Northern Territory (0.2m)	Plastic, metal, glass, liquid paperboard	<i>Fixed:</i> AUD\$0.10 (€0.07, USD\$0.08)	Not applicable	Return-to-depot	Decentralised	72% (2020/21)	PET: 64% HDPE: 25%	Alum: 76% Steel/ other: 130%	85%
South Australia (1.8m)	Plastic, metal, glass, liquid paperboard	<i>Fixed:</i> AUD\$0.10 (€0.07, USD\$0.08)	Not applicable	Return-to-depot	Decentralised	76% (2020/21)	PET: 67% HDPE: 65%	Alum: 82%	81%
Queensland (5.2m) (see notes)	Plastic, metal, glass, liquid paperboard	<i>Fixed:</i> AUD\$0.10 (€0.07, USD\$0.08)	Not applicable	Return-to-depot	Centralised	58% (2020/21)	N/A	N/A	N/A
Western Australia (2.7m) (see notes)	Plastic, metal, glass, liquid paperboard	<i>Fixed:</i> AUD\$0.10 (€0.07, USD\$0.08)	Not applicable	Return-to-depot	Centralised	52% (2020/21)	67%	81%	63%
Kosrae (Federated States of Micronesia) (6,600)	Plastic, metal, glass	<i>Fixed:</i> USD\$0.05	State government	Return-to-depot	Centralised	86% (2017)	79%	104%	37%
Yap (Federated States of Micronesia) (11,400)	Plastic, metal, glass	<i>Fixed:</i> USD\$0.05	State government	Return-to-depot	Centralised	114% (2021)	56%	139%	6%

<sup>2</sup> In Australia, there is no legislation saying a ‘deposit’ must be paid, just that a refund must be given to all consumers that recycle at a refund point. As a result, there is no pool of unredeemed deposits. Instead, the system operator 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



State (Population)	Containers Covered	Refund Value	Unredeemed Deposits <sup>2</sup>	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
Pohnpei (Federated States of Micronesia) (36,200)	Metal	Fixed: USD\$0.05	State government	Return-to-depot	Centralised	57% (2017)	Data not available		
Republic of Kiribati (0.1m)	Plastic, metal	Fixed: USD\$0.04	State government	Return-to-depot	Centralised	Data not available			
Republic of the Marshall Islands (0.06m)	Plastic, metal, glass	Fixed: USD\$0.05	State government	Return-to-depot	Centralised	109% (2019)	Data not available		
Republic of Palau (0.02m)	Plastic, metal, glass	Fixed: USD\$0.05	State government	Return-to-depot	Centralised	84% (2020)	Data not available		
Tuvalu (11,650)	Plastic, metal, glass	Fixed: USD\$0.05	State government	Return-to-depot	Centralised	67% (2021)	5%	147%	N/A
<p><b>Notes:</b></p> <p><b>Australian Capital Territory:</b> Includes containers collected via DRS network operator as well as containers recovered via kerbside programmes (MRF). This is an approximate 50/50 split between the two streams with a large growth in MRF recovery of eligible containers in the past 12 months.</p> <p><b>New South Wales, Queensland, Western Australia:</b> Results include containers collected via DRS network operator (i.e., through return points) as well as through kerbside programmes (i.e. MRF).</p>									

Table 5 Deposit Return Systems (DRSs) for Single-use Drinks Containers in Africa: Comparison of Key Features

State (Population)	Containers Covered	Refund Value	Unredeemed Deposits <sup>3</sup>	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
Republic of Seychelles	Plastic, metal, glass	Variable:	State government	Return-to-depot	Centralised	Data not available			

<sup>3</sup> In Australia, there is no legislation saying a 'deposit' must be paid, just that a refund must be given to all consumers that recycle at a refund point. As a result, there is no pool of unredeemed deposits. Instead, the

State (Population)	Containers Covered	Refund Value	Unredeemed Deposits <sup>3</sup>	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
(99,000)		PET: 0.5 SCR (€0.03, USD\$0.04)  Alum: 0.5 SCR (€0.03, USD\$0.04)  Glass: 1 SCR (€0.07, USD\$0.08)							

---

system operator 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

Table 6 Deposit Return Systems (DRSs) for Single-use Drinks Containers in Central America and the Caribbean: Comparison of Key Features

State (Population)	Containers Covered	Refund Value	Unredeemed Deposits <sup>4</sup>	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
Barbados (0.3m)	Plastic, metal, glass	<p><i>Variable:</i></p> <p>Glass: USD\$0.15 (€0.14)</p> <p>PET: USD\$0.10 (€0.09)</p> <p>HDPE, LDPE &lt;1L: USD\$0.05 (€0.05)</p> <p>HDPE, LDPE &gt;1L: USD\$0.10 (€0.09)</p> <p>Alum: USD\$0.05 (€0.05)</p> <p>Other: USD\$0.05 (€0.05)</p>	Retained by participants within the private sector and used to reduce the cost of operating MRFs	Hybrid	Unknown	75% (estimate)	Data not available		
Belize (0.4m)	Plastic, metal, glass	<p><i>Variable:</i></p> <p>Plastic ≤500ml: USD\$0.05</p> <p>Plastic &gt;500ml: USD\$0.10</p> <p>Glass, metal: USD\$0.15</p>	Unknown	Return-to-retail	Unknown	Data not available			

<sup>4</sup> In Australia, there is no legislation saying a ‘deposit’ must be paid, just that a refund must be given to all consumers that recycle at a refund point. As a result, there is no pool of unredeemed deposits. Instead, the system operator 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

Table 7 Deposit Return Systems (DRSs) for Single-use Drinks Containers in the Middle East: Comparison of Key Features

Country	Containers Covered	Deposit Value	Unredeemed Deposits	Redemption System	Clearing System	Return Rate – Total	Return Rate - Plastic	Return Rate - Metal	Return Rate - Glass
Israel (9.2m)	Plastic, metal, glass	0.3 ILS (€0.07, USD\$0.08)	System operator	Hybrid	Centralised	77% (2021)	77%	N/A	77%