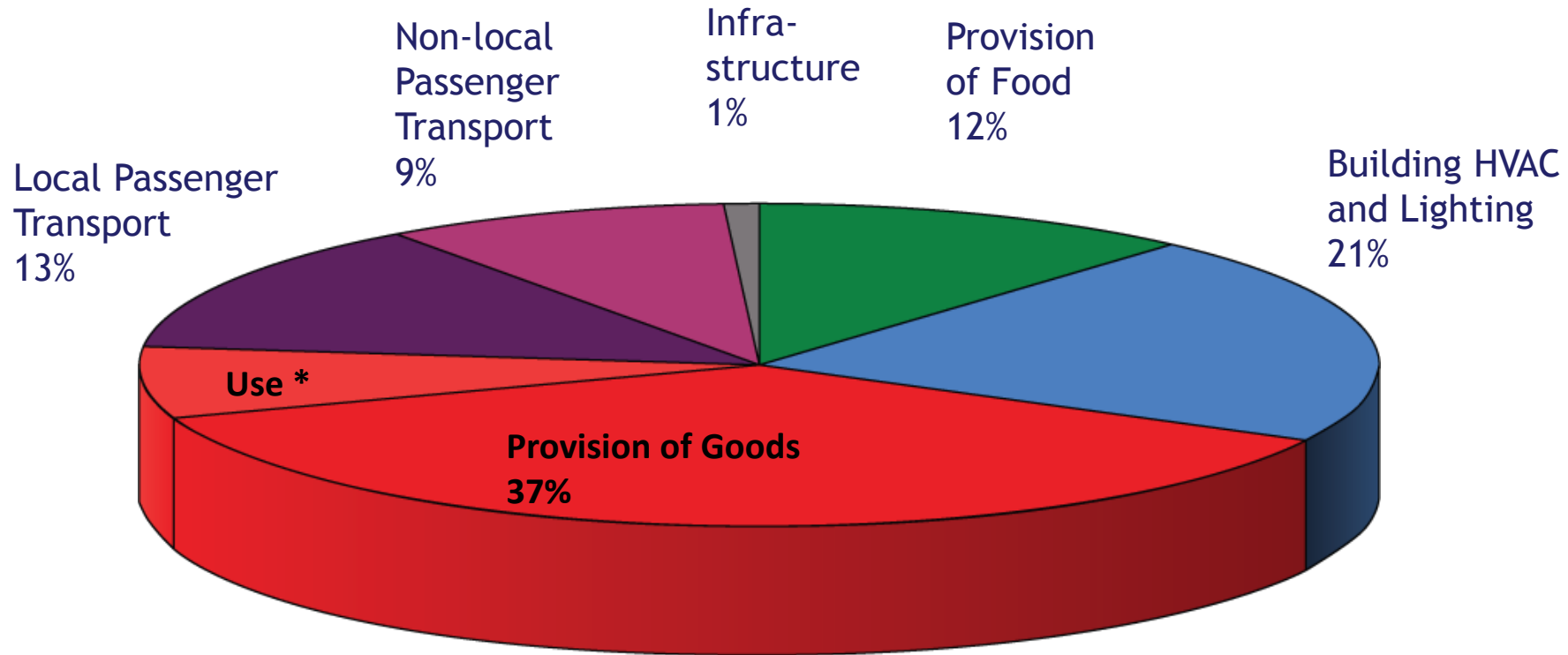


# **Bottle Bills – Benefits & Challenges**

**Susan V. Collins, President  
Container Recycling Institute  
July 17, 2019**



# US Greenhouse Gas Emissions Consumption View - Global



**Products & Packaging**  
**44%**

\* Use of Appliances  
and Devices  
7%

Source: PPI 2009 – Joshua Stolaroff

# Why Beverage Containers?

- **On the go** -- one third of all drinks sold are consumed away from home
- Consume large amounts of **energy** in manufacturing
- Contribute to **greenhouse gas emissions**: avoided by recycling beverage containers rather than manufacturing new ones from virgin materials
- Comprise significant **volume** in the waste stream – and **growing!**
- Litter: An average of 14% of litter is from beverage containers; more when accessories are included (caps, 6-pack rings, other)



# Benefits of deposit systems:

- Incentive produces **high recycling rates**: 58 - 95% for beverage containers
- Produce **clean** recycled materials for manufacturing
- Create **jobs** and new businesses that can't be outsourced overseas
- Shift end of life costs for used beverage containers to **producers responsible** for the waste
- Benefits already mentioned: litter, energy, natural resources, greenhouse gas emissions, pollution prevention

# Environmental Defence, Canada Campaign



# 2017 INTERNATIONAL COASTAL CLEANUP BY THE NUMBERS

## TOP 10 ITEMS COLLECTED



1. CIGARETTE BUTTS  
**2,412,151**



6. OTHER PLASTIC BAGS  
**746,211**



2. FOOD WRAPPERS  
**1,739,743**



7. STRAWS, STIRRERS  
**643,562**



3. PLASTIC BEVERAGE BOTTLES  
**1,569,135**



8. PLASTIC TAKE OUT/  
AWAY CONTAINERS  
**632,874**



4. PLASTIC BOTTLE CAPS  
**1,091,107**



9. PLASTIC LIDS  
**624,878**



5. PLASTIC GROCERY BAGS  
**757,523**



10. FOAM TAKE OUT/  
AWAY CONTAINERS  
**580,570**



**789,138**  
PEOPLE



**20,471,242**  
POUNDS

**9,285,600**  
KILOGRAMS



**18,935**  
MILES

**30,472**  
KILOMETERS

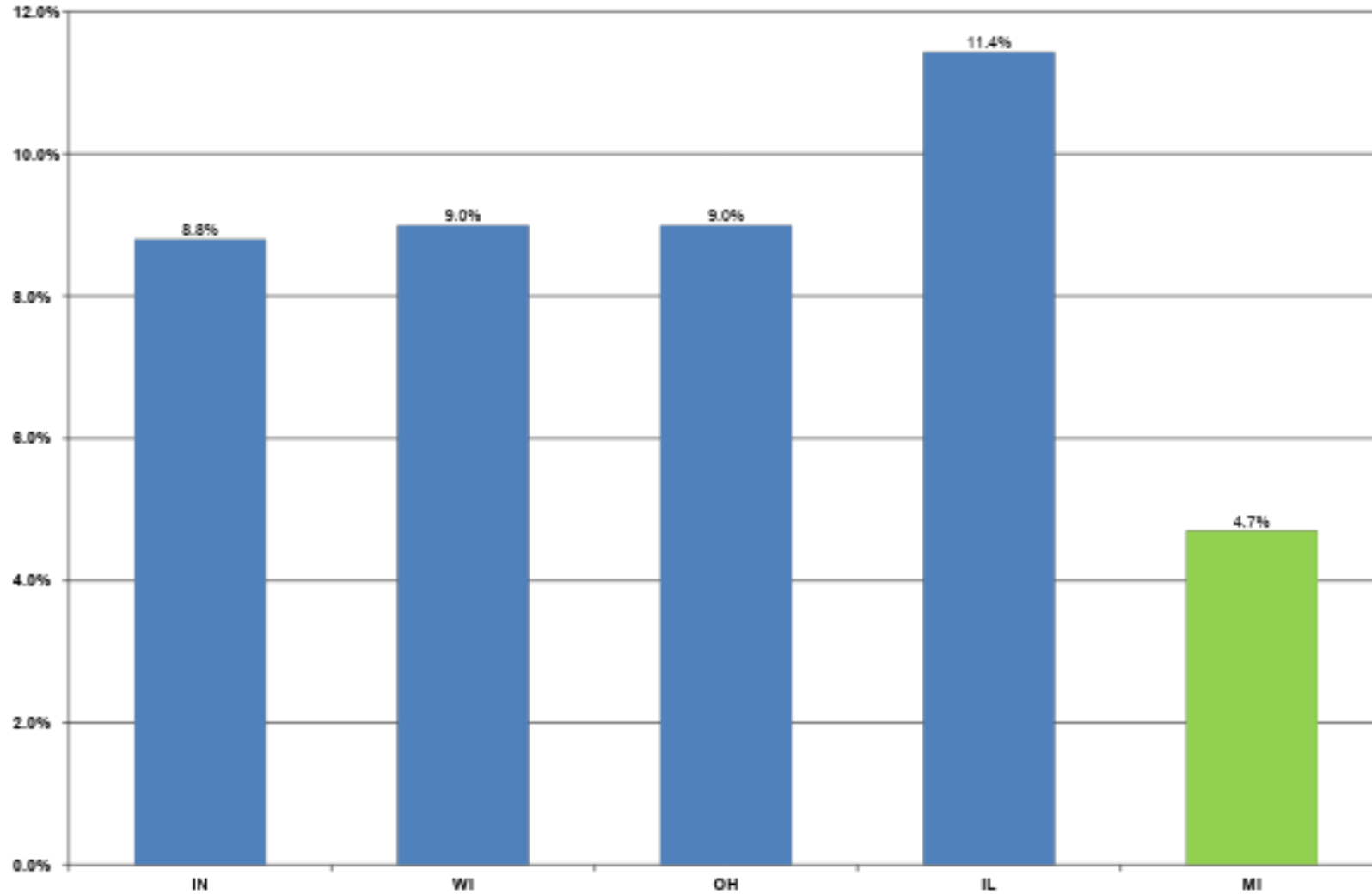


**20,824,689**  
TOTAL ITEMS COLLECTED



# Deposits Reduce Beverage Container Litter – Great Lakes

Beverage containers as a percentage of all beach litter in five States





ELSEVIER

## Marine Policy

Volume 96, October 2018, Pages 250-255



# Economic incentives reduce plastic inputs to the ocean

Qamar Schuyler <sup>a</sup>  , Britta Denise Hardesty <sup>a</sup>  , TJ Lawson <sup>a</sup> , Kimberley Opie <sup>b</sup> , Chris Wilcox <sup>a</sup> 

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<https://doi.org/10.1016/j.marpol.2018.02.009>

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### Highlights

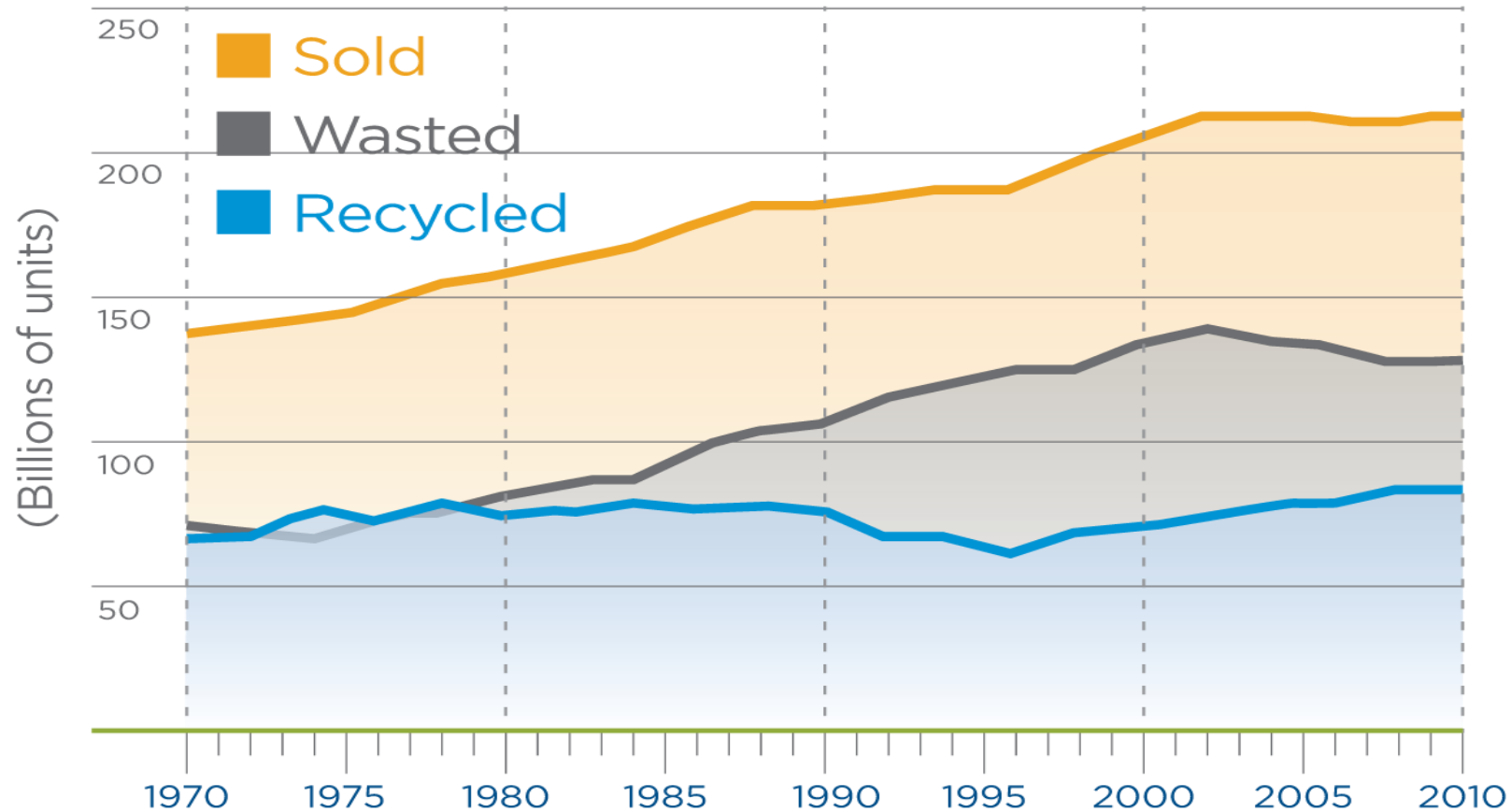
- Marine debris has significant detrimental effects on wildlife, public health, and the economy.
- CDL reduces beverage containers in the coastal environment.
- The proportion of beverage containers littered on the coasts is 40% lower in states with Container Deposit Legislation (CDL).
- States with CDL had more littered lids than other states, because legislation only targets containers.
- CDL reduces beverage containers more in poorer areas, where debris loads are highest.





Container Recycling  
Institute © 2019

# U.S. Beverage Sales, Recycling & Wasting, 1970-2010



2010:

Sold:  
222.5 billion

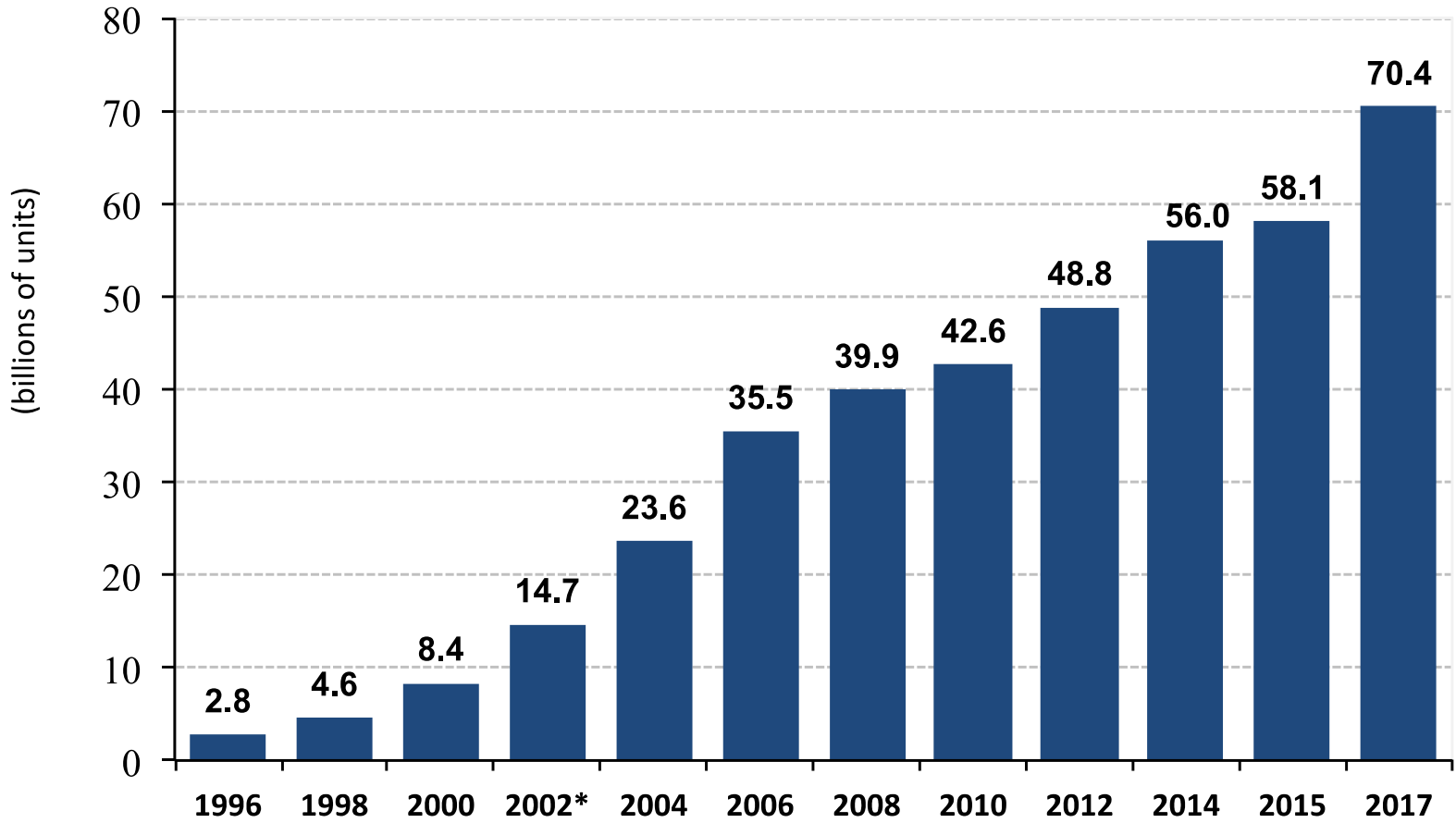
Wasted:  
134.3 billion

Recycled:  
88.2 billion

Excludes aseptic boxes, gable-top cartons and foil pouches. Excludes wine coolers, champagne, sparkling wine, frozen fruit concentrates and milk.

# PET plastic water bottles are *the* primary source of beverage sales growth

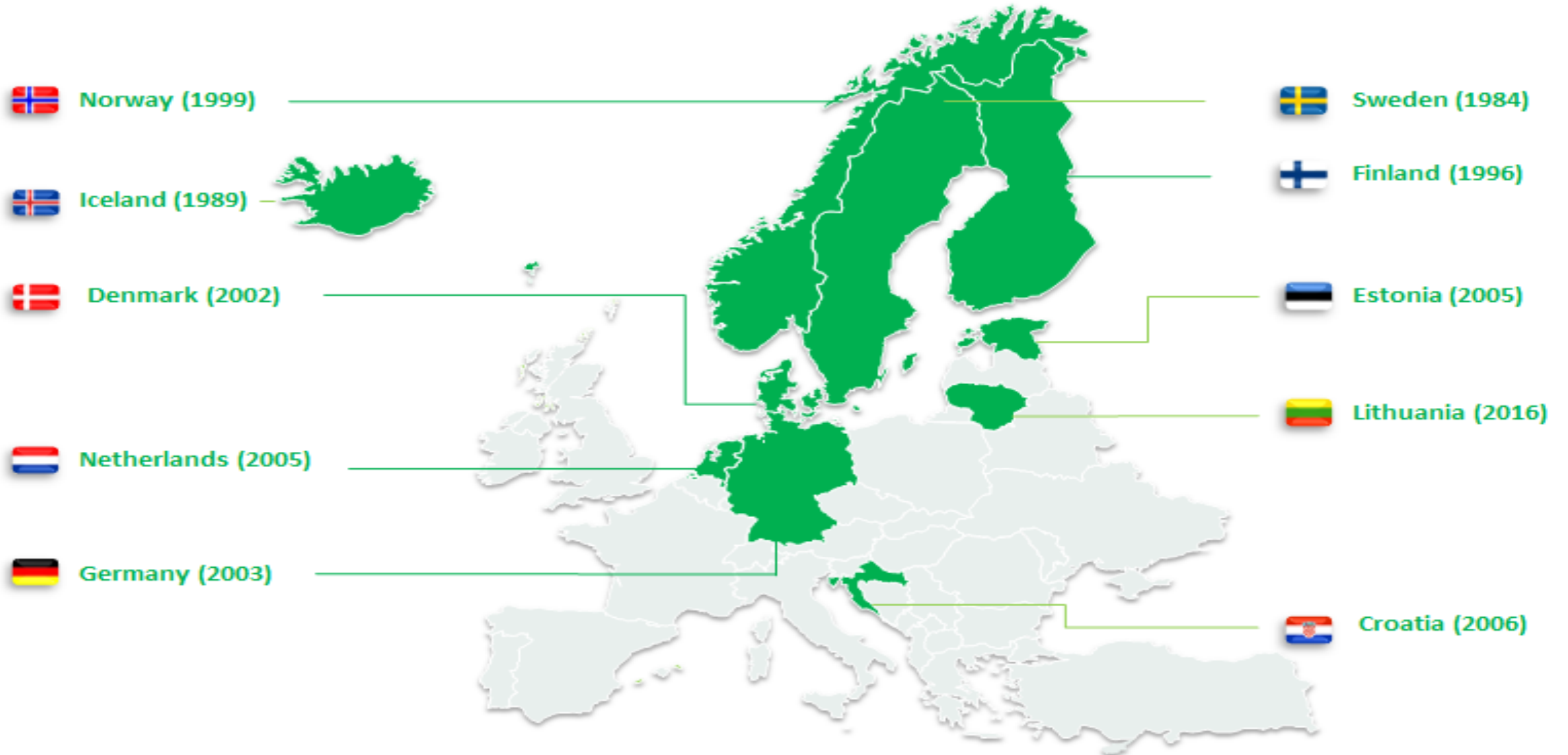
### U.S. PET Plastic Bottled Water Sales, 1996-2017



\* Defined as domestic, non-sparkling water packaged in PET plastic, in sizes of 1 gallon and less. Prior to 2015, excludes flavored, enhanced and sweetened waters (3.2 billion units in 2014). Derived from Beverage Marketing Corporation data, 2002-2017.

# In Europe – Deposit Return

(130M pop with DRS)



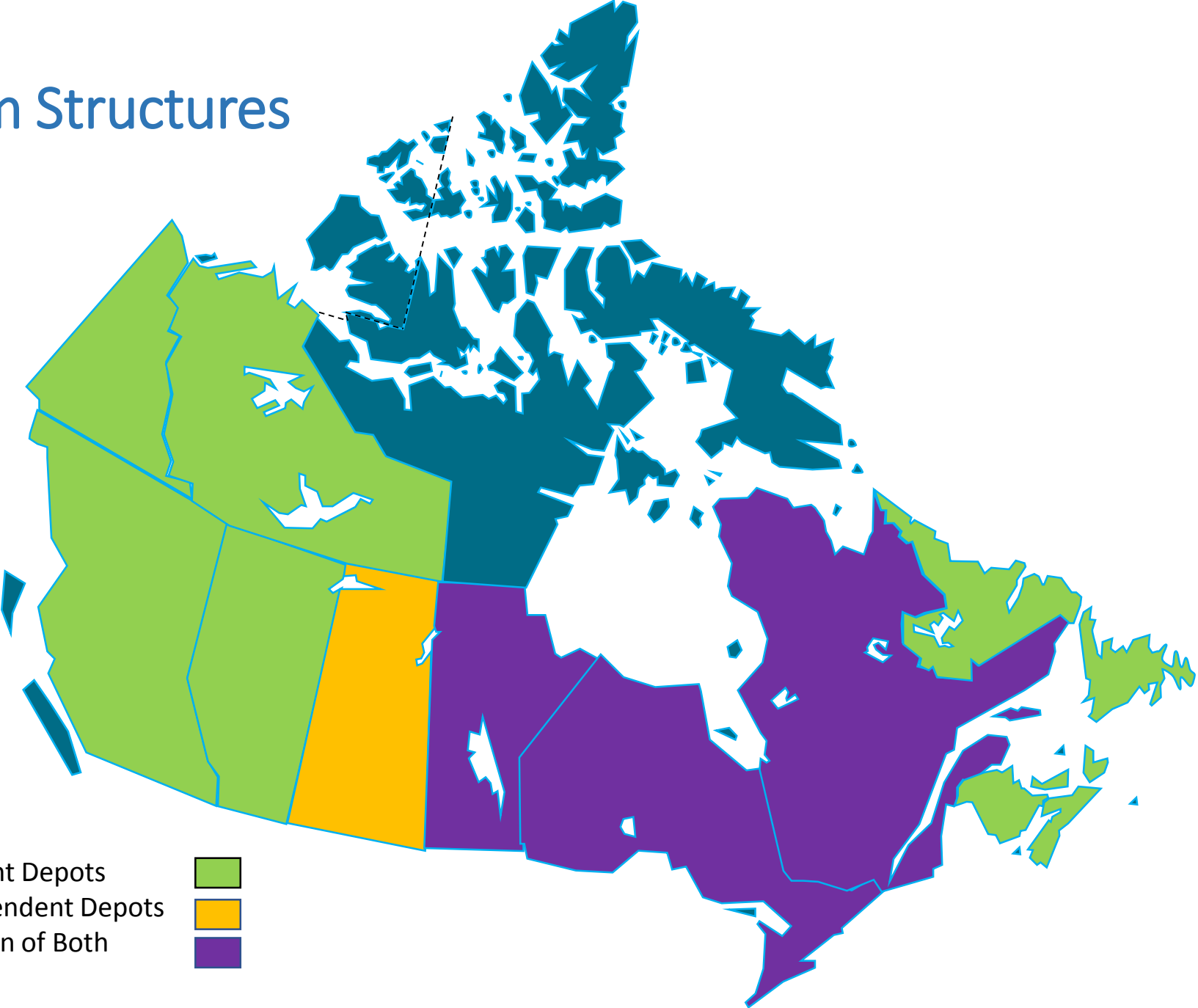
Coming soon: Romania, UK, & Malta

Deposit system implemented

# Jurisdictions in Australia with Beverage Deposit Laws



# Canada Deposit System Structures



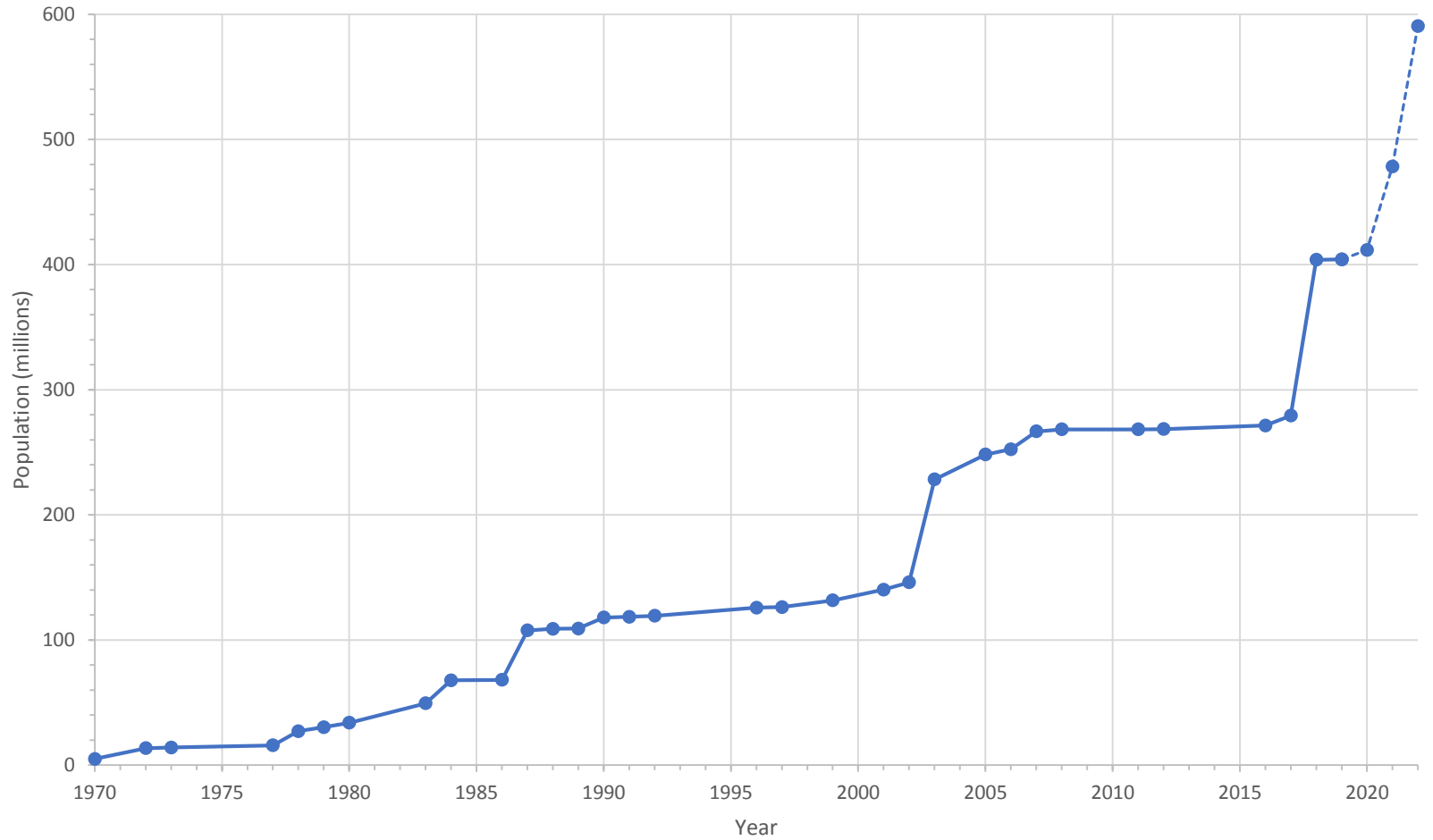
Independent Depots  
Non-Independent Depots  
Combination of Both



16 new deposit laws since 2010

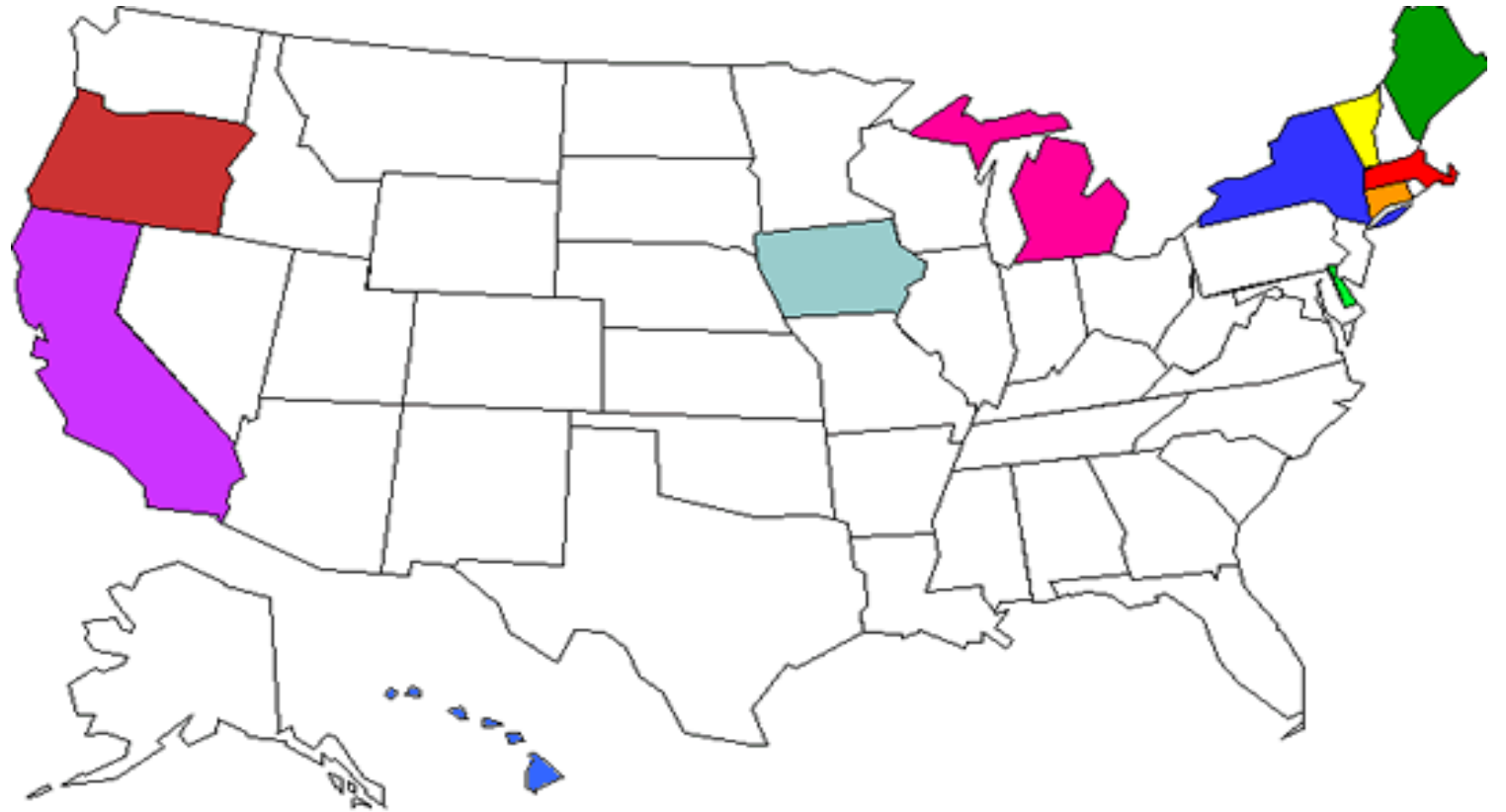
Existing and new laws serve over 590 million people

Global Deposit Laws and Population Covered



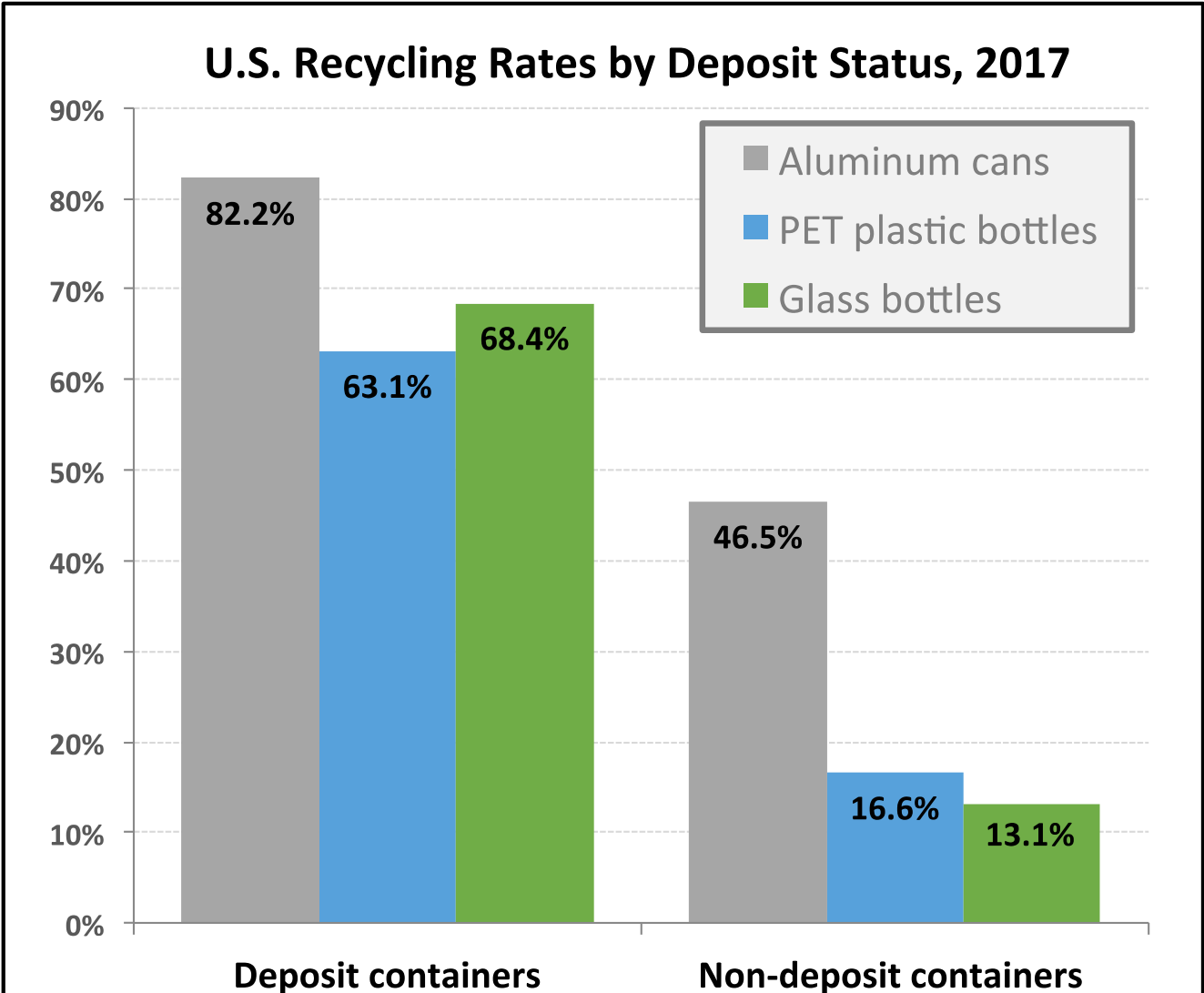
# Deposits drive up the overall U.S. beverage container recycling rate

47% of all beverage containers recycled in the U.S. in 2017 came from the 10 bottle bill states—although they have only 28% of the US population.



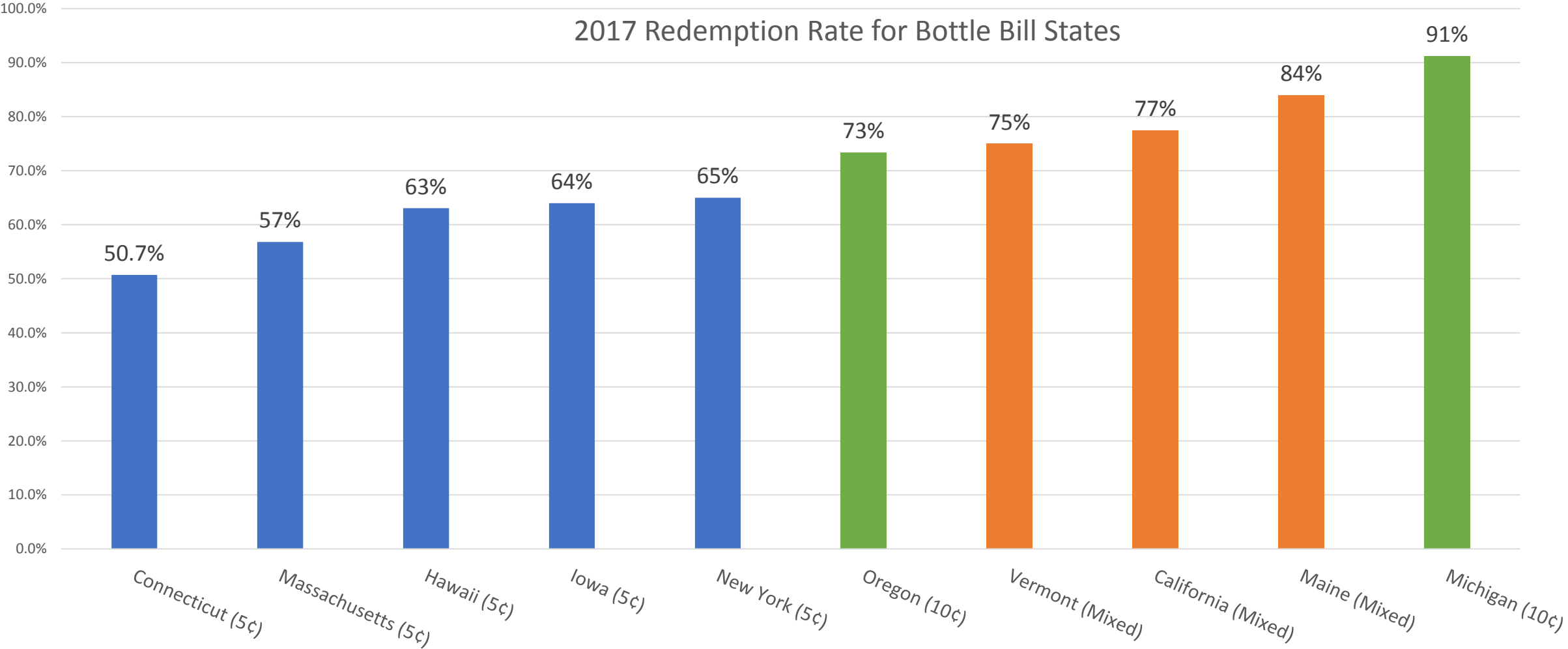


# Container Deposits are the *Rock Stars* of Recycling

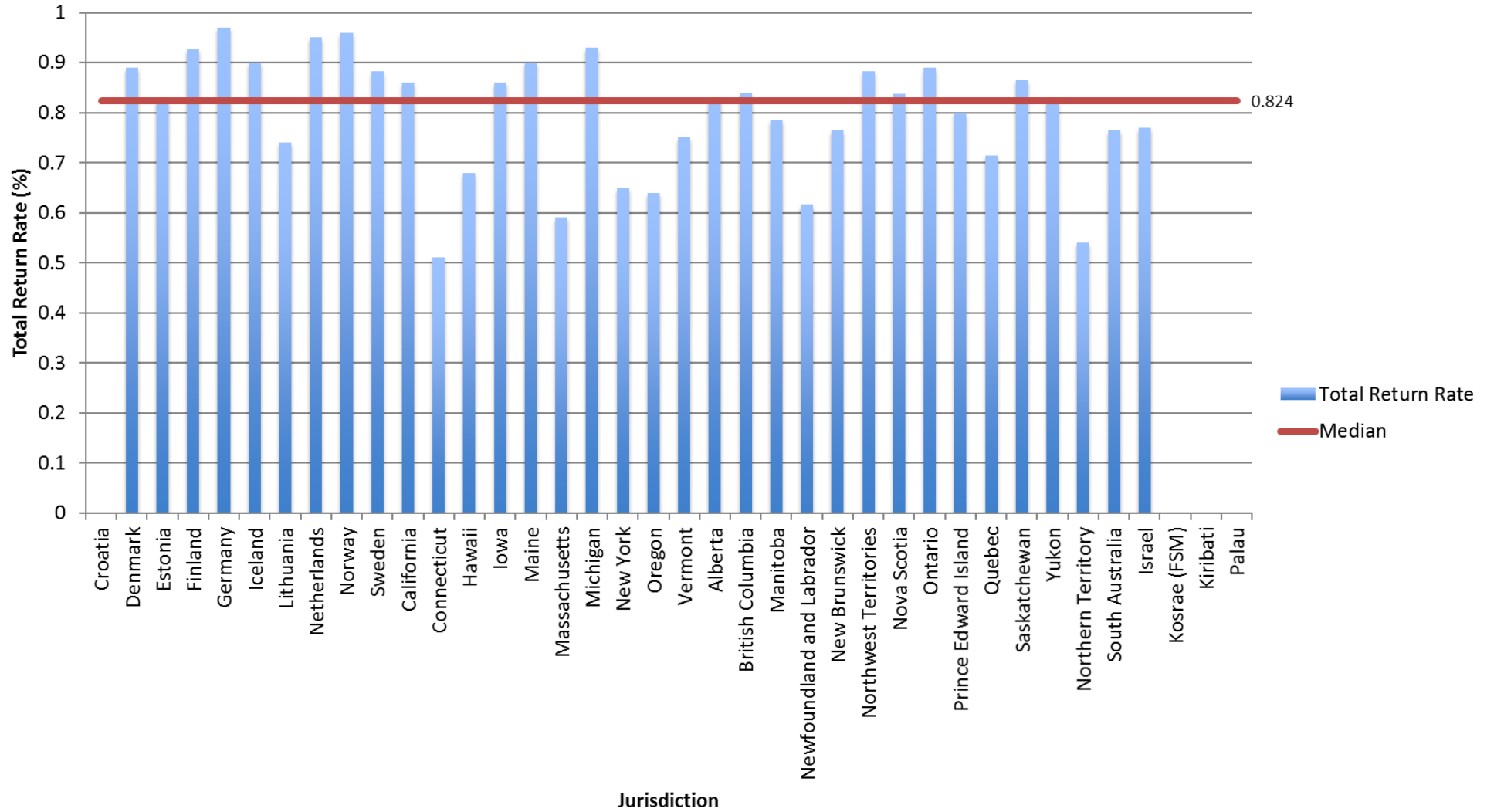


Source: "2017 Beverage Market Data Analysis," Container Recycling Institute, 2019.

# States with higher deposit values have higher redemption rates



## Return Rates in 38 Deposit Jurisdictions Around the World



State	Beer	Soda/ Carbonated water	Water	Juice, Tea, Energy Drinks, Sports, Other non-carbonated drinks	Wine	Liquor
ME	5¢	5¢	5¢	5¢	15¢	15¢
OR	10¢	10¢	10¢	10¢	X	X
CA	5¢/10¢	5¢/10¢	5¢/10¢	5¢/10¢	X	X
HI	5¢	5¢	5¢	5¢	X	X
IA	5¢	5¢	X	X	5¢	5¢
MA	5¢	5¢	X	X	X	X
NY	5¢	5¢	5¢	X	X	X
CT	5¢	5¢	5¢	X	X	X
MI	10¢	10¢	X	X	X	X
VT	5¢	5¢	X	X	X	15¢

## Bills Introduced in New States

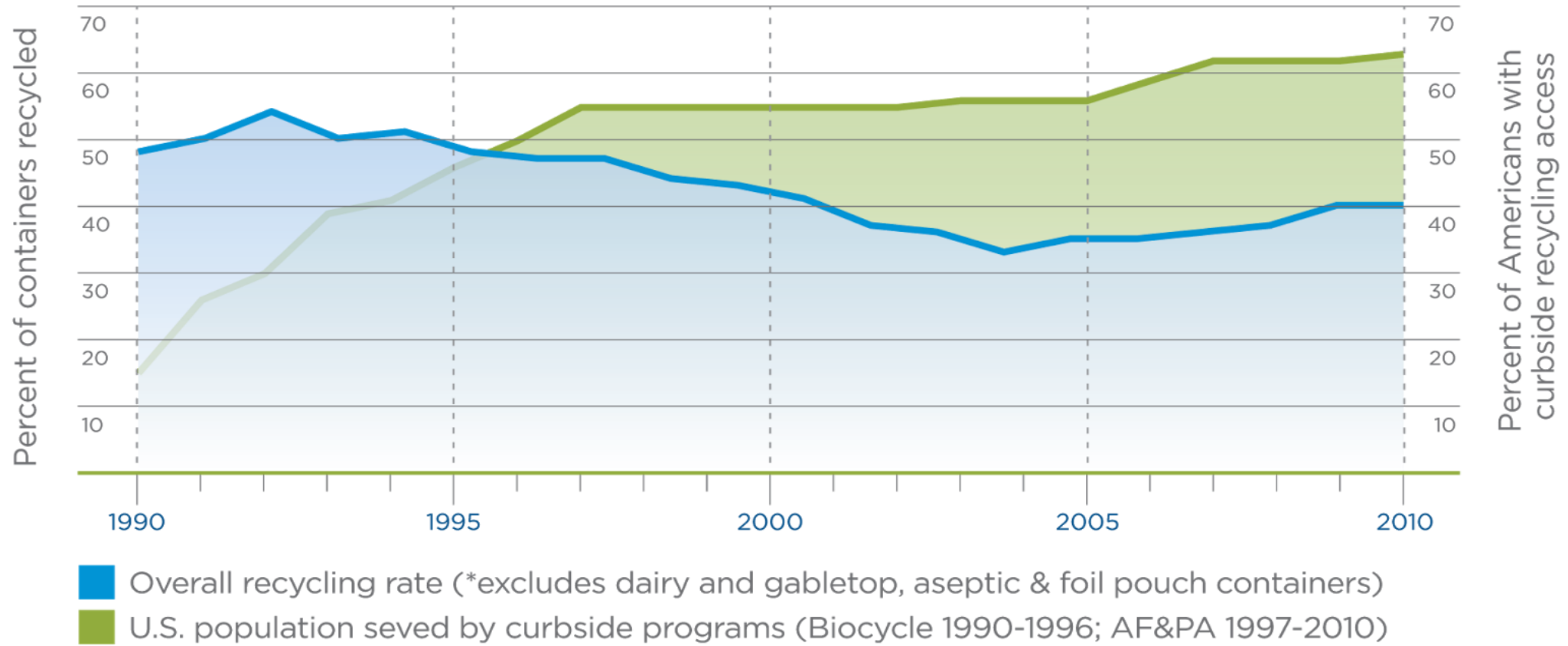
### New Jersey

- Smart Container Act
- 10 cent deposit under 24 fl oz
- 20 cent deposit over 24 fl oz

### Pennsylvania

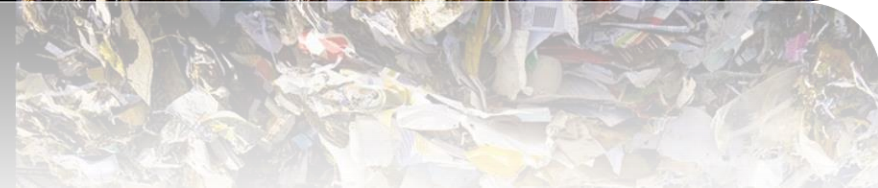
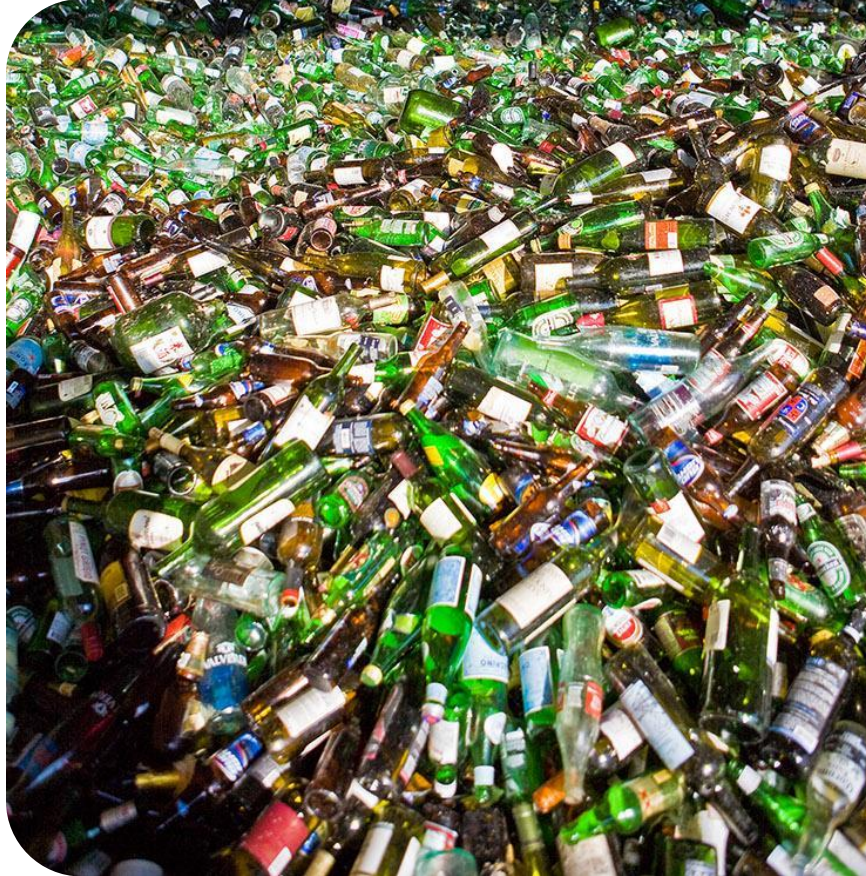
- Returnable Beverage Container Act
- 5 cent deposit
- 2 cent handling fee

# Comparing Curbside Recycling Access and Beverage Container Recycling Rates\*, 1990-2010



© Container Recycling Institute, 2013

# Glass: Deposit vs. Single Stream

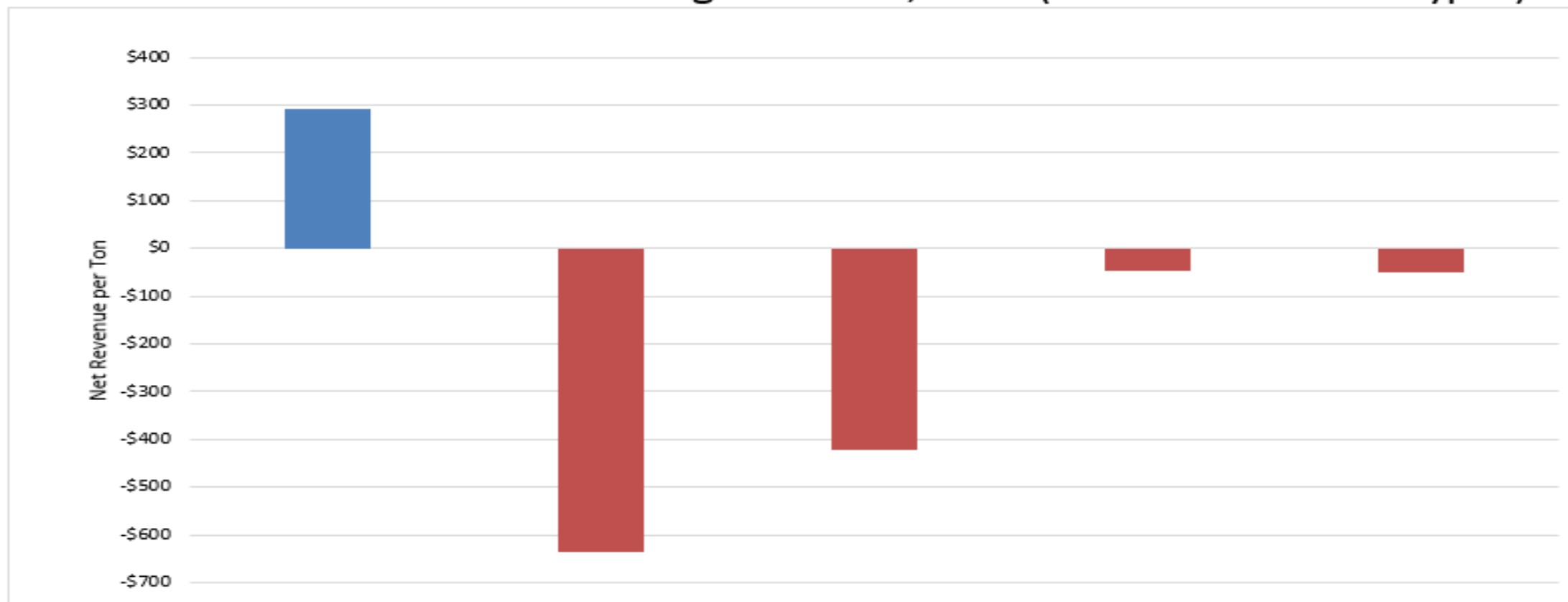


## Paper Mill - Contamination to Landfill





# Province of Ontario Blue Box Program Costs, 2018 (Selected Material Types)



	Aluminum Cans	PET Bottles	HDPE Bottles	Clear Glass	Colored Glass
Net Revenue/Cost	\$290	-\$637	-\$421	-\$48	-\$50
Gross Revenue	\$968	\$186	\$329	\$20	\$18
Gross Cost	\$678	\$823	\$750	\$68	\$68

## Deposit scrap is more valuable:

Single-stream curbside material: contaminated, low quality vs. clean, separated deposit material:

- **PET plastic from container deposit programs typically sells for 40% more than curbside PET**
- **Curbside glass *costs* \$20/ton to recycle—when markets can be found for it at all—versus deposit glass that has a \$20/ton scrap value.**

# Cost Savings for Municipalities Resulting from CDS

## **35% of Beverage Containers are Recycled**

### **SAVINGS ON:**

- **Collection costs for recyclables**
- **Processing costs for recyclables**

## **Without Deposits, Most (65%-75%) of Beverage Containers are Disposed or Littered**

### **SAVINGS ON:**

- **Collection costs for disposal: 70% of the containers**
- **Landfill tipping fees**
- **Litter collection pick-up costs**
- **Collection from public litter bins**
- **Storm drain (or waterway) cleanup costs**
- **Costs due to injuries, damage to farms and farm animals**

## **REVENUE LOST from minority of containers that are recycled:**

- **Sale of recyclables (scrap value)**

[https://reloopplatform.eu/wp-content/uploads/2016/06/Summary-of-studies\\_impact-of-DRS-on-munis-FINAL-31May2016.pdf](https://reloopplatform.eu/wp-content/uploads/2016/06/Summary-of-studies_impact-of-DRS-on-munis-FINAL-31May2016.pdf)

# Public Policy Positions in Support of CDLs

Trade Association	Year	Policy or Target
Aluminum Association	2008	“Container deposit programs are a proven, sustainable method of capturing beverage cans for recycling. States that have deposit programs have the highest can recycling rates, on average 74% or higher, while the recycling rate in non-deposit states is around 38%.”
Aluminum Association	2008	Goal of 75% recycling rate for aluminum cans by 2015
Association of Plastics Recyclers	2006	“APR supports the expansion of existing deposit collection programs.....”
Glass Packaging Institute	2008	Goal to use 50% recycled glass by 2015
Glass Packaging Institute	2008	Glass manufacturers “will continue to work with policymakers to improve and expand state beverage deposit programs.”
		See more here: <a href="http://www.bottlebill.org/about/benefits/support-industry.htm">http://www.bottlebill.org/about/benefits/support-industry.htm</a>

# A sampling of plastics reduction commitments

Company	Timeframe	Commitment or Target
Coca-cola	By 2030	Equivalent of 100% of containers collected and recycled
Coca-cola	By 2030	Average 50% recycled content in bottles
Danone	By 2025	100% of packaging reusable, recyclable or compostable
McDonald's	By 2025	100% of guest packaging from renewable, recycled or certified sources
Kraft-Heinz	By 2025	100% of packaging recyclable, reusable or compostable
Nestlé	By 2025	100% of packaging recyclable or reusable

# Testimony from Nick Brown, Head of Sustainability, Coca-Cola European Partners, U.K., 2017

- “.....but we think a well designed deposit return scheme can work in that context with those other policies. We see from other countries you get higher recovery rates and less littering.”
- “.... We want all our packaging to be recovered and we see, from those other schemes in other countries, that you can get high 80% and low 90% recovery rates on plastic packaging. There is no reason why in the UK we should not be striving for a scheme that achieves those kinds of outcomes.”

## **Coca-Cola European Partners (CCEP) and Coca-Cola Great Britain (CCGB): '11 Key Principles' for a well-designed Deposit Return Scheme**



1. Easy for public to recycle and no penalty for doing the right thing (i.e. good provision of return points and deposit not subject to VAT)
2. Good financial management and fraud control
3. A common approach covering the whole of GB
4. Run by one not-for-profit management company
5. Retailers, machine suppliers and hauliers are paid for the services they provide
6. Scheme costs are covered by the sale of collected materials, deposits which aren't redeemed by the public and a fee on producers and retailers
7. The management company designs and runs the scheme to achieve targets agreed with Government, including responsibility for determining the number and type of collection points, administration and fraud control.
8. The management company is run by the producers and retailers who have an obligation to fund the scheme
9. Scheme is flexible enough to work in different retail outlets, specific exemption criteria for small stores and those with sensitive hygiene or security requirements
10. Underpinned by legislation so all parties engage in the same scheme
11. Sits alongside other policy initiatives such as changes to the current producer responsibility schemes and other proposed taxes

For more information please contact:  
Coca-Cola European Partners GB Press Office  
01895 844 828 | [ccep@3monkeyszeno.com](mailto:ccep@3monkeyszeno.com)

*The Coca-Cola Company*

*Coca-Cola*  
EUROPEAN PARTNERS

# To Get More Information



**Main website:**

**[www.container-recycling.org](http://www.container-recycling.org)**

*Sign up for our free weekly newsletter*

**Bottle Bill Website:**

**[www.bottlebill.org](http://www.bottlebill.org)**



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