

# Expanding Vermont's Bottle Bill

Vermont House  
Committee on Natural  
Resources, Fish and  
Wildlife

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Benefits
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# Eunomia's Deposit Experience

Vermont (2020)  
Impact of  
Modernizing Deposit  
System

Ontario (2019)  
Cost benefit analysis  
if non-alcoholic DRS  
alongside curbside

Scotland (2013 – 2019)  
Design of the system  
(2015) Producer  
mapping, logistic cost  
calc, return locations

England (2009 - 2018)  
Cost benefit, jobs  
assessment, impact on  
curbside, impact on  
small businesses

Czech Republic  
(2018\_  
System design & cost  
benefit for Alu and  
plastic – good/bad  
practices

California (2018)  
Legislative review  
aimed and  
improving  
performance

New York (2019)  
Impact of  
expansion and  
economic benefits  
assessment

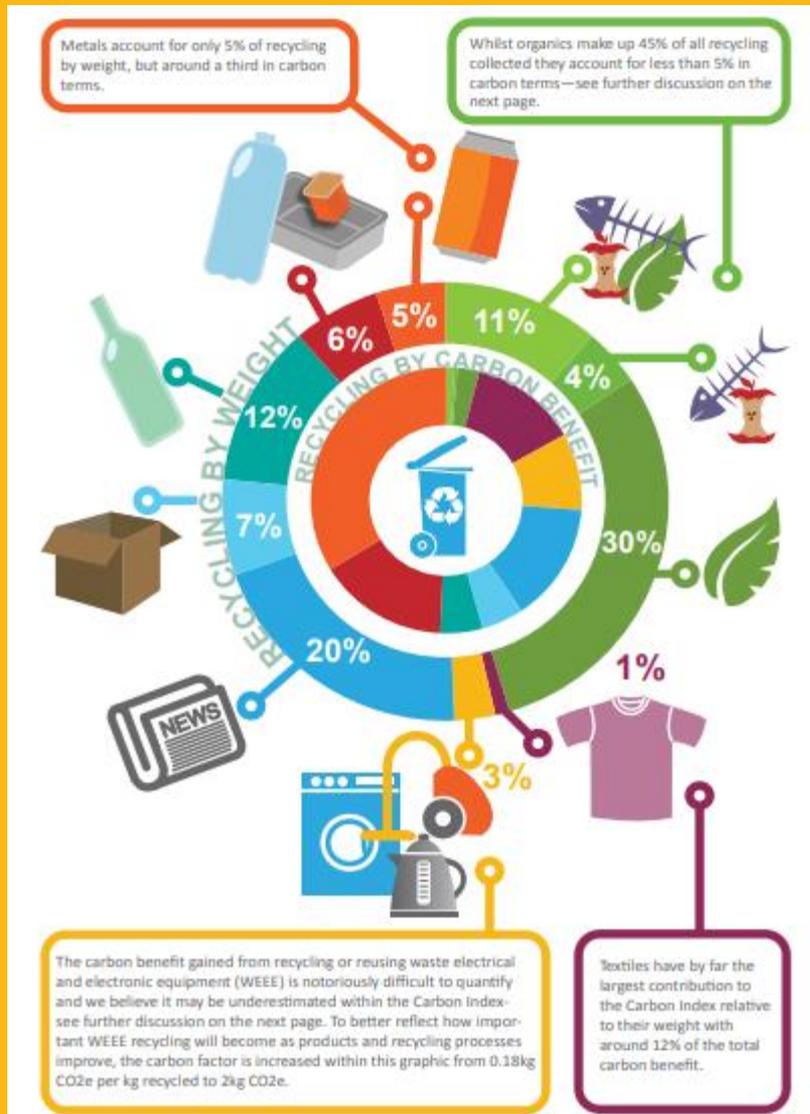
Kosovo (2018)  
Modelled 5 designs for  
system cost and job  
potential

Blueprint for a Modern Deposit  
(2017)  
Principals of design

Spain and  
Catalonia  
(2017)  
Design of  
system

Turkey (2018)  
Design & Cost  
Benefit

# Recycling & the Circular Economy



- Principles:
  - Keep products and materials in use - closed loop
  - Maintain quality to enable continuous recycling
  - Not just about diversion - reducing GHG associated with use of primary materials
- Goal: Resource management system that delivers the above

# Concerns with Expansion



- Considers only impact on recycling not on waste to landfill
- Does not look at system goal and how to cost effectively meet the CE goal
- Considers only cost not wider environmental impact
- Does not consider how lost material could be offset with collection of other material

# Real Financial Impact

Revenue  
Loss

Disposal  
Savings

Litter  
Management  
Savings

Glass  
Processing  
Savings

Collection  
Efficiencies

Reduced  
MRF  
Tipping  
Fees

- Landfill savings: proportionally more material moves from trash stream than recycling stream
- Glass limited markets for curbside glass – not the case for deposit glass
- Reduced MRF processing fees
- Potential collection efficiencies – route optimization
- Up to 90% reduction in beverage litter

# Real Environmental Impact

More  
Material  
Recycled

Increased  
Quality

GHG  
Savings

Reduced  
litter

- Material loss at curbside  
BUT more material recycled
- Increased quality = Closed  
loop recycling and  
marketable glass
- Reduced litter
  - Land and marine
  - Public amenity
- GHG savings
  - Replacement of virgin  
material
  - Closed loop
  - Landfill reduction
- Ability to capture more  
material - HDPE

# Vermont

## Current System

## Future System

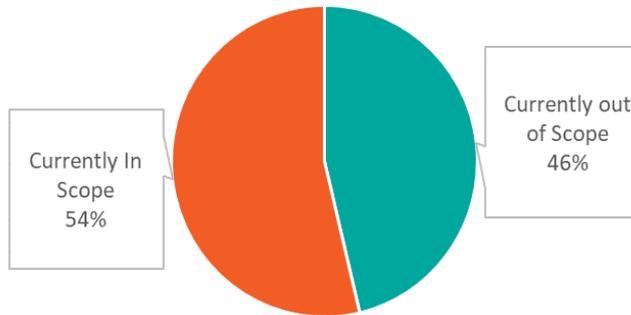
Deposit



Scope

Carbonated soft drinks  
Beer  
Spirits  
Sparkling water

Containers



Current +  
Water  
Wine + Hard cider  
Sports/energy/fruit/  
tea & coffee drinks

Redemption rate  
for beverage  
containers

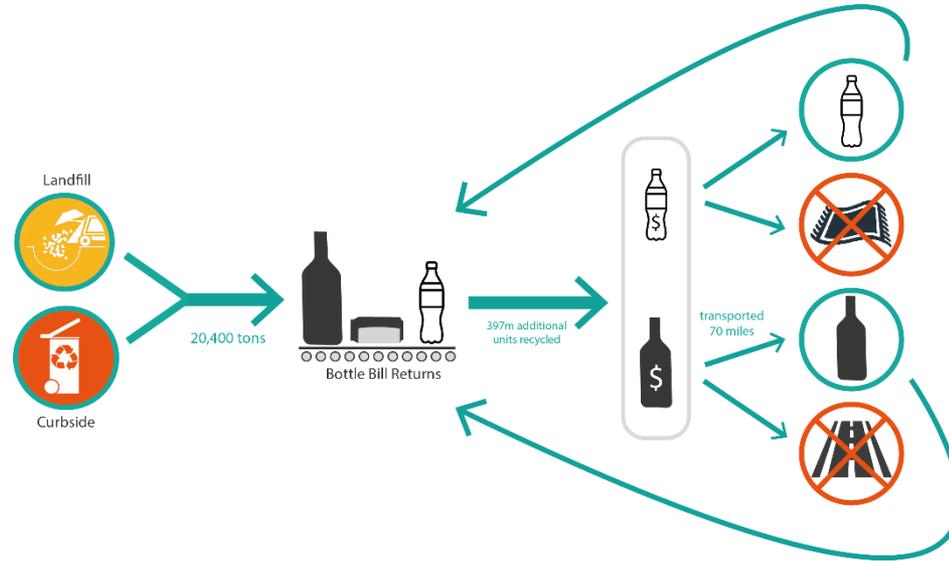
**75%**

**90%**

**Analysis: Consider the economic and environmental impact on MRF operators, haulers and ultimately households of future system**

# Vermont

## More Closed Loop Recycling



## How to be Top Recycling State

State	Extensive Curb Assess	Deposit with Full Scope & 10c Deposit
1. Maine – Full Scope	Yes	Full scope 15c and 5c
2. Oregon	Yes	Full scope and 10c
5. Vermont	Yes	Neither

## Cost Mitigation

- Landfill savings: \$120/ton
- Processing and end of life management savings for glass: \$96/ton (excludes collection cost savings)

# Key Take - Aways



- Reduced material to landfill and associated disposal costs mitigates material loss
- Allows for curbside collection efficiencies due to reduced volume
- Taking a systems approach to achieving a CE
  - Supports curbside recycling
  - Cost effective mechanisms for achieving high diversion and recycling rates
  - Maintains material in use through closed loop recycling - maximum GHG reduction benefits
- **Better Together – Curbside + Optimal Deposit**
- **Mitigate impact of MRFS through transitional support**



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