

Expanding Vermont's Bottle Bill

Vermont House
Committee on Natural
Resources, Fish and
Wildlife

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February 24, 2020





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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

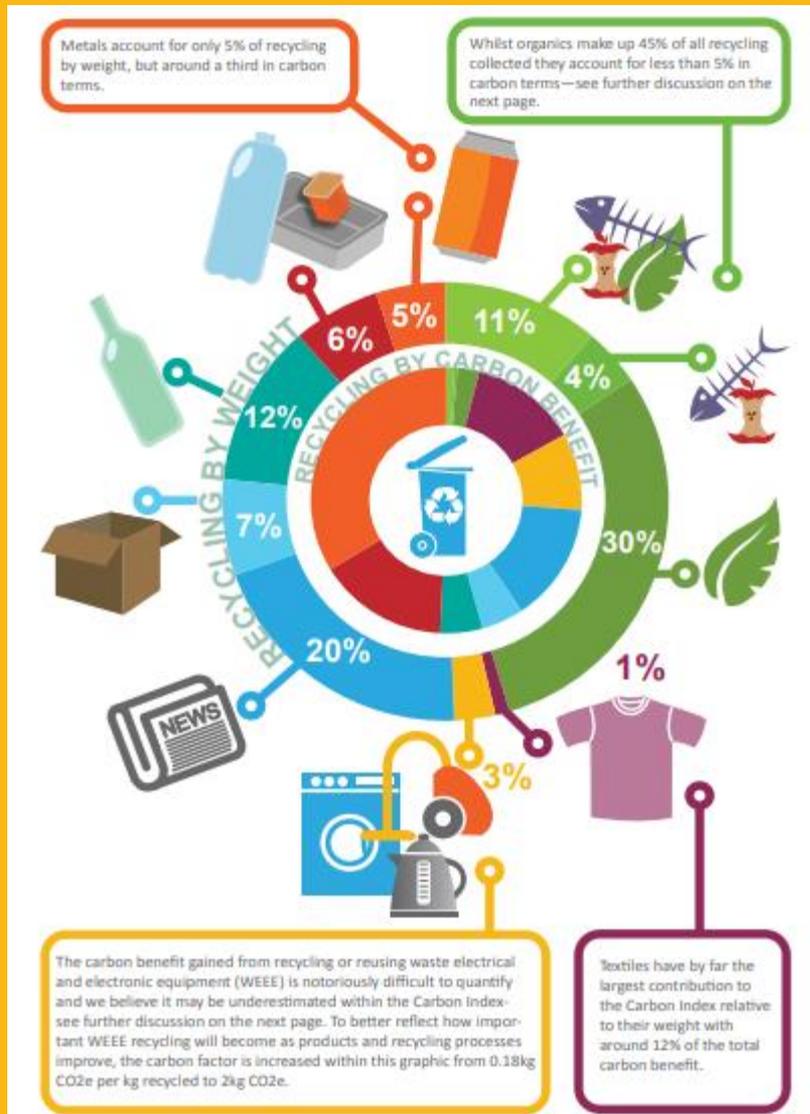
Kosovo (2018)
Modelled 5 designs for
system cost and job
potential

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

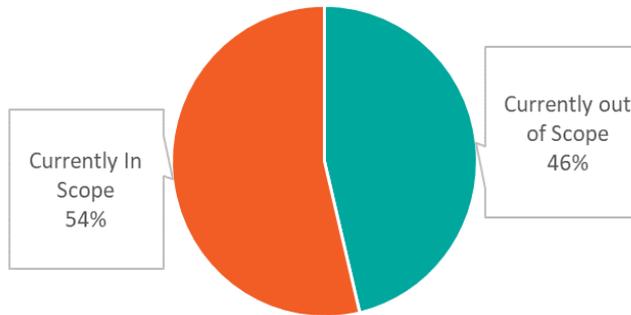
Deposit



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

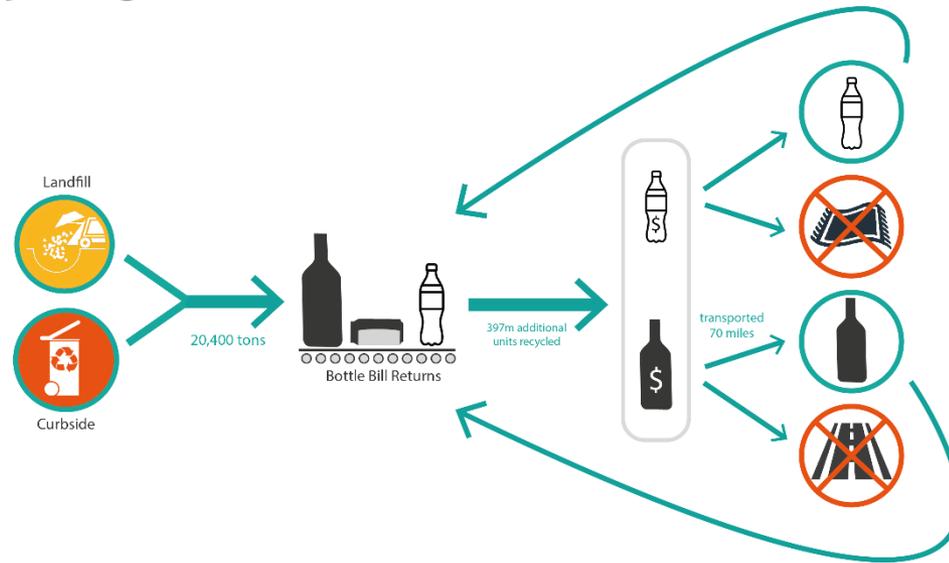
75%

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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