Increase Recycling Working Group Meeting
October 27, 2020
1-3pm
Increase Recycling Working Group

• Welcome & Introductions, Co-chairs:

  Laura Francis, First Selectman, Town of Durham
  Ben Florsheim, Mayor, City of Middletown

DEEP Support Team: Sherill Baldwin, Chelsey Hahn, Elly Moore
Connecticut is looking to the future of waste reduction and sustainable materials management. DEEP and many municipalities from across the state are joining together to form the Connecticut Coalition for Sustainable Materials Management (CCSMM) and explore ways to reduce the amount of waste that is generated in our state, improve reuse, recycling, organics collection, and other innovative solutions.

CCSMM is looking to the future to find preferred ways to reduce and manage the amount of waste produced in Connecticut that provide system reliability, environmental sustainable, and fiscal predictability. A full list of the participating jurisdictions is included at the end of this page, and will be updated as more jurisdictions sign on over time.
Welcome: Housekeeping

• Meeting is in webinar format, automatically muting all attendees that are not panelists.
• This meeting is being recorded.
• Non-municipal participants: Please share your ideas and comments will be accepted through “chat” or,
• Anyone/everyone encouraged to provide feedback to: DEEP.RecyclingProgram@ct.gov
Increase Recycling Working Group
Future Meeting Dates

• Monday, November 9: 10:00 – 12:00pm
• Monday, November 23: 1:00-3:00pm
• Monday, December 7: 1:00-3:00pm

Registration information on Increase Recycling Working Group webpage
Increase Recycling Working Group

• Focus of Presentations/Discussion:
  o Existing Systems/ what’s working, needs improvement?
  o Resources for municipalities
  o How can local groups help?
  o Necessary system improvements (diversion of problematic materials, creation of convenient local collection areas for recyclables)
  o Municipal Resources: “boxed-up” solutions that are convenient, no or low cost)
Boxed Up: Textiles

**Benefits**
- Textiles represent about 7.4% of CT MSW, representing 101,413 tons annually (2015).
- Some companies pay, avg. 0.05-.15 cents per pound*, these companies also provide you with weight of textiles collected.

**Costs**
- Collecting textiles has no to little cost to set up.
- Most companies will ‘drop’ a collection container at your municipal transfer station, fire department, school or other town property at no cost.
- Some offer curbside collection programs.

**Resources**
- CT DEEP webpage: [Textiles Reuse and Recycling](#), includes how to set up a collection program, what happens to clothes after collected and Dept. of Consumer Protection safety and liability information.
- Also, archived webinar: [Collecting Textiles for Reuse and Recycling](#)
Setting Up Textiles Collection in my Municipality, Business, or School

• The Northeast Recycling Council provides how-to steps and key questions to think about when developing a textiles collection program in the Collecting Textiles – Make it Work For Your Community Blog Part 1 and Part 2. NERC’s blog also helps you calculate the approximate costs of disposing textiles in your community.

• SMART is an international trade association for mixed post-consumer textile manufacturers, graders, sorters, and recyclers, and has developed resources for educators and municipalities for promoting textile recovery including Videos and PSAs, a Media Kit, Infographic Banners, and a model ordinance.

• Check out Connecticut's Donation Bin Law (CGS Section 21a-430) and SMART’s Collection Bin Operator Code of Conduct video for suggestions on how to regulate collection bins in your community.

Source: CT DEEP Textile Reuse and Recycling webpage: https://portal.ct.gov/DEEP/Reduce-Reuse-Recycle/Textiles-Reuse--Recycling
**Collecting Textiles for Reuse and Recycling**
February 25, 2019
Speakers: Sherill Baldwin, CT DEEP
Brian Bartram, Salisbury-Sharon Transfer Station
Julie DesChamps, Greenwich Recycling Advisory Board
Brooks Parker, Town of Manchester

Source: Archived Municipal Recycling Coordinator Webinars
Boxed Up: Swap Shops (aka Take It or Leave it Sheds)

**Benefits**
- Swap shops allow community members the opportunity to give gently used, clean and safe materials a new home.
- Reusing items cuts down on the amount of waste requiring disposal and can extend the useful lives of many items.

**Costs**
- Establishing swap shops requires only the cost of the space and staffing.
- Municipalities can choose to set up swap shops at transfer stations, recycling centers, Public Works buildings, or other public locations.
- Towns can choose to charge for use of the shop/dropping off materials.

**Resources**
- CT DEEP webpage: [ReUse Centers and Material Exchanges](https://energy.ct.gov/ive/vegetable-root-waterline) lists local collection sites for donating and buying reusable goods.
- Northeast Recycling Council (NERC) [Reuse Explorer Guide](http://www.ne-recycling.org/) describes how to design and implement safe and effective Reuse Sheds.
Municipal Swap Shops

Many communities with solid waste or recycling transfer stations have Swap Shops, a barn, shed or other building where residents may take or leave useable household items. Swap Shops should be in a dedicated area, shed or building at the Transfer Station. They can become hubs for community activity.

When designing the space, it's important to consider the goals of the program and the needs of the community. Each community should think about items for collection in the shop, a layout plan and design for the structure, ongoing maintenance, staffing, hours of operation, liabilities, signage, promotion, and other management needs.

Source: CT DEEP ReUse Centers and Material Exchanges webpage
& NERC's Reuse Explorer Guide
Boxed Up: CT WRAP – Plastic Film Collection

Benefits

• Promoting this "Return to Retail" program helps reduce contamination in our mixed CT's mixed recycling program by providing a solution.
• Plastic film is more than bags – while many focus on bags a CT WRAP audit found 30-50% of incoming film was not plastic bags.
• Trex offers a school challenge, which can be linked with community-wide collection of film – winners receive a bench made from recycled plastic promoting the importance of using products with recycled content.

Costs

• The plastic film-wrap program is a “return to retail” program; relying on participating retailers and residents to bring film back to stores.
• To ensure residents are aware of the program relies on promotion – which could happen on municipal webpage, handouts, etc.
• Towns could collect more film by offering plastic bag/film collection at transfer station, senior centers, schools, or community centers.

Resources

• Plastic Film Recycling https://www.plasticfilmrecycling.org/
• CT WRAP videos – Partnering with local retailers; benefits for retailers https://www.youtube.com/playlist?list=LL
CT WRAP – Plastic Film Collection

Connecticut WRAP (Wrap Recycling Action Project) is an innovative public/private partnership that promotes recycling of plastic “film” beyond bags. The partnership is comprised of public officials, municipalities, recycling officials, retailers and grocers such as Price Chopper, plastics makers, Trex, which makes recycled plastic lumber products, and other recycling advocates.

Grocers and retailers accept plastic bags such as grocery bags, newspaper bags, produce bags, bread bags, dry cleaning bags, and even zipper bags for recycling. They also accept plastic wraps from water bottle cases, diapers, bathroom tissue, and paper towels, as well as bubble wrap and shipping pillows. The plastic bags and wraps must be clean and dry and placed in storefront recycling bins. Plastic bags and wraps get recycled into products such as new grocery bags, benches, and decking.

Residents can learn where and what to recycle at https://www.plasticfilmrecycling.org/

Source: CT DEEP, Public Officials Launch Campaign to Recycle More Plastic Bags, Wraps
Municipal Recycling Resource Center: Archived E-News and Webinars

CT WRAP: Trex Challenge, a school recycling project
September 25, 2017Facilitator: Sherill Baldwin, CT DEEP
Speakers: Stephanie Hicks, Trex
Jennifer Heaton-Jones, Housatonic Resources Recovery Authority
Cathy Praissman, Team Leader

Source: Archived Municipal Recycling Coordinator Webinars
Response to Public Comments

CT Local Recycling Coordinators
  • Per town
  • Regional approach
    • COGs vs. Authorities
    • Learning from others – MA DEP
  • How to fund

Bottle Bill
  • Increase containers, incl. glass, liquor, nips
  • Increase deposit
  • Increase handling, supporting redemption centers
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Municipal support, regional approach

Brooke Nash
Branch Chief
Municipal Waste Reduction Program
MassDEP
Map of MAC Districts

Source: https://www.mass.govguides/massdep-municipal-assistance-coordinators
Apply for SMRP Municipal Technical Assistance

Your city or town may apply for up to 80 hours of help from a MassDEP Municipal Assistance Coordinator (MAC) for a single recycling/waste reduction project.

Beginning in January 2020, MassDEP will accept applications for MAC project assistance on a rolling basis.

Apply for Technical Assistance via Re-TRAC Connect™ →

THE DETAILS

How to apply

Online

Next steps

What to Know

Your city or town may apply for up to 80 hours of help from a MassDEP Municipal Assistance Coordinator (MAC) for a single recycling or waste reduction project.

CONTACT

Learn More About SMRP Technical Assistance Grants

Questions about SMRP Technical Assistance?
MassDEP Municipal Assistance Coordinators
janice.pare@mass.gov

Questions about Re-TRAC Connect™?
rachel.smith@mass.gov

Source: https://www.mass.gov/how-to/apply-for-smrp-municipal-technical-assistance
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Modernizing Bottle Bill

Jules Bailey, Chief Stewardship Officer
Oregon Beverage Recycling Cooperative

Oregon’s Bottle Bill: A Cooperative Approach
Oregon’s Bottle Bill: A Cooperative Approach

How the Private Sector Made Redemption and Recycling a Success

Jules Bailey
Chief Stewardship Officer
Oregon Beverage Recycling Cooperative
Bottle Bill: A Brief History

A private system run by distributors

- **1971**
  - 5¢ deposit
  - Founded upon return to retail

- **2009**
  - OBRC created – privately run

- **2011**
  - BottleDrop® Redemption Center introduced

- **2016**
  - Reusable bottle planning begins

- **2017**
  - Increase to 10¢ deposit

- **2018**
  - Expansion, huge increase in container volume
  - Reusable program launches
The Power of a Dime

10¢ Sparks Huge Demand

Redemption rate went from 64% to over 82% (now around 90%!) ~35% increase
Efficiency in Numbers

The Oregon Beverage Recycling Cooperative operates with…

- **$44m** operating budget (2019)
- **2 billion** containers/year recycled
- **200** members and participants
- **500** employees throughout Oregon
- **2600** retail redemption locations (~450 total RVMs)
- **62** Green bag drop sites (25 full-service centers)
- **5** processing plants
- **Zero** taxpayer dollars
Where Do the Deposits Go?

Customers get back every dime
BottleDrop® Redemption Centers

Clean, fast and easy returns

- Single-purpose, indoor facilities
- 25 full-service redemption centers
  - One currently under development
  - Possible because of return to retail requirement
- Largest center accepts approx. 100 million containers/year
- ZERO taxpayer dollars
Centers can have as many as 15 or more RVMs depending on volume.

Customers can redeem up to 350 container/person/day – more than at stores.

Cash dispensers on site allow for immediate refund access.
Green Bags
The easy self-serve account program

• **Gear up.** Customers enroll, get card and tags at kiosk, and buy bags at store

• **Tag & fill it.** Place coded BottleDrop tag on bags and fill with redeemable containers

• **Drop it.** Leave bag at secure drop door – 62 locations statewide

• **Track it.** Check account balance online or with our mobile app
BottleDrop now over 70% of volume

Returns have shifted quickly to a system customers prefer

Container Return By Location

- Large Retailers
- C-Stores
- BottleDrop/Green Bags

- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020

- Redeemed Containers
- 200,000,000
- 400,000,000
- 600,000,000
- 800,000,000
- 1,000,000,000
- 1,200,000,000
- 1,400,000,000
- 1,600,000,000
- 1,800,000,000
- 2,000,000,000

BottleDrop now over 70% of volume

Returns have shifted quickly to a system customers prefer
Blue Bags

Redeem yourself, support your cause

• Non-profits:
  – **Enroll** as fundraisers
  – **Distribute** Blue Bags
  – **Drop** full bags at a BottleDrop
  – **Collect** a check

• **Over $1 million** raised to date
Express/Dealer Redemption Centers

Expanding access throughout the state

- Smaller volume markets and urban areas
- Expanded access to green bag accounts and no fee for bag drops
- 37 locations operating

New locations coming every week
Get Your Cash and Much More

Stewardship for the next generation

• At a BottleDrop
• At a store kiosk
• Get 20% more with rewards
• Donate to charity
• Save for college
Measuring Success

Creating a legacy for people who call Oregon home

- Over half a million account holders
  - Up to 1000 account sign ups each day
  - Up to 30,000 bags processed per day
  - Green bag about 37% of overall volume
- 70%+ of all redemptions through BottleDrop
- 1000+ eligible non-profits in Give
- Over $1.5 million donated to non-profits

...and still zero tax dollars
Measuring Success

Creating a legacy for people who call Oregon home
Oregonians are familiar with the bottle deposit and return program. And they agree that it is good.
Familiarity with the program has remained stable since 2016.

Long-term residents are slightly more familiar.

- Very familiar: 2019 - 66%, 2016 - 64%
- Somewhat familiar: 2019 - 29%, 2016 - 29%

Age Group Comparison:
- 0–10 yrs: 2019 - 91%, 2016 - 92%
- 10–19 yrs: 2019 - 92%, 2016 - 97%
- 20+ yrs: 2019 - 97%, 2016 - 92%
Strong agreement that the program is good has increased.

<table>
<thead>
<tr>
<th>Year</th>
<th>Strongly</th>
<th>Somewhat</th>
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<tr>
<td>2019</td>
<td>72%</td>
<td>25%</td>
</tr>
<tr>
<td>2016</td>
<td>61%</td>
<td>31%</td>
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Program viewed more positively knowing that it is privately-run by distributors.

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<thead>
<tr>
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<th>2016</th>
<th>2019</th>
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<tr>
<td>Positive</td>
<td></td>
<td>71%</td>
</tr>
<tr>
<td>About the same</td>
<td></td>
<td>27%</td>
</tr>
<tr>
<td>Negative</td>
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BottleDrop users are satisfied with their experience

Most feel the centers are convenient and safe.

92% Satisfied

- Convenience: 5.7
- Safety: 5.6
- Customer service: 5.4
- Cleanliness: 4.8
Where Does the Material Go?

Keeping the cycle close

**Plastic:** 100% processed at ORPET facility located in St. Helens (~30 million lbs. of plastic last year)

**Glass:** 100% processed in Portland at O-I and made into new bottles (including refillables!)

**Aluminum:** 100% processed domestically
Privately-run DRS is EPR

Oregon program most efficient way to do EPR for containers

- Producers and distributors internalize all costs and benefits of the system, incentivizing efficiency and performance
  - Oregon has lowers cost per container in the world, with strong outcomes
- Enable supply chain links that benefit other environmental goals like minimum content standards
- No handling fees or other payments that increase cost
- Scrap retained by beverage industry
- Creates a centralized system with economies of scale that allow for innovations like refillable bottles
Refillables/Reusables

Building on the infrastructure

12 participating breweries, cideries and wineries so far

Lower cost for producers

Fraction of the carbon footprint of even recycled glass

About 1 million units in first year

Projected 6 million units by year 3
Quality is Everything
Clean, defect-free and sorted

- Inspection of every bottle post-wash
- Additional swab testing to ensure cleanliness
- OBRC takes responsibility and liability for cleanliness for any bottle defects before filling
- Bottle washing machines can easily handle foreign contaminants, like cigarettes, limes and even syringes
Quality is Everything

Clean, defect-free and sorted
Refillables Participants

Off to a strong start with some of the Northwest’s best
Thank you.

Learn more at obrc.com and BottleDropCenters.com

Jules Bailey
Chief Stewardship Officer
Oregon Beverage Recycling Cooperative
Increase Recycling Working Group

Key Principles of High-Performing Deposit Return Systems

Michael Noel, Governmental Affairs Manager
TOMRA
Key Principles of High-Performing Deposit Return Systems
By returning empty containers to our RVMs, you automatically contribute into our cleanest loop system, reducing the need for new containers produced from new materials and keeping materials clean.

Our expert engineers in the field of recycling understand the complex nature of processing raw waste, and have developed solutions to achieve the highest possible recovery and purity rates, producing clean PET flake.

THE WORLD’S MOST ADVANCED RECYCLING SYSTEM.

4500+ employees globally

~900 in America
TOMRA has four decades of experience in deposit systems

ACTIVE IN EVERY MAJOR GLOBAL DEPOSIT MARKET

NORWAY  GERMANY  MICHIGAN
QUEBEC  NEW YORK  OREGON

+ 31 more markets

40 BILLION cans and bottles collected annually

84,000 reverse vending machines installed globally

$6.8 BILLION in deposits exchanged annually
We are active in every link of the deposit value chain
Deposit systems are known for incentivizing recycling.
Deposit systems are extremely effective at capturing items for recycling.

**Beverage Container Recovery Rates for Recycling**

- **US Non-Deposit Average**: 27%
- **US Deposit Average**: 72%
- **High-Performing DRS**: 90%+
Not all deposit systems are created equal.

Return Rates of Every Deposit Return System in the World (2019)

If 2019 data was not available, latest year is shown.
Why are some container deposit return systems succeeding while others are failing?
What We’ve Learned: High-performing deposit return systems prioritize four principles

**PERFORMANCE**
A collection target for all beverages plus a meaningful deposit delivers strong results.

**CONVENIENCE**
The redemption system is easy, accessible and fair for all users.

**PRODUCER RESPONSIBILITY**
Producers finance and invest in the system using the unredeemed deposits and commodity revenues.

**SYSTEM INTEGRITY**
Trust is built into the system through transparent management, a data-driven clearinghouse, and innovative technology.
These principles are brought to life through 12 Key Elements

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<tr>
<th>PERFORMANCE</th>
<th>PRODUCER RESPONSIBILITY</th>
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<table>
<thead>
<tr>
<th>CONVENIENCE</th>
<th>SYSTEM INTEGRITY</th>
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<td>4</td>
<td>10</td>
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<td>5</td>
<td>11</td>
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Relevant scope of beverages and containers

PERCENT OF BEVERAGE UNITS COVERED BY DEPOSIT PROGRAM

- MASSACHUSETTS: 41%
- VERMONT: 46%
- MICHIGAN: 56%
- IOWA: 64%
- CONNECTICUT: 76%
- NEW YORK: 77%
- CALIFORNIA: 86%
- HAWAII: 87%
- MAINE: 91%

High-performing systems establish a deposit of 10¢

Minimum deposit value

U.S. Beverage Container Redemption Rates (2019)

- Michigan
- Oregon
- Maine *
- California
- Iowa **
- New York
- Massachusetts
- Connecticut

8 out of 10 of the highest performing deposit return systems in the world are “return-to-retail” models.

NETHERLANDS
FINLAND
DENMARK
GERMANY
LITHUANIA
NORWAY
CROATIA
MICHIGAN
Centralizing key responsibilities

The Role of a “Centralized System Manager”

<table>
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<tr>
<th>Mission</th>
<th>• Accomplish all targets at lowest possible costs for its stakeholders</th>
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<tr>
<td>Owned and financed by</td>
<td>• Beverage producers and retailers</td>
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</table>
| Potential Responsibilities | • Deposit clearing  
• Product registration  
• Fraud management  
• Calculating EPR and/or handling fees  
• Data management  
• Commodity sales/distributions  
• Material transportation  
• Reporting and public education |
MassDEP evaluated impacts of an expanded bottle bill

“Municipal Benefits of an Expanded Bottle Bill” (MassDEP 2009)

Net Recycling Revenues
Avoided Collection Costs
Avoided Disposal Costs
Litter Abatement
Net Savings

High estimate
Low estimate

$6.9m
$4.2m

Further reading

“Factsheet: Economic Savings for Municipalities”

- Compiles 30+ studies on the impact of deposit systems on municipalities
- https://www.reloopplatform.org/resources/factsheets/
Studies on job impacts of a modernized deposit system

Jobs Created by NY’s Current Deposit System
5,726 jobs

Total Jobs Forecasted for a Modernized NY Deposit System
7,803 jobs

Thank you!

Mike Noel,  
@MrMikeNoel

www.tomra.com
When a ‘redemption rate’ is set in statute, stakeholders align their activities to achieve it.

Container Redemption Rate Targets

- **Norway**
- **Netherlands**
- **Quebec***
- **Lithuania**
- **European Union**
- **Oregon**

*Quebec set staggered goals of 75% collection by 2025, 90% 2030. ** EU set goals of 77% collection by 2025, 90% by 2029.
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• Comments/Discussion for municipal participants

• For non-municipal attendees, to submit comments and solutions, use the CHAT box or submit them through the public engagement request for comments and solutions or email: DEEP.RecyclingProgram@ct.gov
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- Materials to consider to achieve greater reuse/recycling:

  **Reuse:**
  - Textiles - BOXED
  - Furniture (swap shop? repair?)
  - Reuse markets/Municipal swap shops - BOXED
  - Electronics (reuse/repair) – TO BE BOXED

  **Recycling:**
  - Bottle Bill (liquor bottles, including nips) – OCT 27th Meeting
  - Plastic Film (WRAP program, other muni. collection areas) - BOXED
  - Rigid Plastics
  - Scrap Metal
  - Electronics (collection of certain covered electronics* thru CT’s Electronic Recycling Law; non-CED collection options)
  - Tires (EPR WG?)
  - Hazardous Waste (EPR WG?)
  - Food Scrap Collection at Transfer Stations – TO BE BOXED

*incl desktop or personal computers, computer monitors, portable computers, CRT-based televisions and non-CRT-based televisions
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• Suggested topics for next meeting?
Increase Recycling Working Group

- Suggested topics for next meeting?
  - Ban Single Use Plastics:
    - Learn about Stamford's expanded polystyrene ban
    - Learn about banning food service ware with PFAS
  - Repair or Donation:
    - Managing used furniture; appliances; repair clinics
  - How to improve existing infrastructure
    - Stay with a single stream?
    - Source Separation: Glass
    - Source Separation: Bulky Rigid Plastics
    - Multy-family Housing
    - Public Space Recycling
    - Municipal buildings, including schools
    - Site constraints at transfer stations; satellite collection locations
    - Regional/shared services
  - MSW/Recycling Contracts:
    - How can contracts support or inhibit waste reduction, reuse and recycling
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• Next Steps

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