



Welcome to
Northeast Resource
Recovery Association's

Summer Webinar Series

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- Visit our new website at: nrrarecycles.org

For Registration:
nrrarecycles.org

Operator Track - Wednesdays 9:00 am - 10:00 am		
Date	Webinar	Presenters
September 2, 2020	Tricks of the Trade	Joan Cudworth, Hollis; Ed Walsh, Rollinsford; Brian Patnoe, Littleton, NH
September 9, 2020	MA Mattress Recycling Incentive Grant Program	Rachel Smith, MADEP



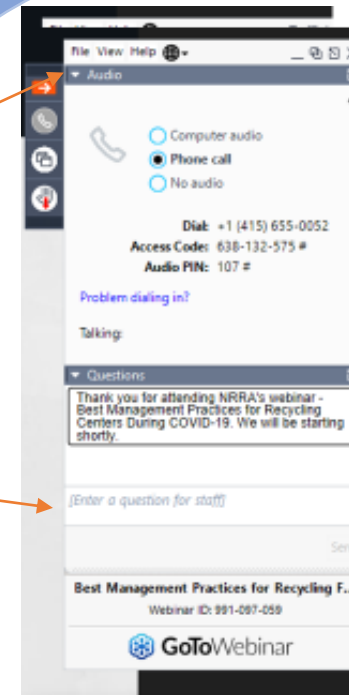
For Registration:
nrrarecycles.org

Educator/Community Track - Fridays 12:00 - 1:00 pm		
Date	Webinar	Presenters
August 28, 2020	We Need to Think About Clothing Differently	Joe Whitten, Apparel Impact
September 11, 2020	Event Waste Reduction: Styling Your Event Recycling Plan	Cindy Sterling, NRRA



GoToWebinar Setting the Table

- You will not be able to be heard by the presenters or other participants on GTW.
- If you cannot hear the presenters, click on audio and computer audio. If that does not work, try clicking on phone call.
- We hope you ask questions and the presenters will answer them if time allows. Click on Questions and keep it short!



About NRRA

- Recycling nonprofit
- 400+ members,
primarily municipalities
- Founded nearly 40 years
ago



Cooperative Marketing & Purchasing



- Enable communities to manage their own recycling programs
- 40 programs, including single stream and municipal solid waste
- Connect sellers of recyclables to purchasers



Education & Technical Assistance

- Workshops
- Facility tours
- Annual conference, webinars
- Technical assistance
- School Club programs





The webinar will begin soon!





Maine's Product Stewardship Programs

Megan Pryor
Environmental Specialist
Division of Materials Management

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Protecting Maine's Air, Land and Water

Product Stewardship & EPR

- Product stewardship is the act of minimizing the health, safety, environmental, and social impacts of a product throughout all lifecycle stages
 - Product stewardship may be voluntary or mandatory
- Extended Producer Responsibility (EPR) laws create mandatory product stewardship, holding manufacturers responsible for helping manage their products at end-of-life
- EPR can help to mitigate the disconnect between producers and the process of dealing with end-of-life management of the products they produce



Drivers for EPR

- Certain waste materials are difficult to manage due to inherent product characteristics
 - EPR may include financial incentives to design products or packaging to be less toxic, or easier to manage at end-of-life
- When the cost of end-of-life management is paid upfront, there will be sufficient resources to manage disposal, and this cost will not fall on the general tax payer
- There may also be inadequate resources at the municipal level, including money and end-market availability
 - EPR helps relieve some of the financial burden on the public sector for end-of-life product management



Reducing Risk with EPR

Many waste products handled through Maine's EPR programs are combustible or contain toxins like lead, mercury, cadmium, lithium, brominated flame retardants, phosphorous coatings, or PVC plastics (create dioxins if burned).

- EPR provides free or low-cost options for residents and municipalities to responsibly manage waste materials and:
 - Reduces the risk that toxins will be released into the environment
 - Reduces the risk of fire, damage, or injury during collection and disposal
 - Increase recycling of materials that might otherwise be disposed of improperly



Products Covered in Maine

These products have stewardship laws or take-back mandates:

- Beverage containers
- E-waste including video display components for TVs and other devices, computer monitors, and printers
- Certain consumer batteries
- Cell phones
- Lamps (light bulbs) that contain mercury
- Mercury auto switches
- Mercury thermostats
- Latex and oil-based architectural paint



Product Stewardship Framework

Maine's product stewardship framework uses the following criteria to determine whether a product is a good fit for EPR:

1. Other countries, provinces, or states have successfully implemented EPR for the product
2. Contains toxics that pose health and environmental risks if improperly managed
3. EPR can reduce the financial burden on taxpayers and municipalities
4. The existing voluntary programs are inadequate
5. EPR would increase recovery of materials



Products Considered for EPR

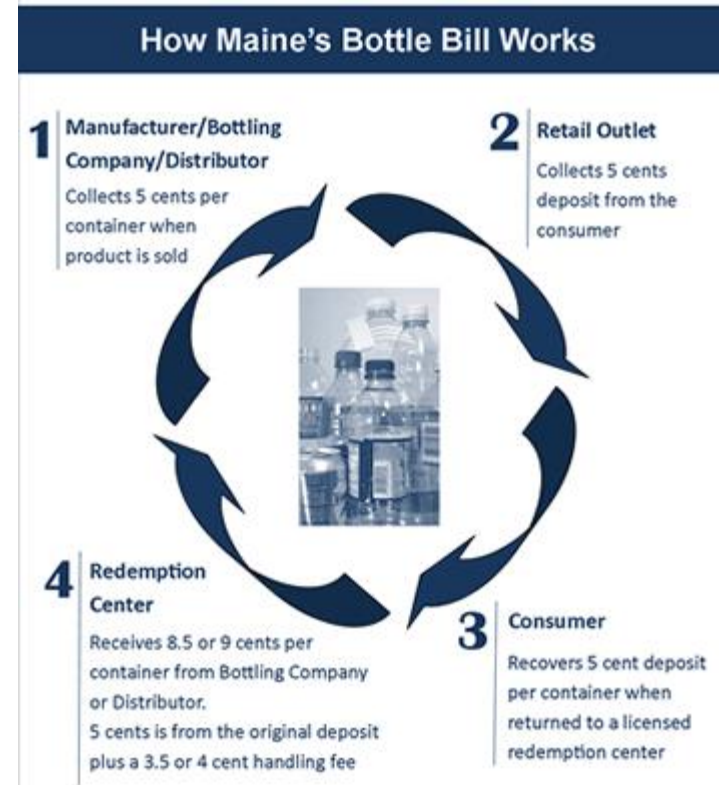
The products below are potential candidates for EPR in Maine, as assessed by how well they meet the framework criteria.

Product	Existing EPR is Successful	Contains Toxics	Reduced Financial Burden	Inadequate Voluntary Programs	Potential to Improve Recovery
Carpet*	√	*	√	√	√
Mattresses	√	√	√	√	√
Packaging	√		√	√	√
Pharmaceuticals	√	√	√	√	
Solar Panels	√	√	√	√	√
Tobacco Waste		√	√	√	√



Bottle Bill

- Consumer pays refundable deposit of \$0.05 to \$0.15 cents on each beverage container
 - Covers spirits, wine, beer, hard cider, wine coolers, soda, water, and noncarbonated drinks
 - Includes container sizes from 50 milliliters (nips) up to 4 liters
- Estimated recovery rates of 75% to 87%
 - National overall recycling rates are estimated at 34%



Electronic Waste

- Manufacturers pay to recycle covered electronic devices and register to sell in Maine
- Residents, elementary and secondary schools, non-profits and small businesses recycle for low to no cost
- Municipalities provide collection site/event and may charge a small fee to cover costs

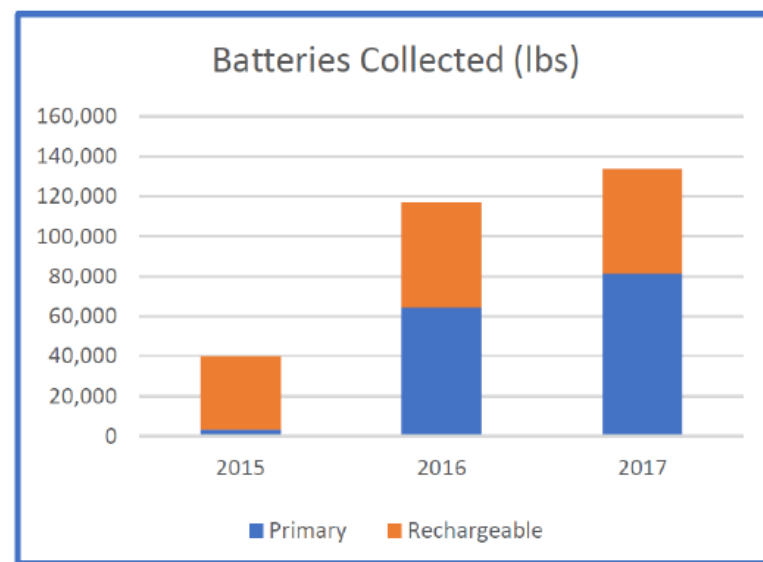


Covered devices include printers, video game consoles, cathode ray tubes and other devices with display screens (greater than four-inch diagonal screen, one or more circuit boards).



Rechargeable Batteries

- Manufacturers must pay to recycle nickel cadmium and small sealed lead acid batteries
- Program run by Call2Recycle accepts wider range of rechargeable batteries than required
- Municipalities and certain retail stores voluntarily participate
- Confusion over battery types likely leads to disposal of batteries that could be recycled
- Residents are encouraged to recycle rechargeable batteries and businesses are required to

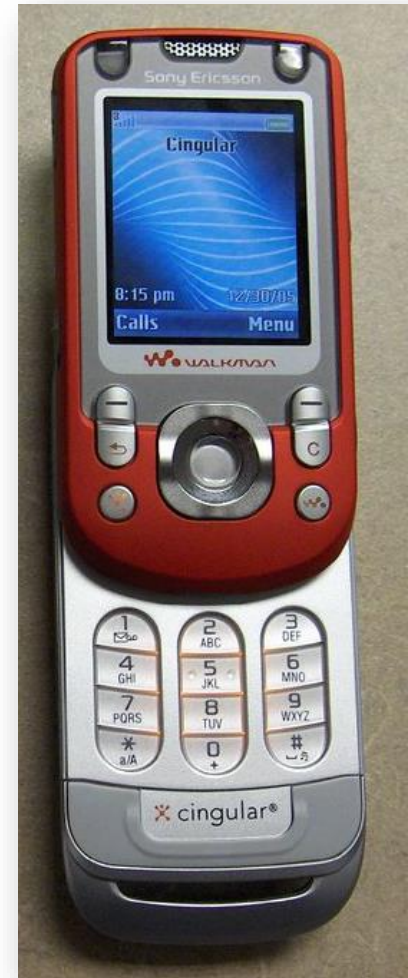


*Vermont 2015-2017 Battery Recycling
from Call2Recycle*



Cell Phones

- Retailers selling cell phones have to accept used cell phones for free recycling
- Stores that sell cell phones must have signage letting customers know they can recycle used cell phones for free
- There is also a disposal ban on cell phones



Mercury Thermostats & Auto Switches

- Manufacturers pay to collect and recycle these devices
- They also pay a financial incentive for consumers to recycle
 - Anyone in Maine is eligible to receive a \$5 incentive for each mercury thermostat turned in for recycling
 - Maine scrap recyclers and vehicle dismantlers can receive a \$4 incentive for each mercury auto switch collected
- Collection sites receive all supplies needed to safely store and ship materials and receive reimbursements



Mercury Lamps



- Costs of the program are internalized by mercury lamp manufacturers
- Anyone can recycle unlimited CFLs and up to ten other mercury-containing lamps (linear fluorescents, black lights, high-intensity discharge, ultraviolet and neon) for free
- Municipalities and retail stores participate in the collection program voluntarily
- Collection sites receive all materials to safely store and ship mercury-containing lamps



Architectural Paint

- Program is funded by consumers paying a small fee on oil-based and latex paint sales
- Brands and manufacturers register to sell paint in Maine
- Municipalities and retail stores participate in collection program voluntarily
- Some retail participants note increased business
- Option to reuse by offering paint in good condition to residents for reimbursement



EPR Considerations

- Consider financial incentives that help a program succeed:
 - Do entities collecting products benefit through payments, increased business, or customer appreciation?
 - Is there an incentive for consumers to recycle the materials instead of throwing them in the trash?
- Consider design incentives that can help a program have better environmental outcomes:
 - Set minimum requirements for non-toxic and recyclable design or recycled content
 - Eco-modulated fees can encourage manufacturers to go beyond the minimum requirements





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A photograph of three young children in a grassy park setting. On the left, a young girl with dark skin and braided hair, wearing a striped shirt and jeans, smiles broadly. In the center, a young boy with dark hair and a red and blue striped shirt looks down at a green recycling bin. On the right, a young girl with light skin and blonde hair, wearing a dark blue shirt and a floral skirt, also looks at the bin. They are all holding the bin, which has a white recycling symbol on its front. The background shows trees and a bright sky.

EPR Programs in the Northeast

Terri Goldberg, NEWMOA Executive Director

Outline

- Overview of EPR Programs in the Northeast
- Packaging & Paper Products
- Mattresses
- Pharmaceutical Take Back

Overview of Enacted Programs

States	CT	ME	MA	NH	NY	RI	VT
Products							
Packaging							
Electronics	✓	✓			✓	✓	✓
Paint	✓	✓			✓	✓	✓
Thermostats	✓	✓	✓	✓	✓	✓	✓
Mercury Auto Switches		✓	✓			✓	✓
Mercury-Added Lamps		✓	✓				✓
Rechargeable Batteries		✓			✓		✓
Primary Batteries							✓
Pharmaceuticals			✓		✓		
Mattresses	✓					✓	
Framework		✓					
Cell Phones		✓					
Bottle Bill	✓	✓	✓		✓		✓

Recently Proposed

States	CT	ME	MA	NH	NY	RI	VT
Products							
Packaging & Paper Products		●	●		●		
Electronics			●				
Paint			●	●			
Tires							
Carpet					●		
Batteries		●			●		●
HHW							●
Pharmaceuticals		●					
Medical Sharps			●				
Mattresses			●		●		
Solar Panels					●		
Tobacco Products		●					

Packaging & Paper Products -

www.newmoa.org/solidwaste/NEWMOA_PPP_flyer.pdf

Extended Producer Responsibility (EPR)

for Packaging & Paper Products: The Basics

Current Challenges with Packaging & Paper Recycling

Approximately, 33 percent of the municipal solid waste that is generated in the U.S. (more than 85 million tons) is composed of product packaging and paper products (or PPP). This waste stream includes plastic containers, steel and aluminum cans, plastic film, glass bottles and containers, newspaper, magazines, multi-material packages, and cardboard. According to the U.S. EPA, about 58 percent of PPP was recycled in the U.S. in 2015. While the amount of paper waste in general has declined in recent years, the amount of plastic waste is steadily growing. EPA has reported that about 15 percent of plastic packaging was recycled in 2015.

In the past year, recycling costs for municipalities have skyrocketed, driven by the loss of end-markets, and increased requirements for quality. This is a by-product of policies adopted by China that limit imports of paper and plastic. As a result, some communities that used to rely on recycling as a revenue stream are now facing significant costs, and in some instances those costs are dramatic. In a few communities, recycling programs have been suspended, or certain materials no longer accepted. Glass is the most common material to suffer this fate. A widespread phenomenon is increased education for residents about what is and what is not recyclable.



What is EPR?

Extended producer responsibility (EPR) is the term used to describe laws that mandate responsibilities for manufacturers/brand owners for the end-of-life management of their products. There are a few important features of EPR:

- Shifting end-of-life financial and sometimes physical

- Depending on how the program is structured, greater incentives for producers to improve PPP design so that it is more recyclable and environmentally friendly

How an EPR System Works

Under the current, traditional waste management system, brand owners/manufacturers sell products to

Packaging & Paper Products -

[www.newmoa.org/solidwaste/EPR for PPP White Paper.pdf](http://www.newmoa.org/solidwaste/EPR%20for%20PPP%20White%20Paper.pdf)



White Paper Extended Producer Responsibility (EPR) for Packaging & Paper Products

Prepared by the Northeast Waste Management Officials' Association (NEWMOA) &
the Northeast Recycling Council (NERC)

April 2020

Goal of this Document

The goal of this White Paper is to provide state officials, policymakers, and affected industries with a baseline of shared knowledge about Extended Producer Responsibility (EPR) for packaging and paper products (PPP).

The [Northeast Committee on the Environment](#) (NECOE), a program of the Coalition of Northeastern Governors (CONEG), requested that NEWMOA and NERC provide information about EPR for packaging and paper products to help them and other state officials consider options for EPR for PPP. This White Paper is not intended to cover all aspects of EPR for packaging and paper products, but rather to provide an overarching understanding of the system structure and design, requirements, and benefits.

NEWMOA and NERC have published a short introductory [Fact Sheet on EPR for Packaging and Paper Products](#), and this White Paper is designed as a companion resource to provide more in-depth information about existing programs and proposals.

Background

According to the [most recent U.S. EPA estimates](#) for 2017, approximately 55 percent (more than 147 million tons) of the municipal solid waste (MSW) that was generated in the U.S. was composed of product packaging and paper products (PPP).¹ This includes plastic containers, steel and aluminum cans, plastic film, glass bottles and containers, newspapers, printed paper, magazines, multi-material packages, and corrugated cardboard. In total, about 50 percent of

Packaging & Paper Products -

[www.newmoa.org/solidwaste/EPR for Packaging and Paper FAQ.pdf](http://www.newmoa.org/solidwaste/EPR%20for%20Packaging%20and%20Paper%20FAQ.pdf)



Frequently Asked Questions About Extended Producer Responsibility (EPR) for Packaging & Paper Products (PPP) July 2020

Introduction

In 2017, more than 147 million tons of product packaging and paper product waste was generated in the United States, according to the U.S. EPA's latest estimate.¹ This is the weight equivalent of 2,810 ships the size of the Titanic. This includes newspapers, printed paper, magazines, and corrugated cardboard; steel and aluminum cans and containers; glass jars and bottles; and plastic containers and film. For over 40 years, residents have collected some of this material as part of either municipally operated / taxpayer-funded or private subscription recycling programs.

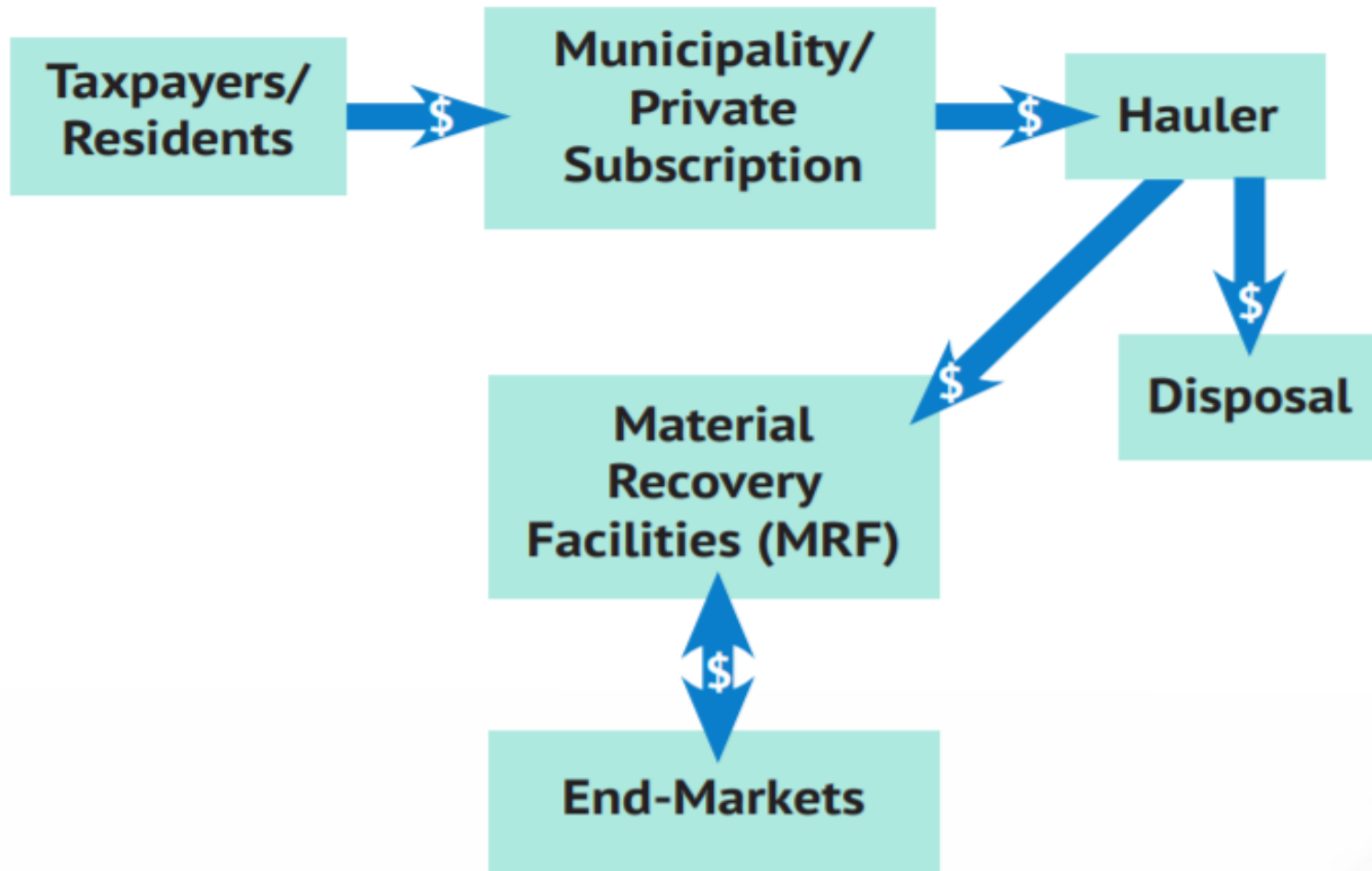
Residential recycling programs, whether municipally operated or private subscription, need sustained financial support to maintain and expand collection. Very few municipal programs can secure adequate taxpayer funding for the level of education and investment that is needed to grow and sustain effective recycling. Moreover, today, recycling programs are facing additional financial difficulties:

- Depressed global commodity markets for paper, plastic, and metal
- Severely strained resources due to the financial impacts caused by the COVID-19 pandemic in 2020

At the same time that recycling programs are struggling, many large brands have made commitments to increase their use of recycled plastic content in their packaging and to make their packaging recyclable, reusable, or compostable.² To achieve their goals, recycling programs need to collect more clean materials, especially plastic food and beverage containers, as well as heavier household plastics, such as detergent bottles. But current municipal recycling

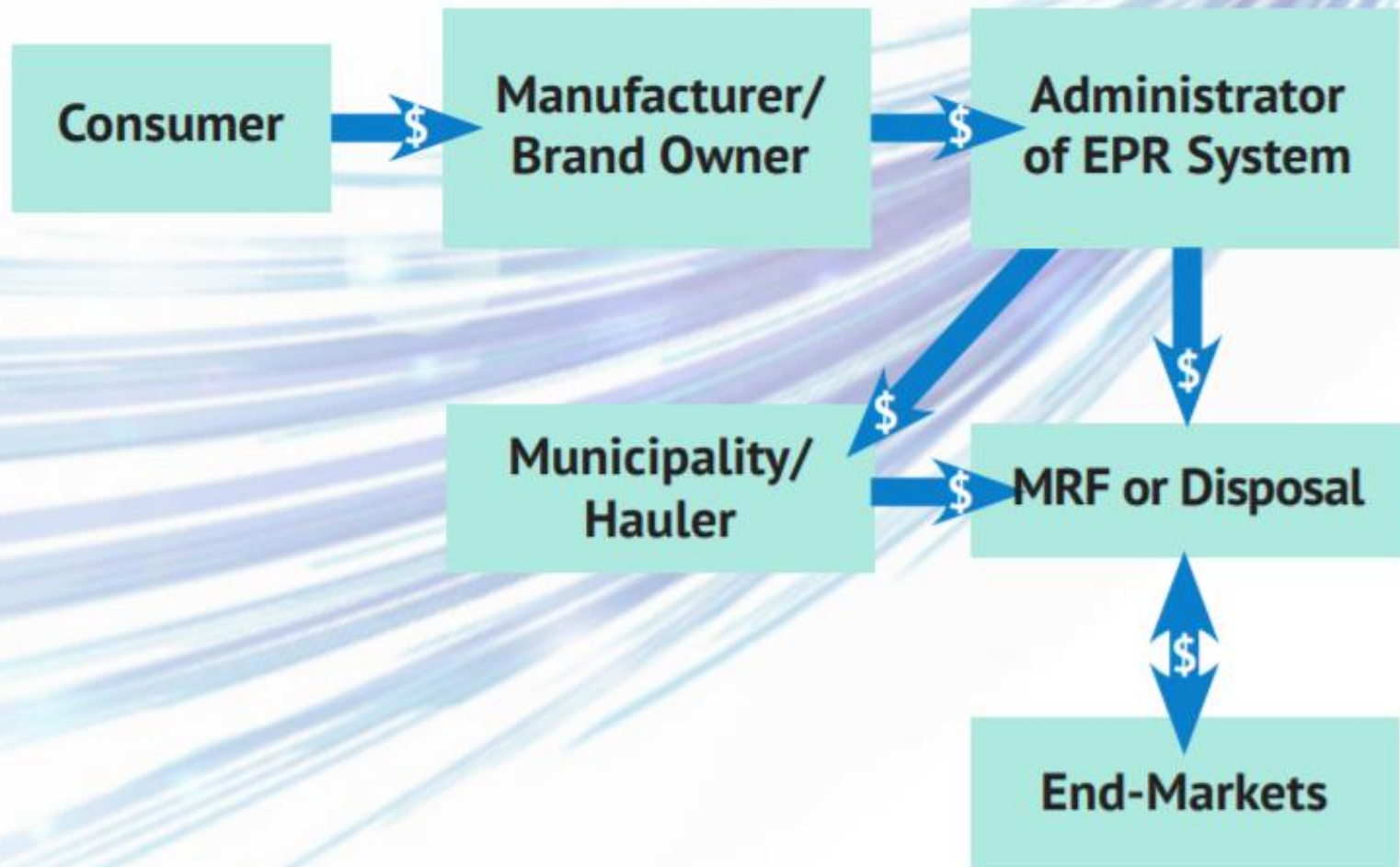
Traditional Approach

Financing of Traditional PPP End-of-Life System



EPR Approach

Financing of EPR System for PPP



Worldwide Adoption of EPR for PPP

Many European Union & Asian countries & five of Canada's provinces manage packaging thru EPR

Proposals in Maine, Massachusetts, & New York

Key aspects to consider when establishing EPR for PPP –

- Manufacturers are given complete financial & operational responsibility for establishing & maintaining recycling systems (full manufacturer responsibility)
- Manufacturers share the responsibility with municipalities
- Incentives for the use of recyclable packaging &/or disincentives for the use of non-recyclable packaging

PP Program Elements

Major elements:

- Defining what materials & products are covered
- Determining how it is structured (from financing to collection)
- Describing the role of the existing municipal collection system, haulers, & material recovery facilities (MRFs)
- Characterizing oversight by government entities of the system & its operations
- Setting performance measures & incentives

Benefits of EPR for PPP

- Dedicated, non-taxpayer funding to sustainably support recovery & recycling, & disposal, where necessary
- A more consistent & predictable system that enables states &, possibly, regions to take a more unified approach to strategic planning around recycling
- Increased investment in the end-markets & the recycling infrastructure
- Depending on how the program is structured, greater incentives for producers to improve PPP design so that it is more recyclable & environmentally friendly

Why Mattresses?

- U.S. residents, businesses, & universities discard more than 50,000 mattresses/day
- <5% of these mattresses are recycled, while 90% of their components can be used to make steel products, carpet padding, animal bedding, & mulch
- Currently no convenient way for many people to recycle mattresses
- Most mattresses end up in landfills or waste-to-energy facilities
- Worst-case, mattresses are illegally dumped
- Bottom line: mattresses are expensive for local governments to manage

<https://www.productstewardship.us/page/Mattresses>

EPR for Mattresses

EPR laws require mattress companies to establish & operate recycling programs that make it easy for consumers to recycle old mattresses

CA, CT, & RI have enacted EPR laws for mattresses

Program Elements

- Funded by consumers paying an eco-fee on the sale of the mattresses
- Brands & manufacturers register w/the state
- Municipalities & retail stores participate in collection program voluntarily
- Mattress Recycling Council (MRC) provides Producer Responsibility Organization support

MRC

<https://mattressrecyclingcouncil.org/>

- Formed by the mattress industry to operate recycling programs (known as Bye Bye Mattress) in states that have enacted mattress EPR laws
- Educates the mattress industry about mattress recycling laws
- Assists retailers & manufacturers with their registration & reporting obligations
- Works closely with local governments, waste management professionals, recyclers, & others to create & support a mattress collection & recycling network

Benefits

- Relieves local governments from managing this bulky waste
- Example - CT municipalities saved nearly \$1.5 million in mattress disposal costs in 1 year from their EPR mattress program
- Reduces greenhouse gas emissions & energy use
- Provides a flow of high-quality material
- Encourages long-term investments in local refurbishing, recycling, & remanufacturing facilities
- Creates local recycling jobs

Pharmaceuticals – The Issues

- When leftover or expired drugs are thrown in the trash, in the toilet, or down the drain, they end up in landfills, sewage systems, or wastewater treatment facilities that are not equipped to remove them
- From there, they enter waterways, where they can threaten wildlife & drinking water
- When stored at home, they can fall into the wrong hands – leading to drug abuse, misuse, or accidental poisonings – contributing to the prescription drug abuse epidemic
- 7 out of 10 people who abuse prescription drugs get them from friends & family, often from medicine cabinets

Pharmaceutical EPR Programs

- MA & NY have enacted laws
- The Mass law is in effect & collection is occurring; amendments have been proposed -
<https://www.mass.gov/safely-dispose-of-prescription-drugs>
- The NYS Health Department is developing regulations covering the implementation of the drug take back program

Mass Program

Enables residents to dispose of unused or expired medication safely, easily, confidentially, & for free at many health centers, pharmacies, & hospitals; drug collection kiosks at police stations - open to residents, 24/7

WHAT IS COLLECTED?

- Prescription medications
- Over-the-Counter medications
- Pet medications
- Sample medications
- Pills, capsules, inhalers, ointment & patches
- Vitamins
- Liquids in glass or leak-proof containers

NOT COLLECTED?

- Needles/sharps
- Thermometers
- Bloody or infectious waste
- Aerosol cans

More Information

- PSI - <https://www.productstewardship.us/>
- NEWMOA - www.newmoa.org/solidwaste/projects/epr/
- NSAC - <https://www.nsaction.us/>
- NERC - <https://nerc.org/>

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**Northeast Resource
Recovery Association**

Summer Webinar Series- Coming Next



We Need to Think About Clothing Differently

Presenter: Joe Whitten, Founder and CEO of Apparel Impact

Friday, Aug 28
12:00-1:00 pm



Tricks of the Trade

Panelists: Joanie Cudworth, Director of Public Works, Hollis, NH; Brian Patnoe, Recycling Manager, Littleton, NH; and Ed Walsh, Transfer Station Manager, Rollinsford, NH.

Wednesday, Sept. 2
9:00-10:00 am

