

Extended Producer Responsibility in Rhode Island: Rethinking Mattress Recycling



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Introduction

Extended producer responsibility describes a model in which manufacturers take full financial and physical responsibility for their products when consumers no longer want them. EPR can:

- Incentivize eco-design
- Save taxpayer money
- Decrease waste in landfills

During the 2010-2011 legislative session, a bill was introduced into the RI House (H5888) and Senate (S459) that would have created a framework for establishing producer responsibility for a wide array of products.

The bills targeted mattresses and medical sharps as two products that are top priorities.

Why Mattresses?

- Mattresses are expensive for municipalities: **Providence spends 12.1% of its municipal solid waste budget on mattress disposal**
- Mattresses are costly for the state: the RI Resource Recovery Corporation (RIRRC) loses \$2-3 on every mattress it recycles in MA
- Mattresses left on curbs can pose public health risks

Research Question and Approaches

Key Question: What does the most optimal RI mattress take-back program in look like?

Approaches:

- Interviewed recycling coordinators in seven RI municipalities
- Calculated corresponding percentage of solid waste budgets spent on mattress disposal
- Interviewed six mattress retailers for data on existing retail collection programs
- Identified goals for mattress take-back
- Generated optimal producer-funded program

A Traditional Versus EPR Model

Currently, mattresses flow linearly (Fig. 1):

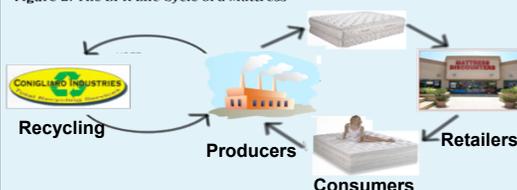
Figure 1: The Current Mattress Life Cycle



Producers → Retailers → Consumers → RIRRC → Recycling

Under an EPR Model, mattress recycling could be funded and overseen by producers (Fig. 2):

Figure 2: The EPR Life Cycle of a Mattress



Figs. 1, 2: Max Ernst, Ben Heller, Dan Rome, and Kiana Ward. Extended Producer Responsibility: An Innovative Paradigm for Mattress Disposal. Rep. Print. 2.

Goals for an EPR Take-Back Model

- 1.) Decrease the burden on municipalities
- 2.) Incentivize eco-design
- 3.) Make EPR the norm
- 4.) Create jobs in RI
- 5.) Generate "green" jobs
- 6.) Recover the full costs for RIRRC

Goals	Current System			
	Transport	Storage	Financing	Recycling
Active Entities	Municipalities Retailers	Municipalities RIRRC	Municipalities RIRRC, Contracting with Conigliaro	RIRRC, Contracting with Conigliaro
	Parties to Most Effectively Handle Roles			
Decrease burden on municipalities	Retailers, Producers, Third Party	Retailers, Producers, Third Party	Producers, Producers, Third Party	Retailers, Producers, or Third Party (Contract)
Green Design	Any	Any	Producers	Producers, Third Party (Contract)
EPR Paradigm Shift	Producers	Producers	Producers	Producers, Third Party (Contract)
RI Job Creation	Any	Any	Any	RI Recycling Facility
Green Job Creation	Any	Any	Any	RI Recycling Facility
Recover Full Costs for RIRRC	Any	Any	Any	Any

Table 2: An analysis of goals and most effective parties for associated tasks.

Results

Based on the matrix generated in Table 2, the most effective model to achieve all 6 goals is a producer-funded third party that:

- Finances existing retail collection programs
- Transports, stores, and finances the recycling of all other mattresses in Rhode Island (Fig. 3)

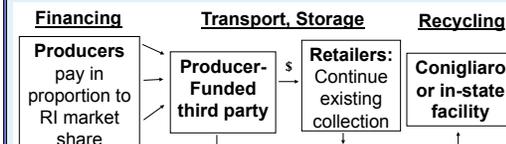


Figure 3: Optimal Mattress Take-Back Model in RI. The most optimal program identified to achieve all six goals involves a producer-funded third party that finances existing retail collection programs and hauls other mattresses directly to a recycling facility.



Figs. 4, 5, 6: Education and Outreach Materials. Clockwise from left: "Support H5888," at RIRRC, "Introducing—Mattress Man and the Amazing Medical Sharp!" at the State House; an image of Joe Nield, Director of Public Works, City of Central Falls, RI. Such images have been used as part of advocacy efforts; to date, 10 municipalities have passed resolutions in support of EPR.

Conclusions

Based on an analysis of costs associated with mattress disposal, a producer-funded third party emerges as the most effective entity to transport, store, and finance mattress collection and recycling. EPR legislation is the most expedient way to create such a program, and requires strong public support.

Acknowledgements

I would like to thank the Brown Environmental Fellows Program, Henry David Thoreau Foundation, Swearer Center for Public Service, Environmental Change Initiative, Center for Environmental Studies, Peter and Pamela Voss, Sheila Dormody, Nicole Poepping, Ellie Leonardsmith, Caroline Karp, Christopher Bull, Max Ernst, Charlene Kim, and the Rhode Island Product Stewardship Council, for the support, guidance and mentorship to make this project possible.