

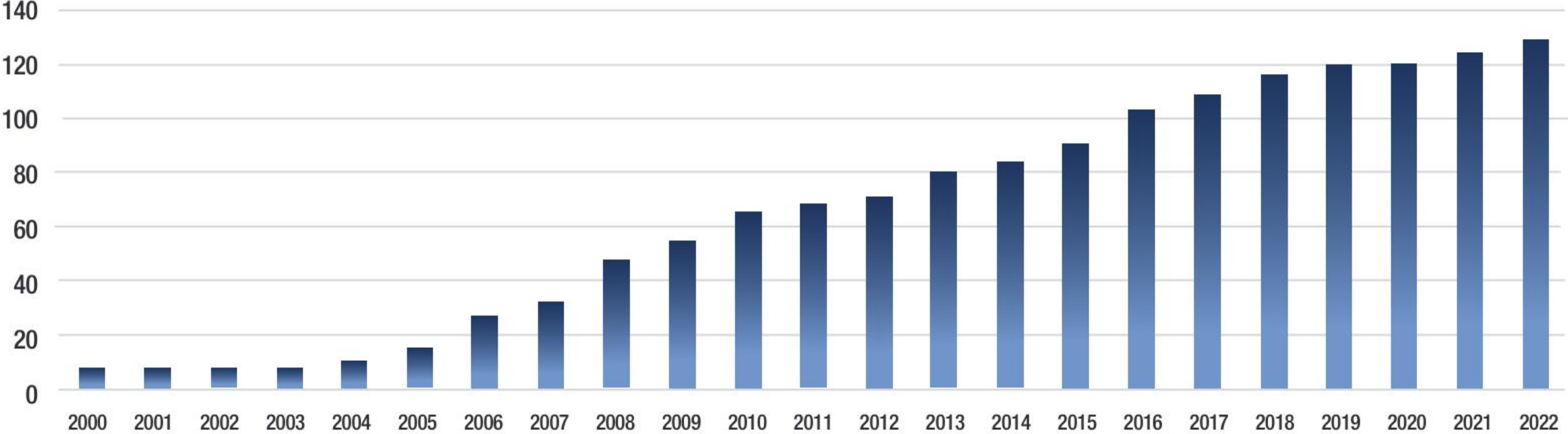
EPR Beyond Packaging

May 2023

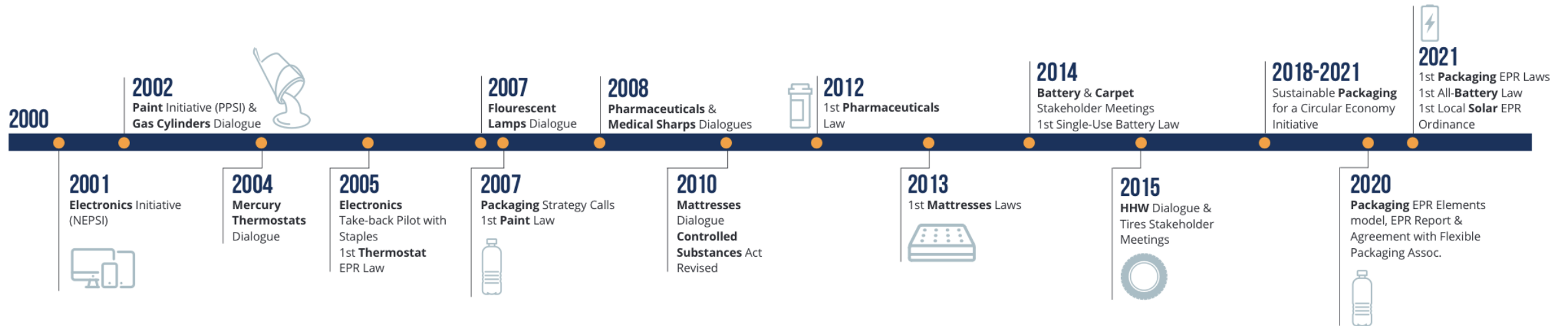
Lelande Rehard

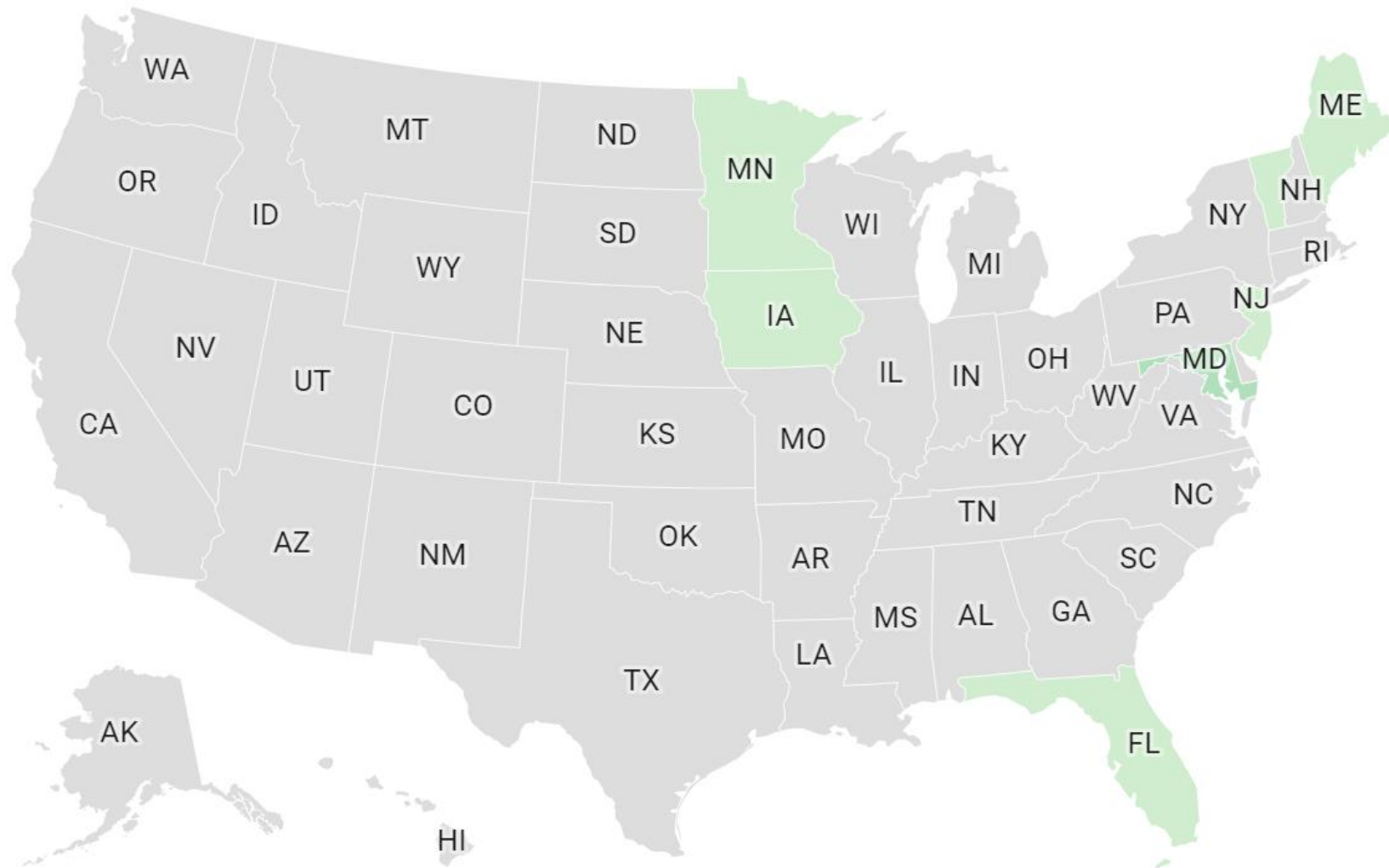
Policy and Programs Associate





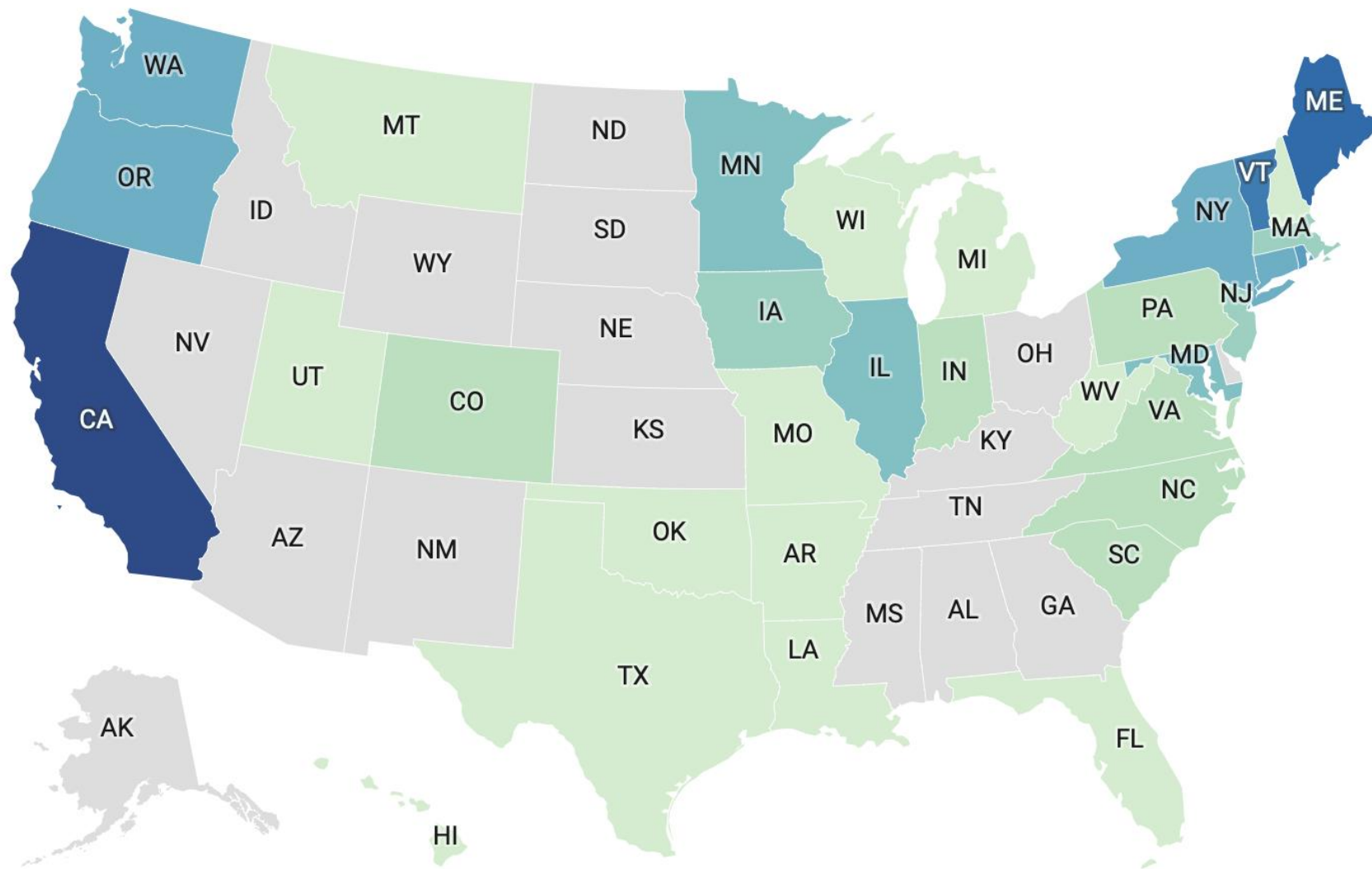
TWO DECADES OF IMPACT





Number of State EPR Laws in 2000





Product Categories



Solar Panels



Electronics



Pharmaceuticals



Medical Sharps



Appliances with
Refrigerants



Gas Cylinders



Packaging



Mattresses



Paint



Lighting



Framework



Pesticides



HHW



Batteries



Phone Books



Junk Mail



Textiles



Tires



Radioactive
Devices



Mercury
Thermostats



Motor Oil



Carpet



Auto Switches

The circular economy
could reduce 45% of
greenhouse gas
emissions by 2050

EPR is the “only proven and likely way to provide funding that is dedicated, ongoing, and sufficient” to develop a circular economy.”

– *Ellen McArthur Foundation*



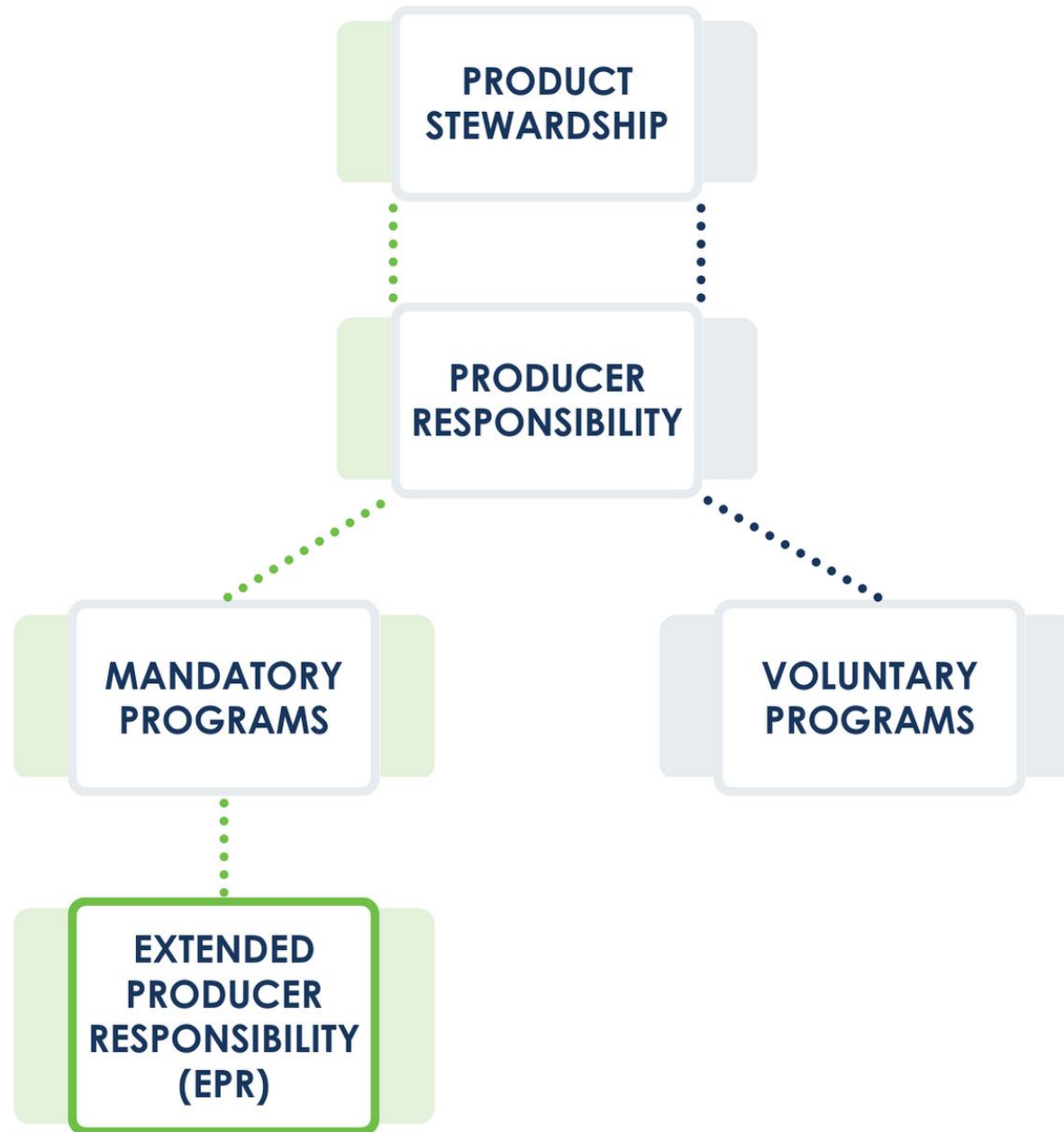
What is EPR?

Product stewardship

is the act of minimizing the health, safety, environmental, and social impacts of a product and its packaging throughout all lifecycle stages, while also maximizing economic benefits. Stewardship can be voluntary or required by law.

Extended **P**roducer **R**esponsibility
is a mandatory type of product stewardship
required by law. It includes the requirement that
the producer's responsibility for its product extends
to post-consumer management of that product and
its packaging.

- 1.** Shifting financial and management responsibility, with government oversight, upstream to the manufacturer and away from the public sector.
- 2.** Providing incentives to manufacturers to incorporate environmental considerations into the design of their products and packaging.





How does EPR help consumers?

What does EPR mean for governments?



What does EPR
mean for business?

EPR laws and programs level the playing field for producers and incentivize environmentally conscious design.



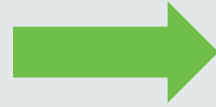
How does EPR work?

Pass a Law



80 million gallons of
leftover paint is
generated each year
– most is recyclable

2000 Multi-
stakeholder
dialogue



PaintCare



2010 Oregon



10 states +
D.C.

Established 2,000 collection
sites

Collected 51 m. gallons of
paint

Recycled 72% of leftover
latex paint

Saved governments and
taxpayers \$300 m.

50,000 mattresses go to landfill each day
– 90% of components are recyclable



2012 Model mattress EPR legislation



2013 Connecticut
2013 California
2013 Rhode Island
2022 Oregon



Recycled 3 m. mattresses

Diverted 126 m. pounds of
materials from landfills

Increased recycling from
8.7% to 63.5% (CT - 1)

Recovered 23,700 illegally
dumped mattresses (CA -1)

New Mattress Law in Oregon

Builds on **lessons learned** since PSI negotiated initial model (early 2010s)
+ incorporates current **best practices** in EPR

- **Plan reapproval every 5 years** to improve the program over time by incorporating lessons learned + best practices
- Objective, measurable minimum **convenience** standards;
- Measurable **goals** (collection/recycling rates, public awareness);
- Advisory committee for **multi-stakeholder input**;
- Stewardship organization report to DEQ on mattresses **not being collected by the program** to account for all mattresses discarded
- Study on effective methods to provide **collection services to low-income individuals** and **multifamily housing**
- **State agency funding** for program oversight and enforcement
- Mechanism to mitigate management **costs of illegally dumped mattresses**



Funding



Type of Funding Mechanisms

Consumer Fees

Cost Internalization

Eco-Modulated Fees

Recycled content

Lower carbon footprint

Reusability

Waste prevention

Recyclability

Producer Responsibility Organization (PRO)



Stewardship Plan and Government Oversight

Potential steps and processes needed before implementation.



RULEMAKING



GUIDANCE DOCUMENTS



NEEDS ASSESSMENT



STEWARDSHIP PLAN



CONTRACTS/AGREEMENTS

Implementation and Reporting

Oregon Mattress Law Implementation

- **Stewardship Program Timeline**

- April 2023 – Rules drafted for public comment
- October 1, 2023 – Stewardship Plans due from PRO
- 2024 – Mattress stewardship program implementation

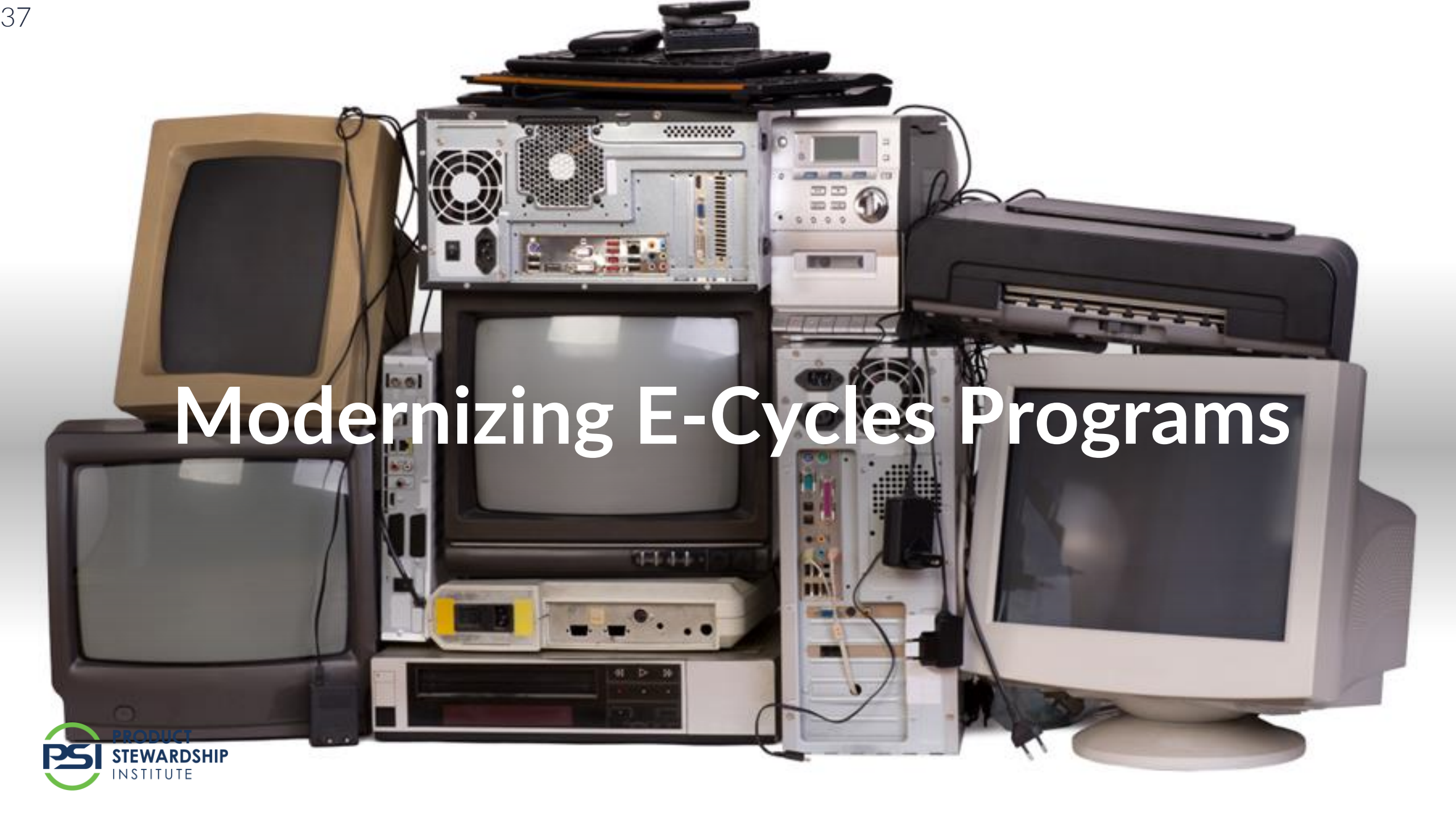


- **Metro/Greater Portland Area Implementation Project**

- Purpose: Support **effective and equitable implementation** of mattress stewardship law in the Greater Portland area.
- Approach: Through **research, interviews, and a multistakeholder meeting**, PSI worked with Metro to identify desired **outcomes** and key **steps** to enable the agency to work to meet its program vision



Improvements and Changes



Modernizing E-Cycles Programs

Oregon E-Cycles 2.0

- Expands Covered Materials: tablets, DVD players, speakers, stereos, etc.
- Removes reliance on weight-based funding formula.
- Best Practices in EPR for program Administration.



oregon
E-CYCLES
oregonecycles.org

How do you get EPR Programs?



Product Stewardship Institute

Building capacity for product stewardship & EPR

*Convening **public & private sectors** in dialogue for **20+ years***

Government Members & Board

47 **state** agencies
& hundreds of **local** governments

Multi-Stakeholder Partners

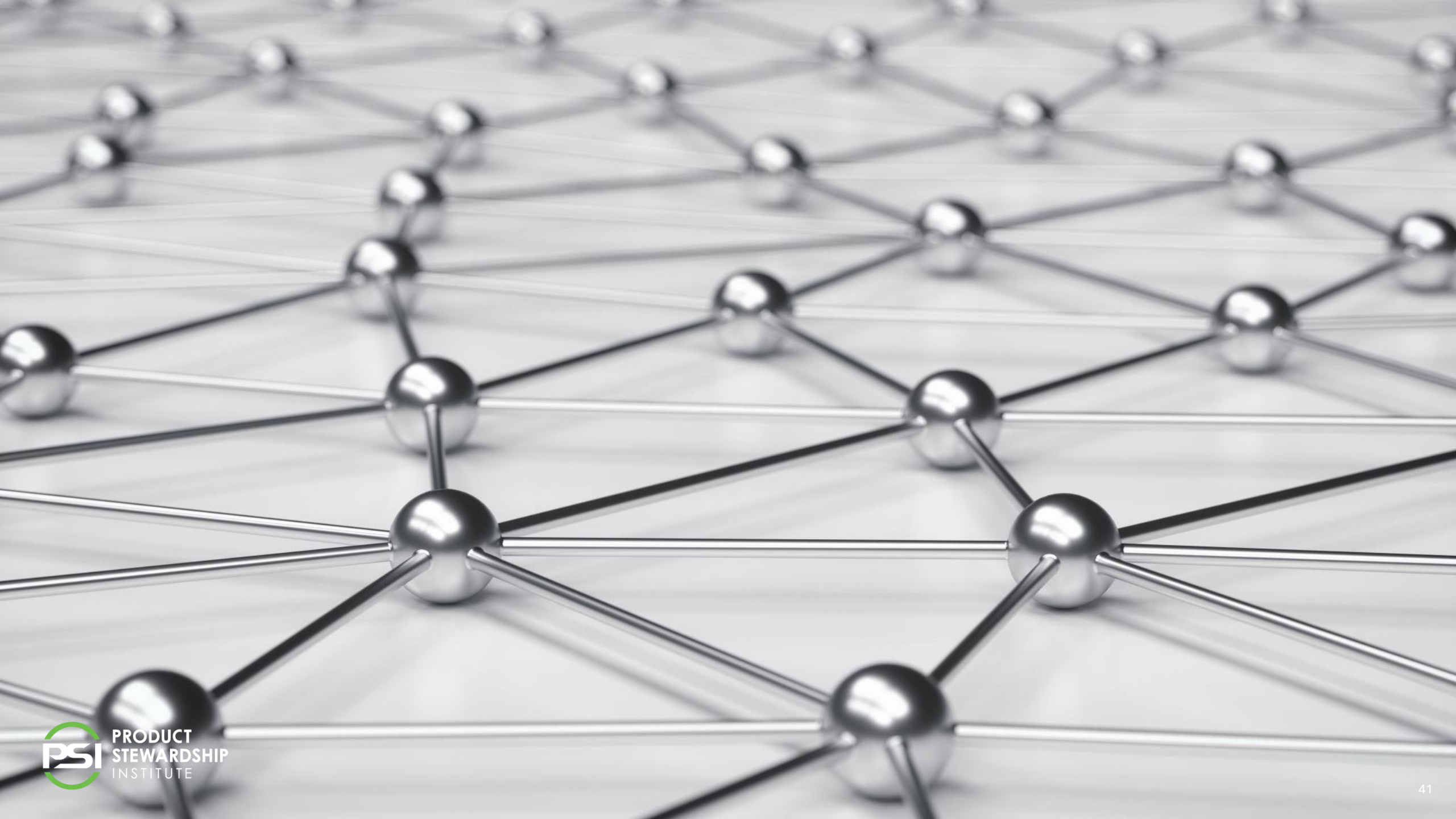
100+ producers, recyclers, waste management, retailers, NGOs, academics, international gov'ts

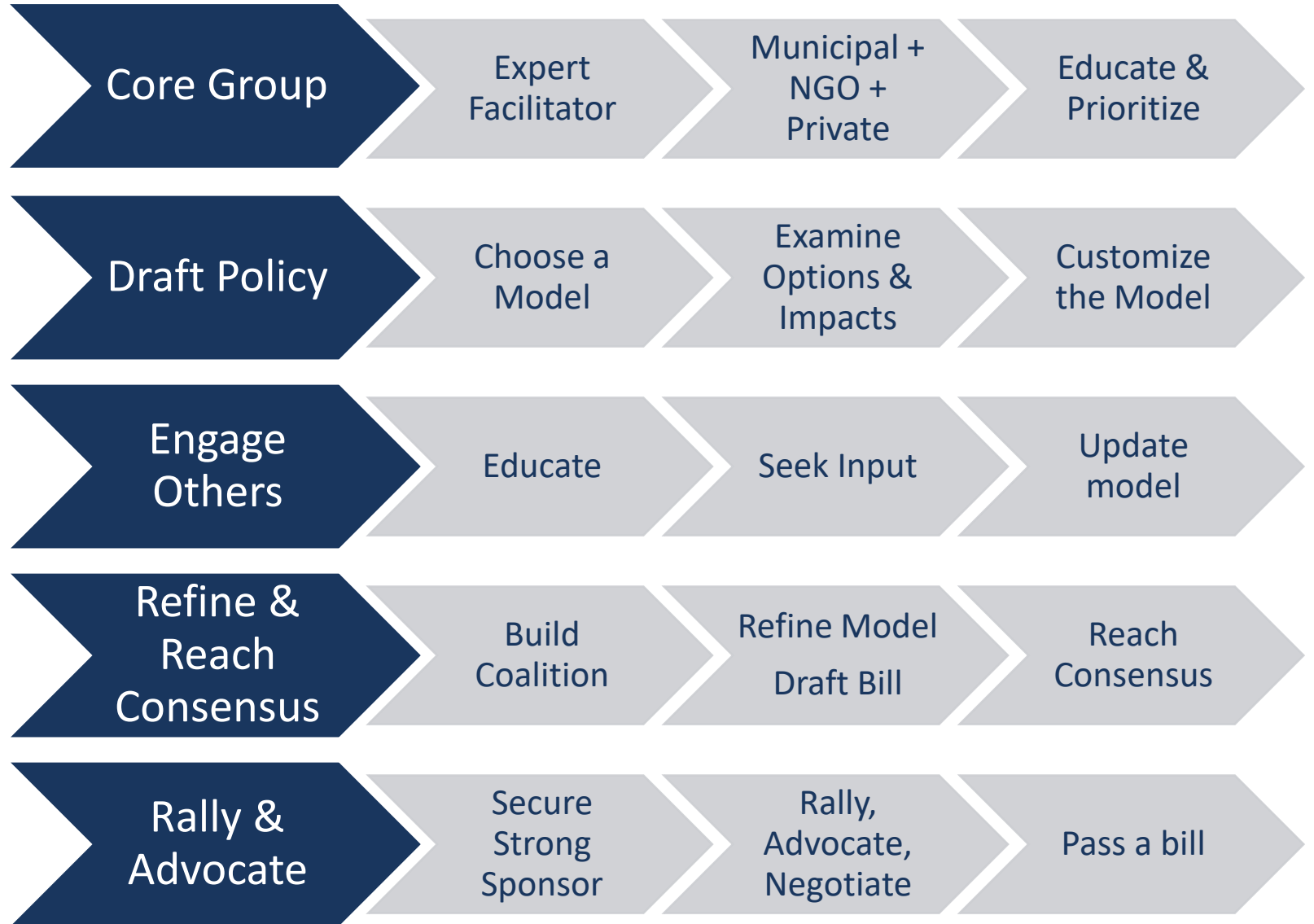
***Our mission:** Reduce the health and environmental impacts of products across their life cycle*

**25+
Products:**



**&
more...**





Missouri Product Stewardship Council

- Founded in 2018 with the support of the Product Stewardship Institute (PSI) and funding from the St. Louis-Jefferson and MARC SWMDs.
- Coalition of **local governments, businesses, and other stakeholders** committed to reducing waste, increasing reuse and recycling, saving local governments money, and supporting local jobs.
- Primarily focused on paint, pharmaceuticals, and packaging, with monthly meetings facilitated by PSI staff.



Mid-Missouri Solid Waste
Management District



St. Louis-Jefferson Solid
Waste Management District
Recycling Works for St. Louis!



Research

Battery Energy Storage Systems – CT Green Bank and CT DEEP



A close-up, low-angle shot of several rows of solar panels. The panels are blue with a grid of silver lines. The perspective is from below, looking up at the panels as they recede into the distance. The lighting is bright, suggesting a sunny day.

Rising Solar Waste

- Panels have a 20+ year lifespan, but once they degrade, they can leach dangerous chemicals if sent to the landfill.
- Recycling diverts panels from landfills and creates an economic opportunity.
- Due to a lack of sustainable funding, U.S. solar panel recycling is more expensive than landfilling (\$15-\$45 per panel for recycling vs. \$1-\$5 for disposal).
- The solution: **solar panel stewardship.**

First in Nation EPR Programs

HHW EPR Passes in VT

Potential Impacts on VT's HHW Management System

material diverted:

- first 2 years: 197 additional tons per year diverted
- by 2nd year: HHW landfilled reduced to 443 tons (from current rate of 640 tons/year)




Existing HHW EPR: Success in Canada



Product Scope

HHW covered products could include:

- Aerosols
 - Automobile products (antifreeze, brake fluid, oil, oil filters)
 - Marine Flares
 - Road Flares
 - Furniture and other wood stains and varnishes
 - Gasoline
 - Glue, Contact Cement, Rubber Cement
 - Household Cleaners
 - Hobby chemicals (chemistry sets, photography chemicals, etc.)
 - Lead Debris
 - Lawn and Garden Pesticides and Chemicals
 - Smoke Detectors
 - Solvents and Thinners
- 
- Swimming Pool and Spa Supplies
 - Explosives and Fireworks
 - Bullets, Ammunition, and Gunpowder
 - Vapes
 - **Compressed gas (fire extinguishers, propane tanks, butane tanks, oxygen, acetylene)**
 - Empty HHW Containers



2023 U.S. PRODUCT STEWARDSHIP FORUM

**To register or sponsor, visit
www.productstewardship.us**



September 11-14



Portland, Oregon



Lelande Rehard
lelande@productstewardship.us



**PRODUCT
STEWARDSHIP
INSTITUTE**