

Extended Producer Responsibility for Packaging in other Jurisdictions

Vermont General Assembly
Single Use Products Working Group

September 24, 2019

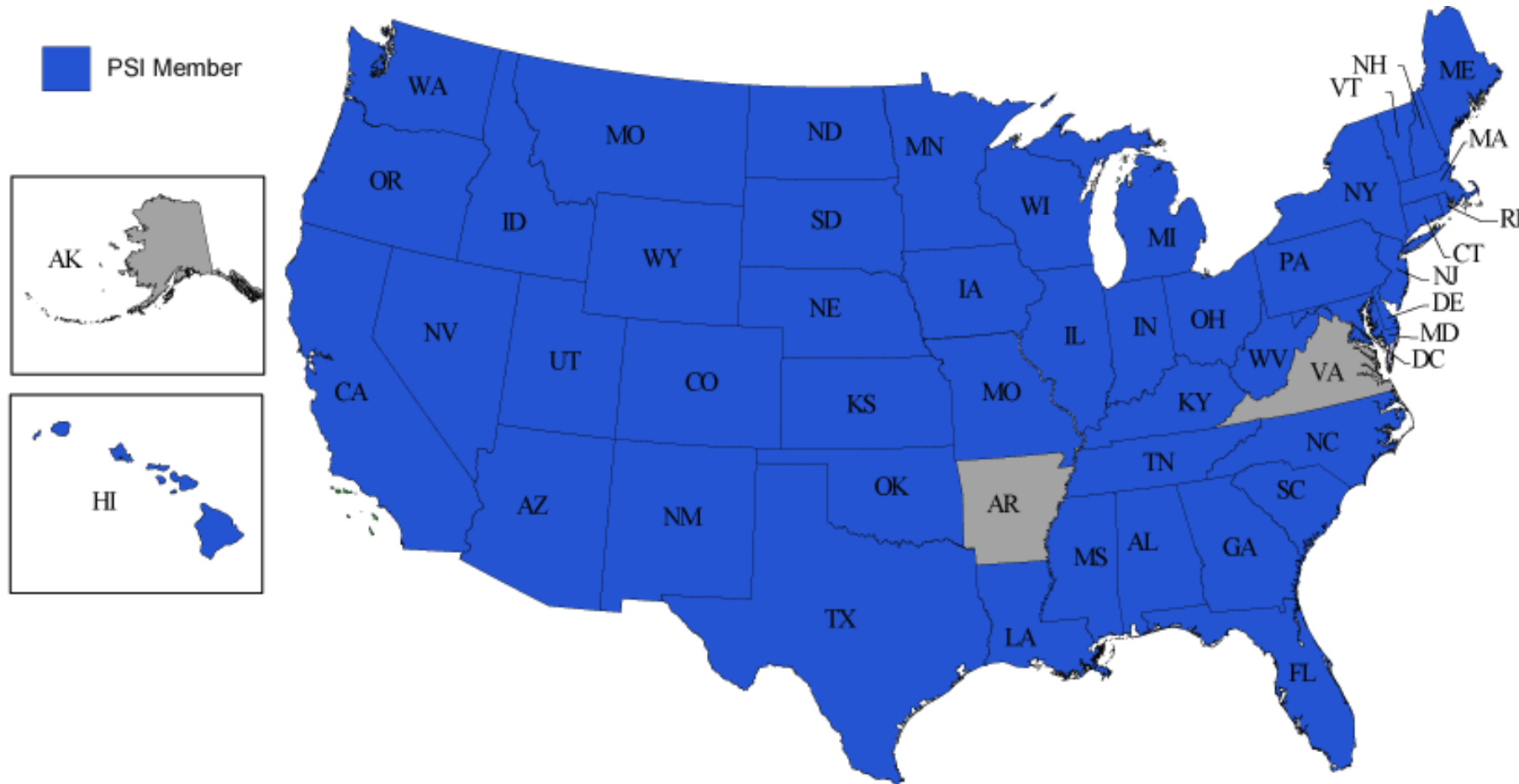
Scott Cassel, *CEO/Founder*
Product Stewardship Institute



credentials

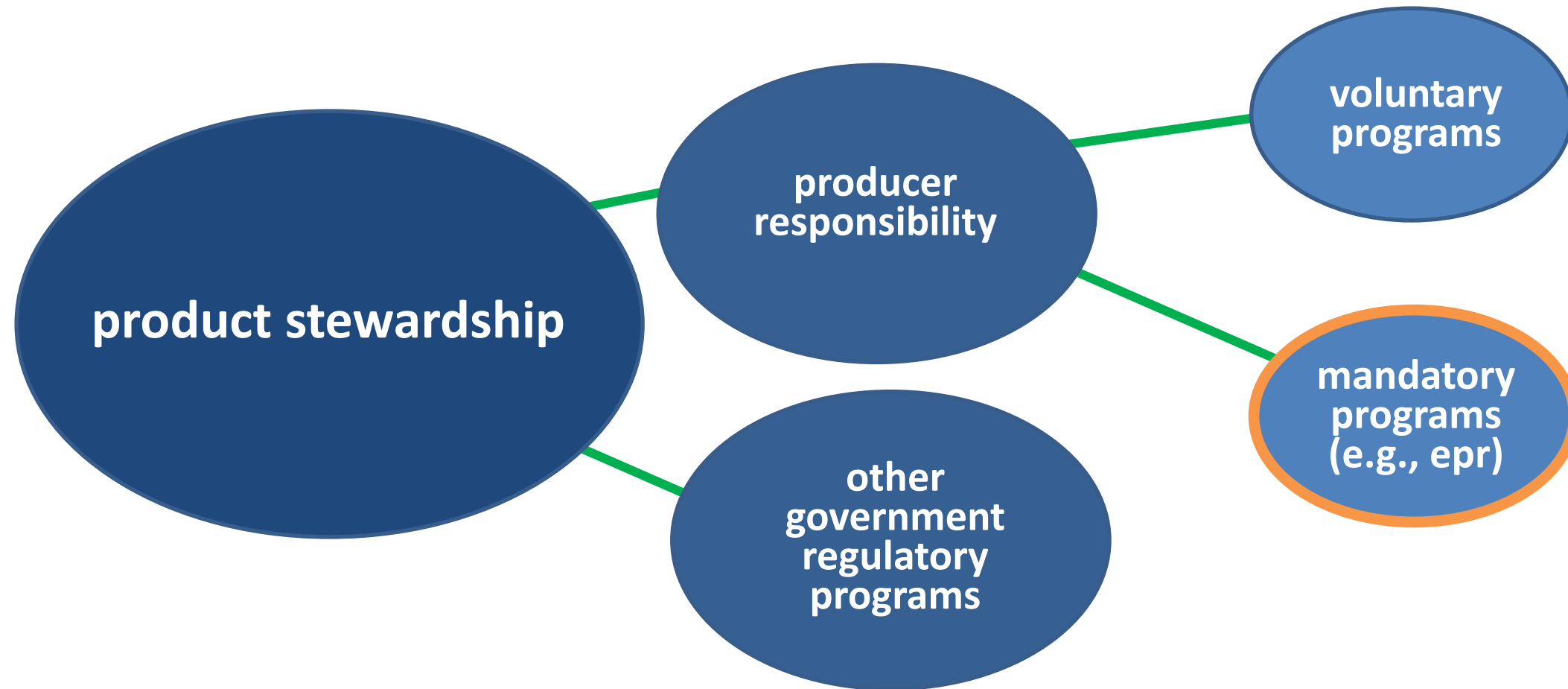
- **35 years** in waste mgt (non-profit, state gov't, private sector)
- CEO/Founder: **Product Stewardship Institute** (20 years)
- **15 years** working on packaging EPR
- Appointed to **CT Legislative Packaging Task Force** (2017)
- President: **Global Product Stewardship Council**
- Director of Waste Policy and Planning: **MA Executive Office of Energy and Environmental Affairs** (1993-2000)
- Masters degree in environmental policy/**dispute resolution**; trained mediator; developed PSI dialogue process
- **EPR models: paint, thermostats, lamps, batteries, electronics, etc.**

who is the product stewardship institute?

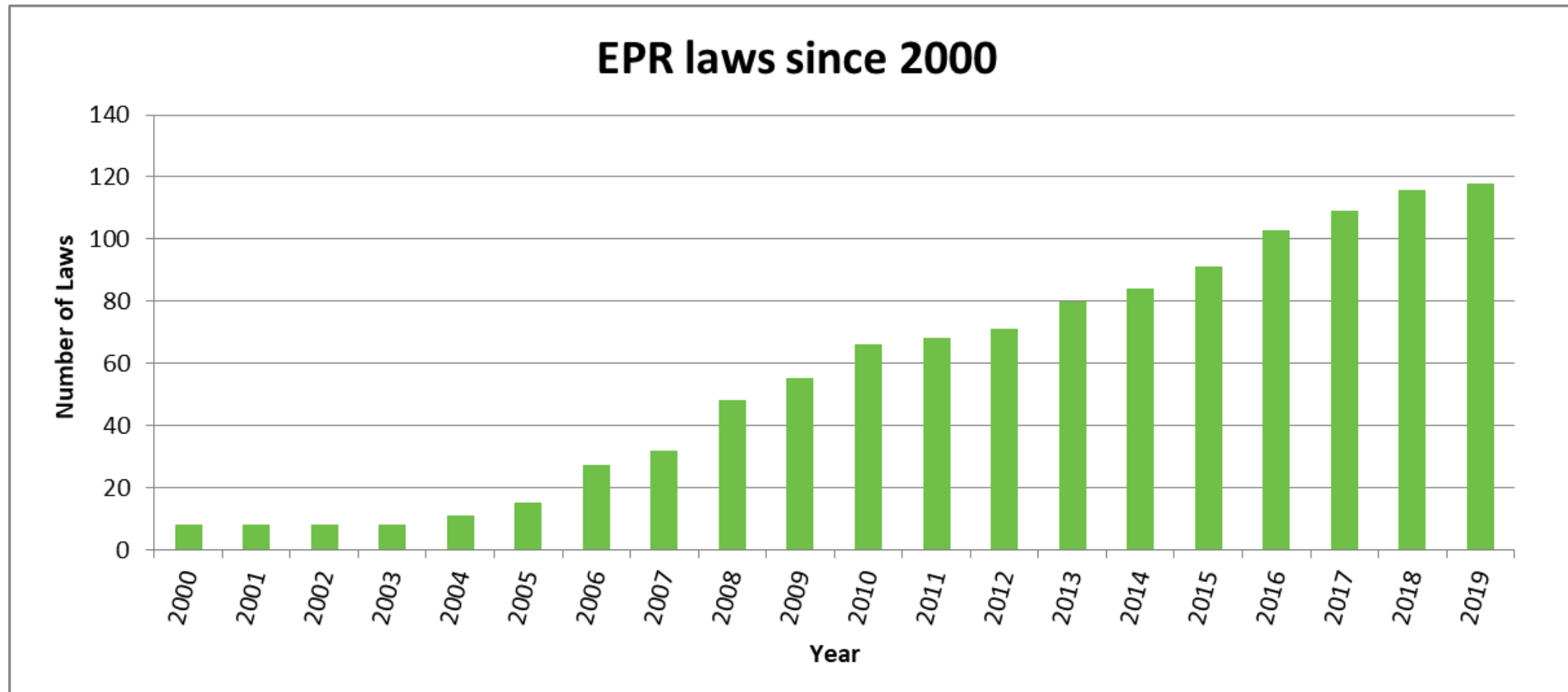


- members
- partners
- advisory council
- global psc
- state pscs

product stewardship vs. epr

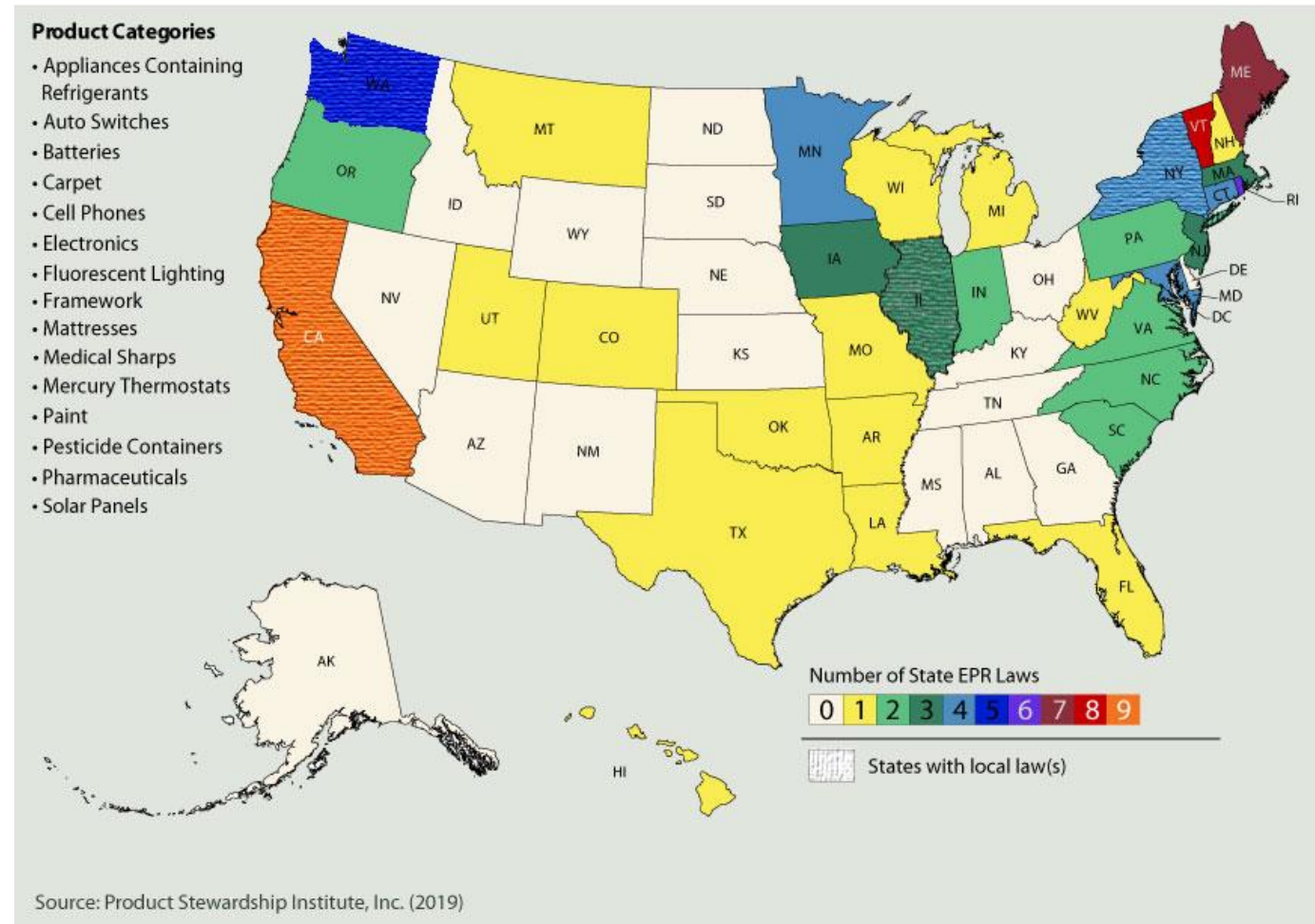


U.S. EPR Laws Trends



u.s. epr laws now

118 epr laws
14 products
33 states + d.c.



U.S. epr laws (partial list)

3



5



9



10



1 state,
9 local

11



13



24



28



5 state,
23 local

118* epr laws

14 products
33 states + d.c.

**while bottle bills are highly effective at recovering beverage containers, this count does not include the 10 state bottle bills in the U.S. due to the different ways in which the disparate policies shift responsibility to producers.*

why is epr growing

in the u.s. and globally

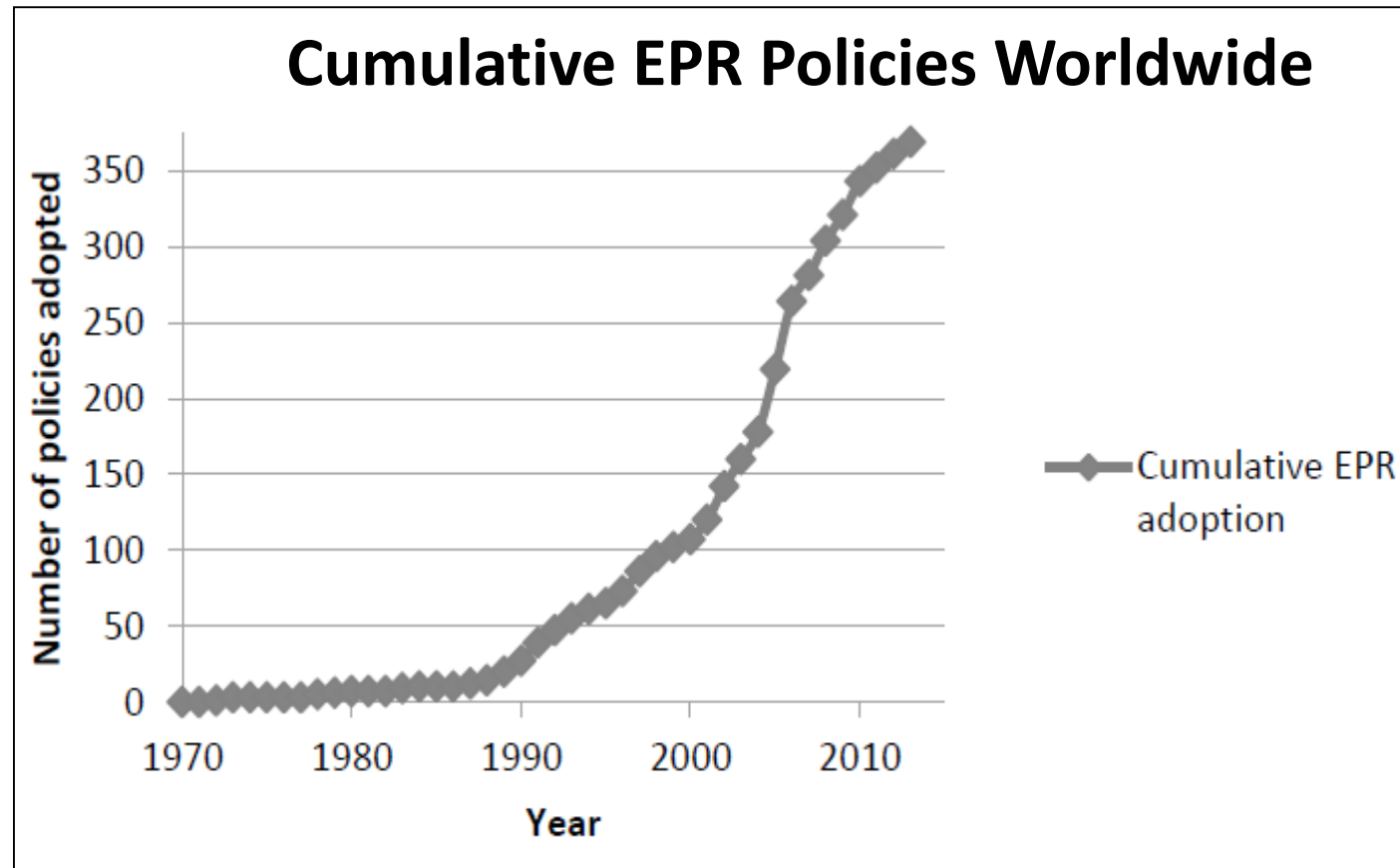
- ground has been plowed
- it works:
 - sustainable financing (\$\$\$ savings)
 - education and infrastructure (convenience)
 - increased recovery, reuse, and recycling
 - jobs
 - improved efficiency
 - better products (fewer lifecycle impacts)





epr is the centerpiece of the circular economy

worldwide epr adoption



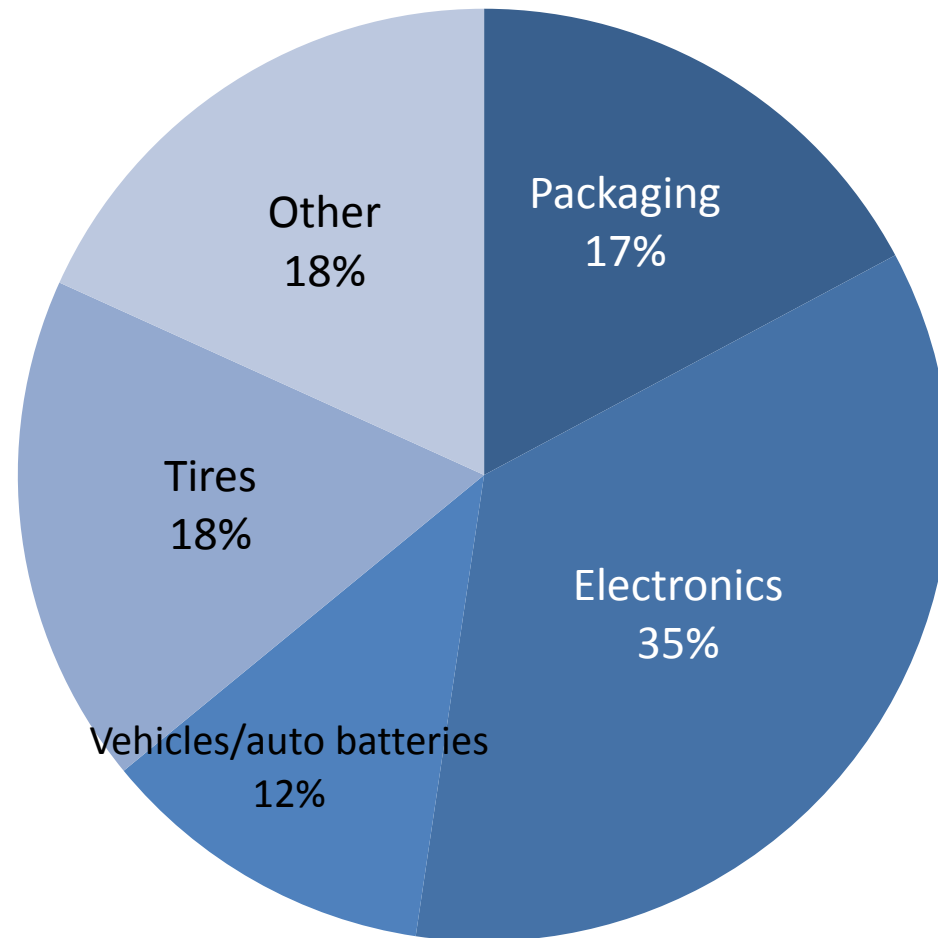
369 programs worldwide (as of 2013)

59% of policies instituted between 2000 and 2009

122 were in the U.S.

33% of worldwide programs were in the U.S. as of 2013

worldwide epr by product type



“other” includes:

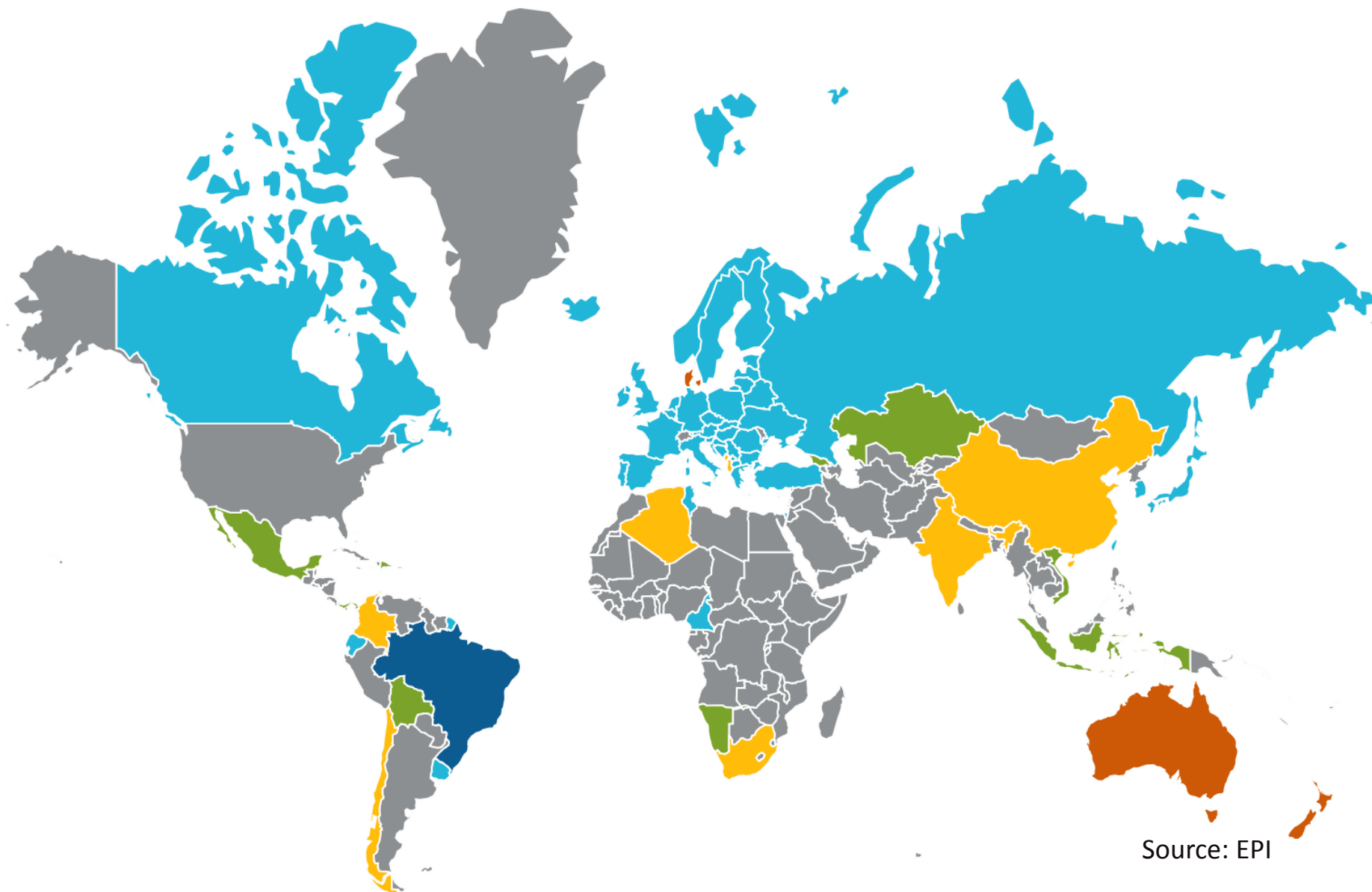
- used oil
- paint
- fluorescent lamps
- medicine
- appliances
- other

packaging EPR in the world

Packaging EPR in 2000



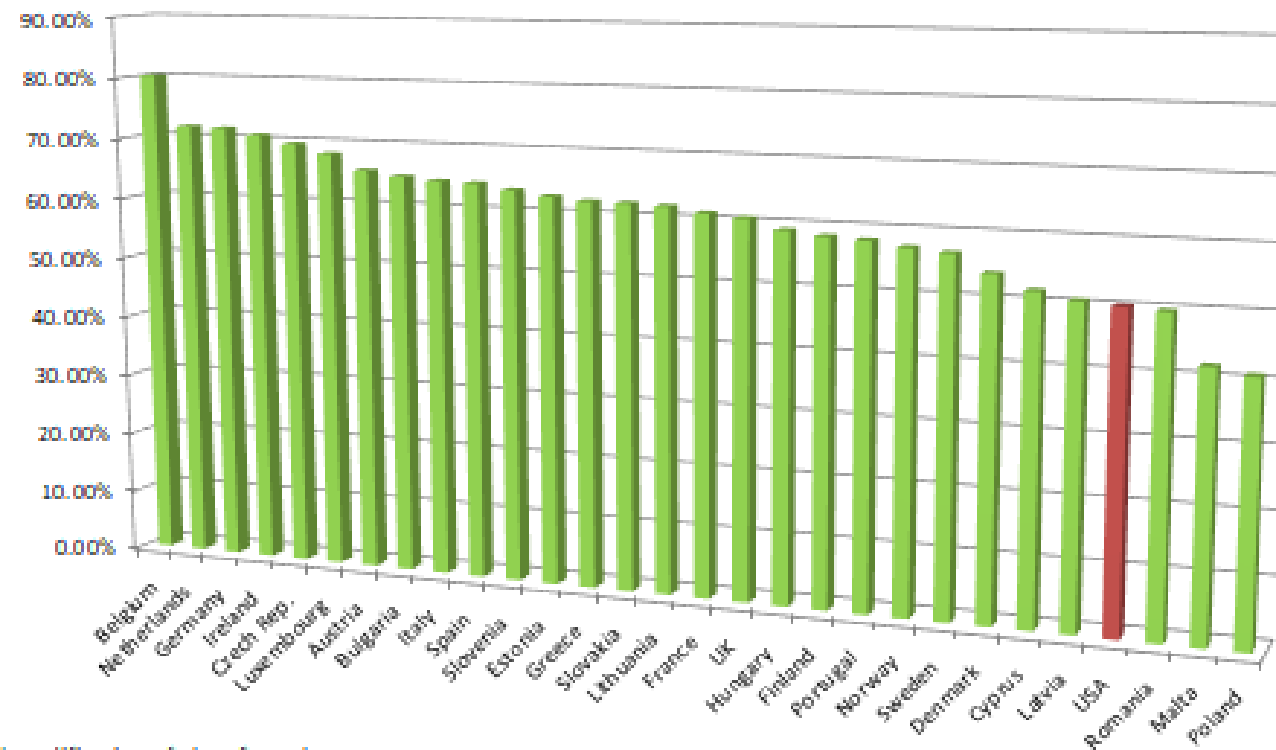
Packaging EPR in 2019



Source: EPI

packaging recycling

Packaging* recycling: europe vs. USA (2011)



Source: PSI modification of chart from the Extended Producer Responsibility Alliance (EXPRA)



*Data does not include printed paper

PSI dialogue process

Research →
Briefing Document

- **problems**
- **goals**
- **barriers**
- **solutions**



the packaging problem

current system is...

- **stagnant**
u.s. packaging recycling rate stagnant over past decade
- **fragmented**
patchwork of public collection programs leads to high levels of contamination and inefficient processes – increasing costs
- **underfunded**
municipal budgets are tight; costs are increasing (estimated at least **\$30 million per year** spent to recycle packaging in state of Connecticut → **3.6 million population**)
- **difficult markets**
china's restriction on recyclables



who pays for recycling?

- **governments, taxpayers, ratepayers**
- **no incentive** for manufacturers to change product design and reduce impact (unless lower cost for them)
- government has **little control** over packaging material design

VT goals for recycling reform?

- **shift costs** from taxpayer-funded government programs to producers and consumers.
- reduce **waste**, increase **reuse** and **recycling**.
- maximize **material value** by reducing contamination.
- create recycling **jobs**.
- create **incentives** for manufacturers to make more sustainable products.

VT objectives for recycling reform?

- cost **internalized** as part of doing business
- **producers** pay cost to recycle what put on market
- **cohesive** system that integrates existing related laws, regulations, and programs
- **differential fees** (“eco modulated”) to create incentive for use of material that costs less to recycle and has less impact on environment

“eco-modulated fees”

- set by **weight** to incentivize the efficient/effective use of resources (less material quantity use for a packaging = less contribution)
- set by **type of material** to reflect the environmental costs of a material (e.g., low recycled content = higher fee)
- being **revised** in Europe, Canada to reflect the true cost of managing materials and to incentivize eco-design choices

example fees in BC program

RECYCLE BC FEE SCHEDULE (CENTS/KG)				
Category	Material	2018 Fee Rates (cents/ kg)	2017 Fee Rates (cents/ kg)	Variance %
PRINTED PAPER	Newsprint	11.00	11.00	0.0%
	Magazines and Catalogues	11.00	11.00	0.0%
	Telephone Books	11.00	11.00	0.0%
	Other Printed Paper	11.00	11.00	0.0%
PAPER PACKAGING	Corrugated Cardboard	24.00	24.00	0.0%
	Boxboard	24.00	24.00	0.0%
	Gable Top Cartons	52.00	52.00	0.0%
	Paper Laminates	52.00	52.00	0.0%
	Aseptic Containers	52.00	52.00	0.0%
PLASTICS	PET Containers	53.00	53.00	0.0%
	HDPE Containers	53.00	53.00	0.0%
	Plastic Film	91.00	91.00	0.0%
	Plastic Laminates	102.00	102.00	0.0%
	Polystyrene	91.00	91.00	0.0%
	Other Plastics	91.00	91.00	0.0%
STEEL	Other Steel Packaging	20.00	20.00	0.0%
	Steel Aerosols	20.00	20.00	0.0%
	Steel Paint Cans	20.00	20.00	0.0%
ALUMINUM	Aluminum Food & Milk Containers	26.00	26.00	0.0%
	Other Aluminum Packaging	26.00	26.00	0.0%
GLASS	Clear Glass	15.00	15.00	0.0%
	Coloured Glass	15.00	15.00	0.0%

france (citeo) 2020 Rates

- CITEO currently only has one EPR fee for all plastics. Beginning in 2020, there will be **7 categories** for plastic packaging “to reflect the level of development of recycling facilities”:

	Material Rates (in ct €/kg):
Plastic	
Bottle and vial in clear PET	28,88
Bottle and vial in coloured PET, in PE or PP	30,92
Rigid packaging in PE, PP or PET	33,30
Flexible PE packaging	36,08
PS rigid packaging	38,85
Complex packaging or other resins excluding PVC	41,63
Packaging containing PVC	48,57



netherlands (afvalfonds verpakking)

- starting January 1, 2019, a lower rate applies to plastic goods that can be sorted and recycled with a positive market value
 - non-Recyclable Plastics: € 0.64/kg
 - easily Recyclable Plastics: € 0.38/kg

“recyclable” plastic packaging materials in the Netherlands must meet four conditions:

1. made from type of plastic that is collected, has a market value and/or is supported by a legally mandated program
2. sorted in predefined streams for recycling processes
3. processed and recovered/recycled using commercial recycling processes
4. recycled plastic is used as a raw material for the production of new products

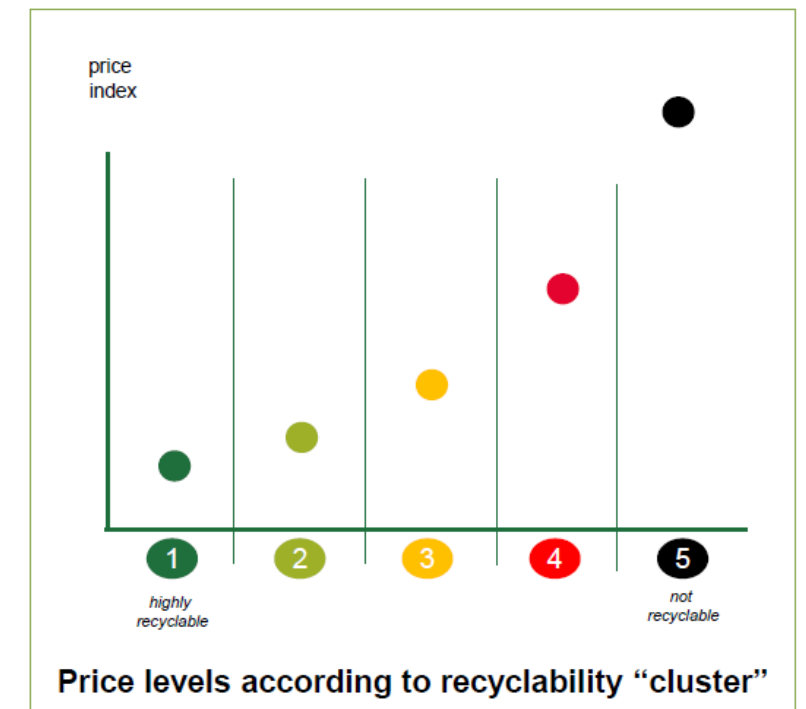
eco-modulated fees in europe



- **Germany:** In 2020, packaging to be classified through a “Cluster Tool.” For each cluster, a different price will apply.
- **Sweden:** Effective April 1, 2019, plastics categories changed, and an increased level of fees is applied to non-recommended resins and design choices (such as labels that cover >60% of the bottles, EVOH barrier>2%, black plastic).
- **Italy:** Effective April 1, 2019, there are now four plastics categories with increasing fee levels, based on recoverability.

	Material Type	EUR/kg*
Plastic	LEVEL A Sortable and recyclable packaging - “Commerce & Industry” circuit	0.179 0.150 (from 1/1/2019)
	LEVEL B1 Domestic circuit packaging with an effective and consolidated selection and recycling chain	0.208
	LEVEL B2 Other selectable and recyclable packaging from domestic circuit	0.263 (from 1/1/2019)
	LEVEL C Packaging not sortable/recyclable with current technologies	0.228 0.369 (from 1/1/2019)

Draft proposal for 2020



Die Gruppe mit dem Grünen Punkt | Der Grüne Punkt Group

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Source: Der Grune Punkt Group, March 2019. Workshop on Design4Recycling and Eco-modulation in Germany

VT objectives for recycling reform?

- use **existing** recycling and solid waste **infrastructure**.
- all municipalities **collect same materials** for recycling.
- statewide **consistent messaging**.
- **full producer payment** into the system: collection, processing, education, outreach, and state government oversight and enforcement.
- state **government oversight**.
- multi-stakeholder **advisory committee**.

program mgt options for recycling reform

OPTION 1: British Columbia

- brand owners responsible for financing and managing recycling.
- municipalities provided options:
 - (a) turn recycling service over to producers.
 - (b) municipality under contract to brand owners to recycle.
 - (c) muni continues current program with no reimbursement.

program mgt options for recycling reform

OPTION 2: Quebec

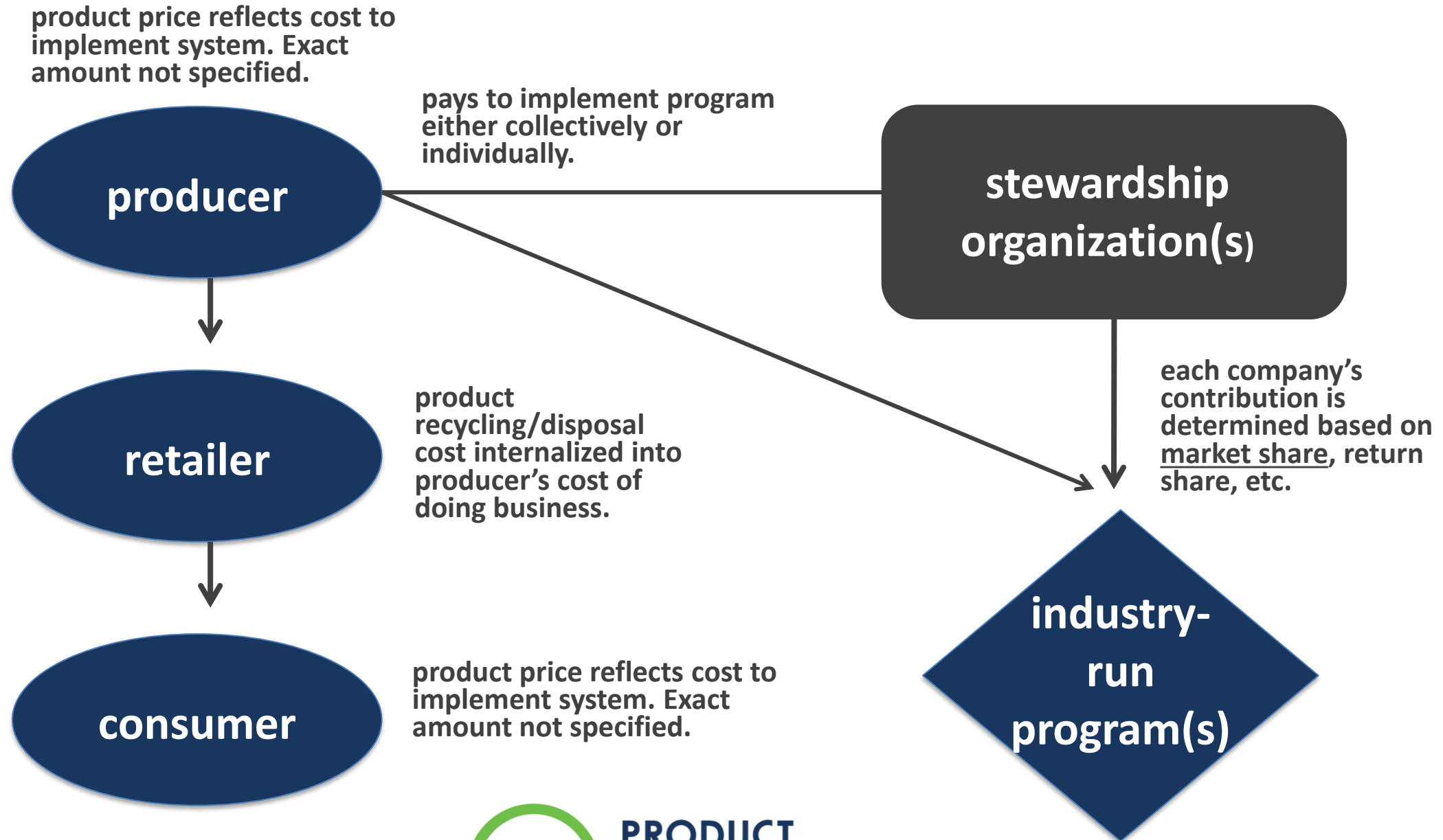
- brand owners responsible for financing recycling.
- munis responsible for managing recycling (reimbursed by brand owners).

program mgt options for recycling reform

OPTION 3: Vermont hybrid?

- brand owners responsible for financing recycling.
- munis responsible for managing recycling (reimbursed by brand owners).
- **Add: Quebec model + municipal option to relinquish recycling management to brand owners?**

cost internalization



key elements

of product stewardship systems

1. **legislation:** levels the playing field
2. **producers** responsible for financing (and managing) programs
3. **stewardship organization(s)** manage program
4. **performance** goals/convenience standards
5. **government oversight** of industry's plan

elements of effective epr laws

- scope of products
- producer/responsible party
- funding mechanism
- stewardship organization
- stewardship plan contents
- incentive payments
- outreach/education
- performance standards

- convenience standards
- penalties for violation
- administrative fees
- antitrust
- audit requirements
- reporting requirements
- implementation schedule
- disposal ban
- state procurement

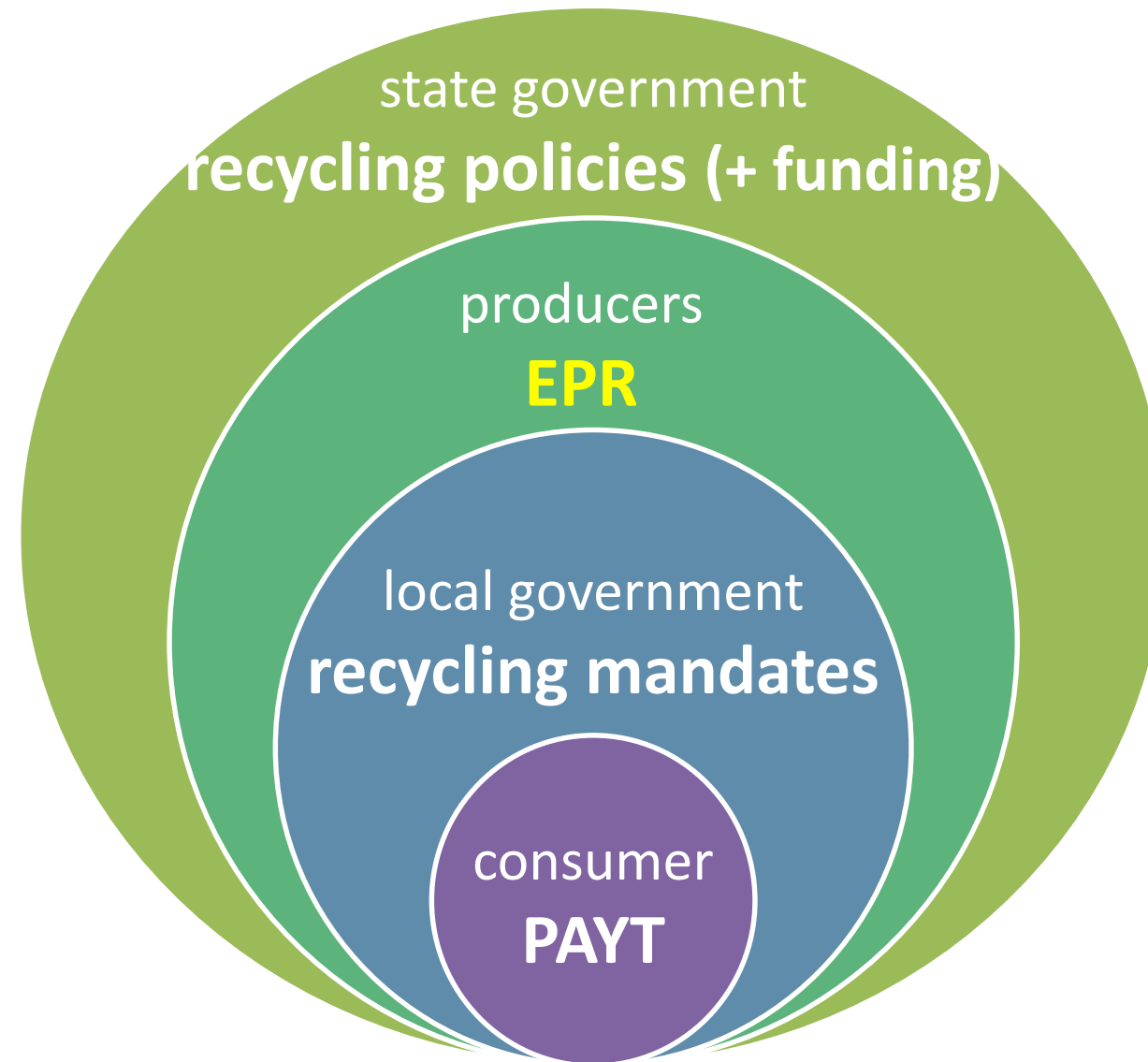
complementary packaging systems

- EPR
- bottle bill
- PAYT
- recycled content standards
- bag ban/fee
- voluntary

EPR + bottle bills

- definition of “covered materials” in EPR system can **exclude** containers covered under bottle bill
- materials collected curbside in EPR programs are:
 - **subtracted** from the amount (weight) recovered (e.g., from RecycleBC to Encorp) or **credited** (in Quebec, reimbursements from EEQ to munis wouldn't include cost of processing bottle bill materials)
- in Quebec, the total proportion of deposit material received at recycling sorting centers by weight = **1.4%**

roles + responsibilities



some gov'ts considering...

- status quo: voluntary
 - drop materials or recycling program
 - more government investment
- all packaging recyclable or compostable by 2030 (CA)
- 75% reduction of single-use packaging by 2030 (CA)
- study bill (WA)
- “resolve” to pass EPR bill in next year (ME, 2019)
- pass packaging bill in 2020 (ME, 2020)

US state action on epr for packaging

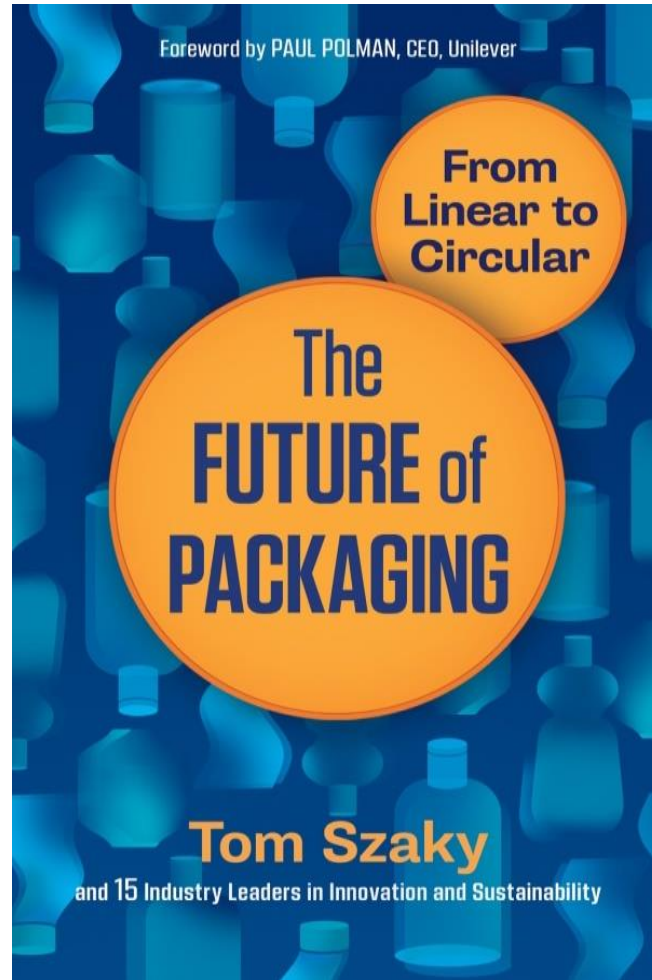
- Vermont
- Maine
- California
- Washington
- Oregon
- New York
- Indiana
- Massachusetts

US federal action on packaging

- U.S. Sen. Udall (NM)
- U.S. Rep. Lowenthal (CA)
- comprehensive proposal
- EPR for packaging
- national bottle bill
- bag ban + fee
- other single-use plastics bans

the future of packaging

from linear to circular



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chapter on epr
by scott cassel

thank
you!

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**PRODUCT
STEWARDSHIP**
INSTITUTE

us epr financing models

cost internalization (“take-back”)

- pharmaceuticals (29)*
- electronics (24)
- auto switches (15)
- mercury thermostats (13)
- batteries (11)
- medical sharps (10)**
- fluorescent lamps (5)
- cell phones (1)
- pesticide containers (1)
- refrigerants (1)
- solar panels (1)

eco-fee (consumer fee)

- paint (10)
- mattresses (3)
- carpet (1)



* 6 state, 23 local

** 1 state, 9 local