

Challenges and Potential Solutions in Advancing Pesticide Stewardship: An Overview

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agenda

I. Who is PSI?
II. Background
III. Key Challenges
IV. Improving Pesticide Stewardship
V. Laying the Groundwork
VI. PSI Resources
VII. Questions?

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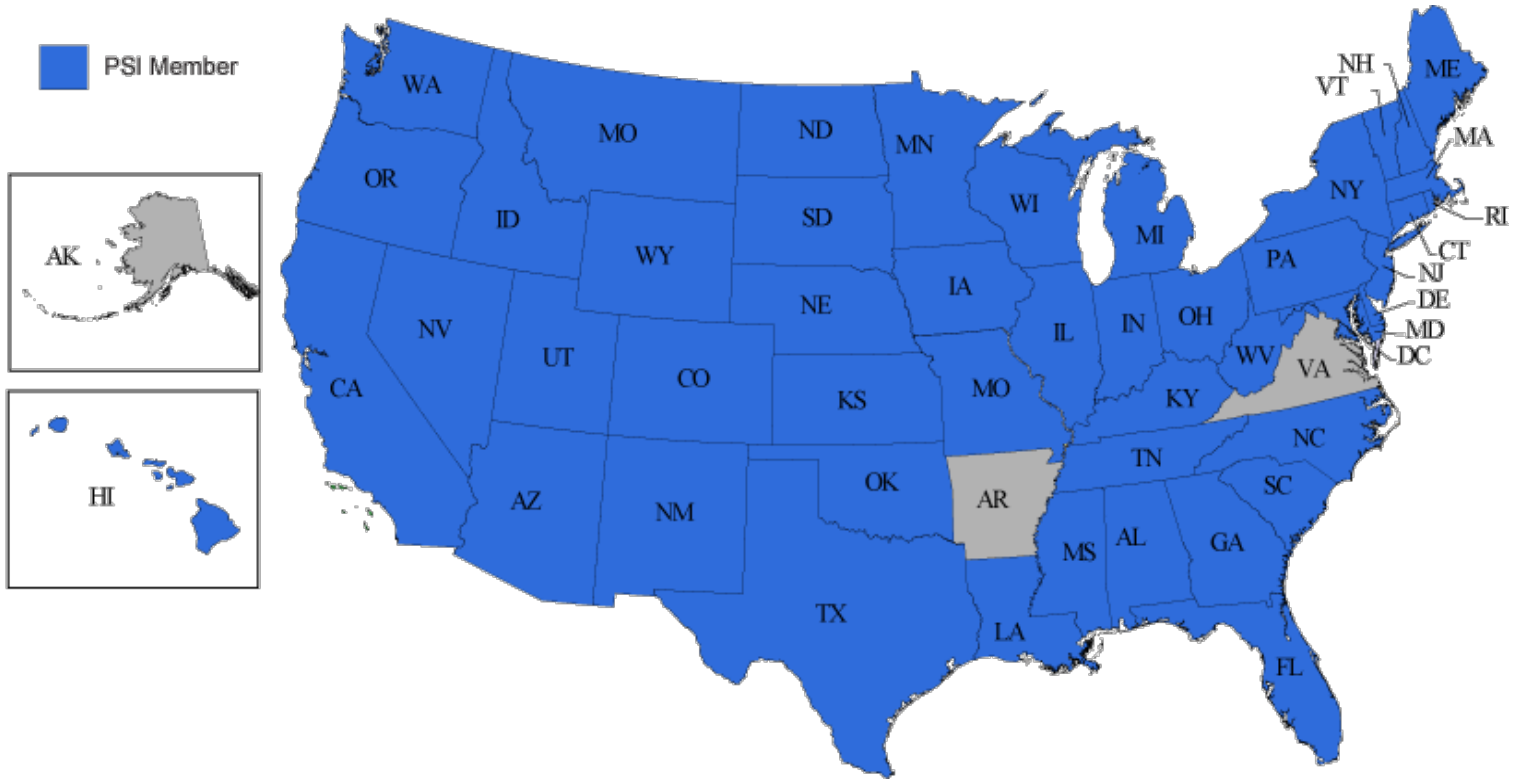

Building the capacity for product stewardship and EPR in the U.S. to reduce the health & environmental impacts of products across their lifecycle since 2000

- Members
- Partners
- Advisory council
- State product stewardship councils (PSCs)
- 20+ products

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product categories

pesticides

electronics

paint

hhw

packaging

batteries

pharmaceuticals

thermostats

mattresses

medical sharps

fluorescent lamps

textiles

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product **categories**


phone books


solar panels


used motor oil


gas cylinders


auto switches


radioactive devices


appliances with refrigerants


carpet


tires

+ framework legislation

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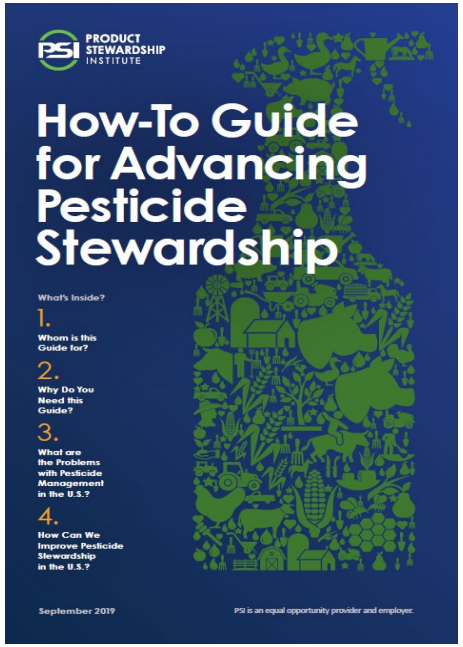

background

psi's pesticide stewardship initiatives

- 2019 usda-funded project
  - how-to guide for advancing pesticide stewardship
  - roadmap to pesticide stewardship: best practices and solutions webinar
- 2017 usda-funded project
  - pesticide stewardship briefing document
  - pesticide stewardship webinar discussion
- 2000 draft pesticide stewardship action plan

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key challenges: collection

1. **demand** for collection > **services** that governments can provide with current financial resources
2. lack of **permanent collection locations** for pesticides
3. lack of collection programs for empty **containers**

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key challenges: awareness

1. collection **options** for unwanted pesticides + containers
2. **toxicity** + risks (central nervous system damage, inc'd risk of cancer)

related issues

- lack of **awareness of collection locations**

  = long-term **storage** + health/environmental **risks**
- **household** pesticide users
  - misconceptions: home use = safe = **trash** disposal?
  - **appropriate** type + quantity for the job?
  - lower unit price for larger quantities → **overpurchase**

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key challenges: funding

pesticide disposal program funding is inadequate + unsustainable

all states require pesticide **manufacturers to pay a pesticide registration fee**, but

- **only 24 states** use these **industry** fees to fund household and/or commercial pesticide disposal
- only 14 states use these industry fees to fund **household** pesticide disposal
- other states use **government** funds or cost sharing (e.g., with farms and businesses) to fund disposal

→ this funding can be intermittent or allocated year-to-year and **not guaranteed**

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key challenges: funding

pesticide disposal program funding is inadequate + unsustainable

state disposal programs that ARE funded by **pesticide registration fee**:

- are **government-managed** + incur **costs not covered** (e.g. oversight + education)
- are only **partially** industry funded
- funding is often **static**, while quantities/costs are **increasing**
- often only cover **subset of pesticides** (e.g., farmers only)

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key challenges: funding

voluntary industry-funded initiatives have "**free riders**" -- manufacturers that benefit from the end-of-life product management program but don't contribute funding to pay for collection and processing costs.

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key challenges: data

comprehensive + continuous data is needed to:

- gauge program **performance**
- show **trends** in generation rate and costs
- **identify where improvements should be made**
- identify **underserved populations**

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key challenges: a product comparison

pesticide stewardship in the U.S. **lags in comparison with how other products** are managed – many that are less toxic/hazardous!

- **fluorescent lamps**: > 150 collection sites in VT; >295 collection sites in WA
- **mattresses**: >90% CA residents live < 15 miles from a collection site; >63% recycled in CT (2016)
- **paint**: 146 CT collection sites; 827 CA collection sites; 51% leftover CT paint collected (2016)

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improving pesticide stewardship: goals + features

goals

- convenient collection
- sustainable funding
- consumer awareness
- data collection and use

product stewardship programs have either of these features:

1. **industry-funded** + **government-managed** (e.g., pesticide registration fee funded disposal programs); or
2. **industry-funded/industry-managed** or **consumer-funded/industry-managed** (e.g., extended producer responsibility, or EPR).

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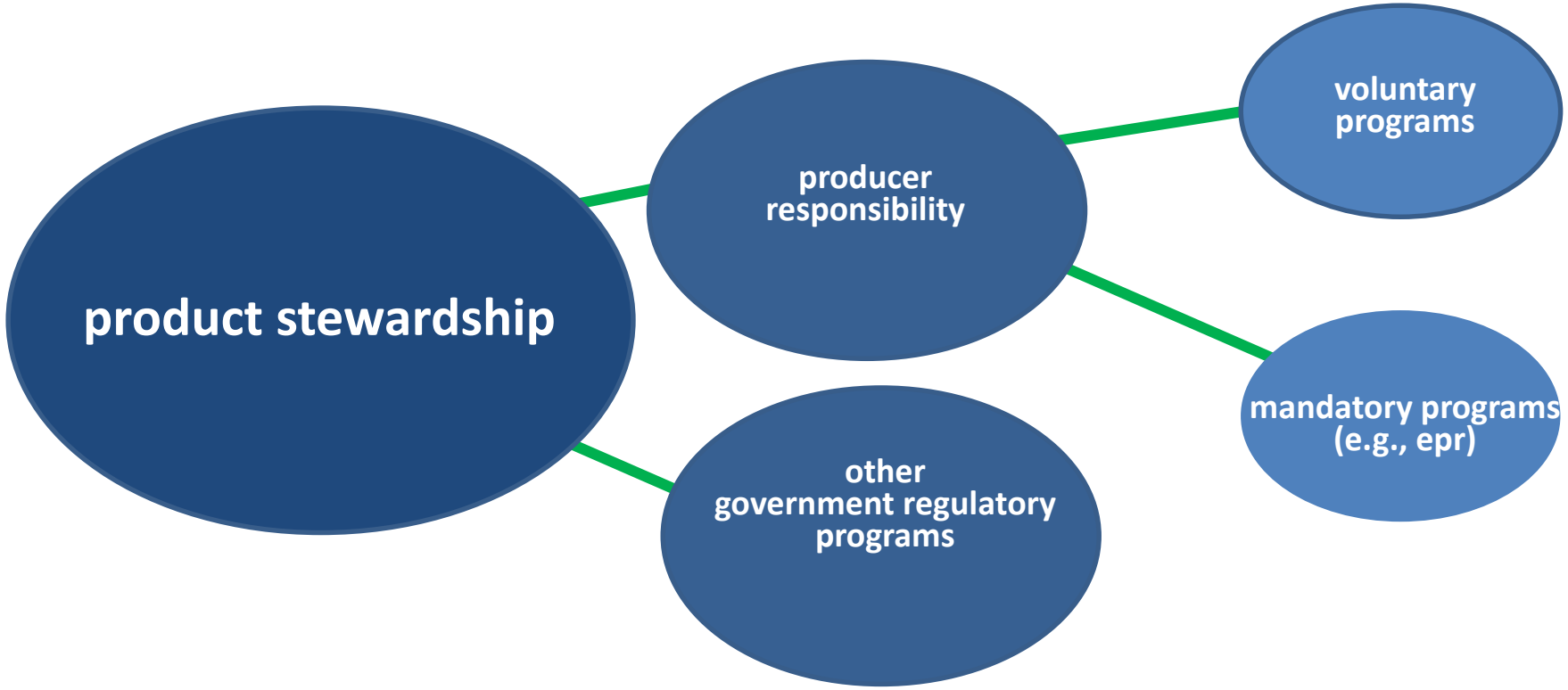
product stewardship vs. epr



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improving pesticide stewardship: policy options

Approach 1 – Enhance Current Law

Improve existing

gov't-managed system

under state pesticide laws

Approach 2– Establish EPR System

Pursue + establish

EPR legislation

Possible 3rd Approach:

Improve existing system for *non-household* pesticides + containers and complement this system with EPR legislation for *household* pesticides + containers.

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improving pesticide stewardship:
amend existing law (gov't-managed system)

1. pesticide registration fees
   - **adequate** funding for…
     …all generators + **education**/outreach + **data** + **collection**/handling/disposal + **oversight**
   - ensure fee is **flexible** to accommodate fluctuations
2. collection convenience
   - accept all unwanted pesticides + containers from all generators
   - minimum **convenience standard**
   - **permanent** sites + events
   - **collaborate** with local HHW programs

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improving pesticide stewardship:
amend existing law (gov't-managed system)

3. retailers/dealers provide **educational** materials
4. performance **measures +** annual **reports**
5. intra-state + state-local govt **collaboration**
6. industry, gov't, multi-stakeholder, + regional groups (including TPSA) **partnerships**
7. disposal **bans**

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improving pesticide stewardship:
epr (industry-managed system)

pesticides

- CA EPR law for containers (ag + professional application only)
- HHW EPR bills that include pesticides introduced, most recently in OR in 2019

other products

- **119 EPR laws** in 33 states + DC for 14 products → batteries, carpet, electronics, and more…
- in 8 states + washington DC, **paint** EPR has:
  - created >1700 **collection sites**
  - saved taxpayers $150 million

in canada, EPR for HHW, which includes pesticides, has achieved the following:

- **59% of pesticides available** for collection collected in Ontario (2015)
- hhw **collection volumes inc'd by 419%** in first 5 yrs in Manitoba
- collection rates **> 35% higher than without EPR** in BC

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u.s. epr laws
(partial list)

3

5

11

10

1 state,
9 local

11

13

24

29

6 state,
23 local

119* epr laws
14 products
33 states + d.c.

**while bottle bills are highly effective at recovering beverage containers, this count does not include the 11 state bottle bills in the U.S. due to the different ways in which the disparate policies shift responsibility to producers.*

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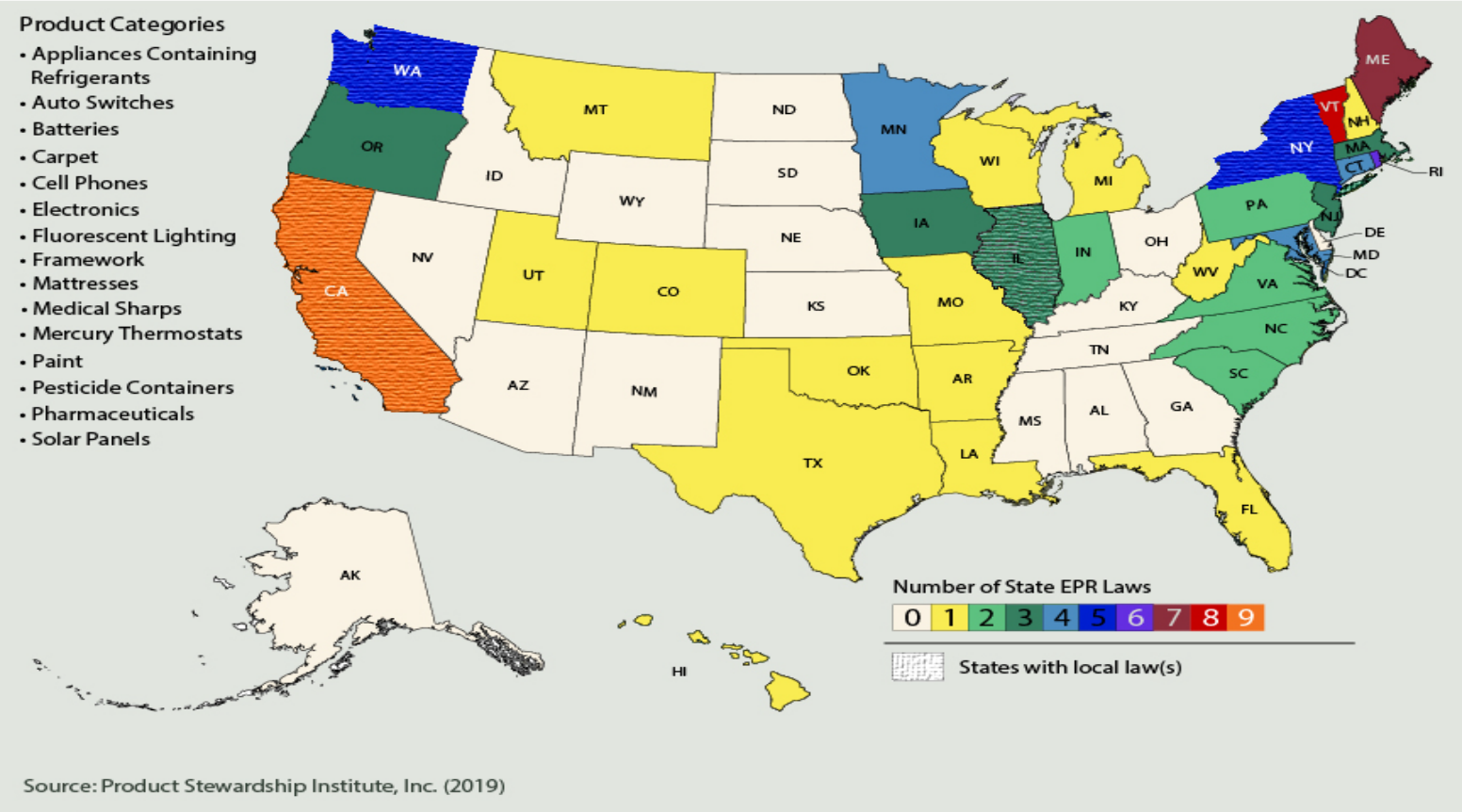
u.s. epr laws **now**



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overview of 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

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key elements
of effective u.s. epr laws

1. **legislation** levels the playing field
2. **producers** responsible for financing + managing programs
3. **stewardship organization**(s) manage program + **report annually**
4. **retailers** provide outreach + education funded by producers
5. **performance** goals/**convenience** standards
6. **government oversight** of industry's plan
7. **administrative fees** paid by producers to state for oversight

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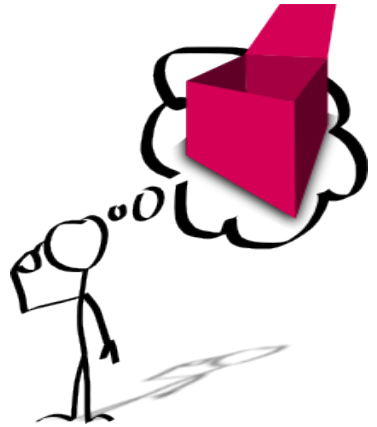
how epr works



1. **producers pay for + manage** the stewardship program
2. **producers develop + operate** the program under **a stewardship plan approved by the government** (to meet convenience standards + performance goals)
3. often **stewardship organization** manages the program on **behalf of producers**
4. **stewardship plan** includes how the program:
   - will work, including meeting goals
   - will be funded
   - collection infrastructure will be established to meet convenience standard
   - will provide education/outreach about program + collection locations

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laying the groundwork

1. develop the **capacity** to implement change
2. build **coalitions**
3. begin to shift the **context**
4. enhance **policy** design

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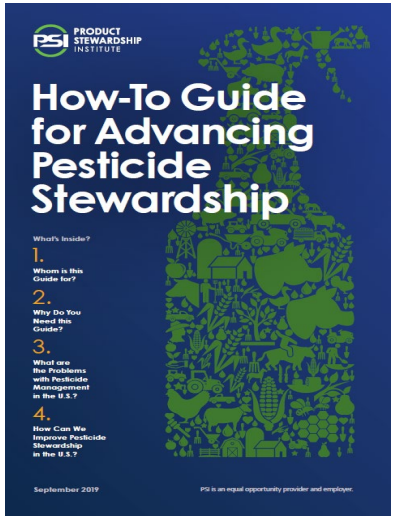
psi resources



- Pesticide Stewardship How-To Guide
  - ✓ Best Practices
  - ✓ Problems + Goals: Collection, Awareness, Funding, Data
  - ✓ Improving Pesticide Stewardship: Potential Solutions + Policy Options
  - ✓ Laying the Groundwork

- Pesticide Stewardship Briefing Document
  - ✓ Key Issues
  - ✓ Pesticide, Types, Uses, Impacts
  - ✓ Quantifying the Issue: Sales, Use, End-of-life management
  - ✓ Pesticide Policy
  - ✓ Potential Strategies

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thank **you!**

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questions or comments?

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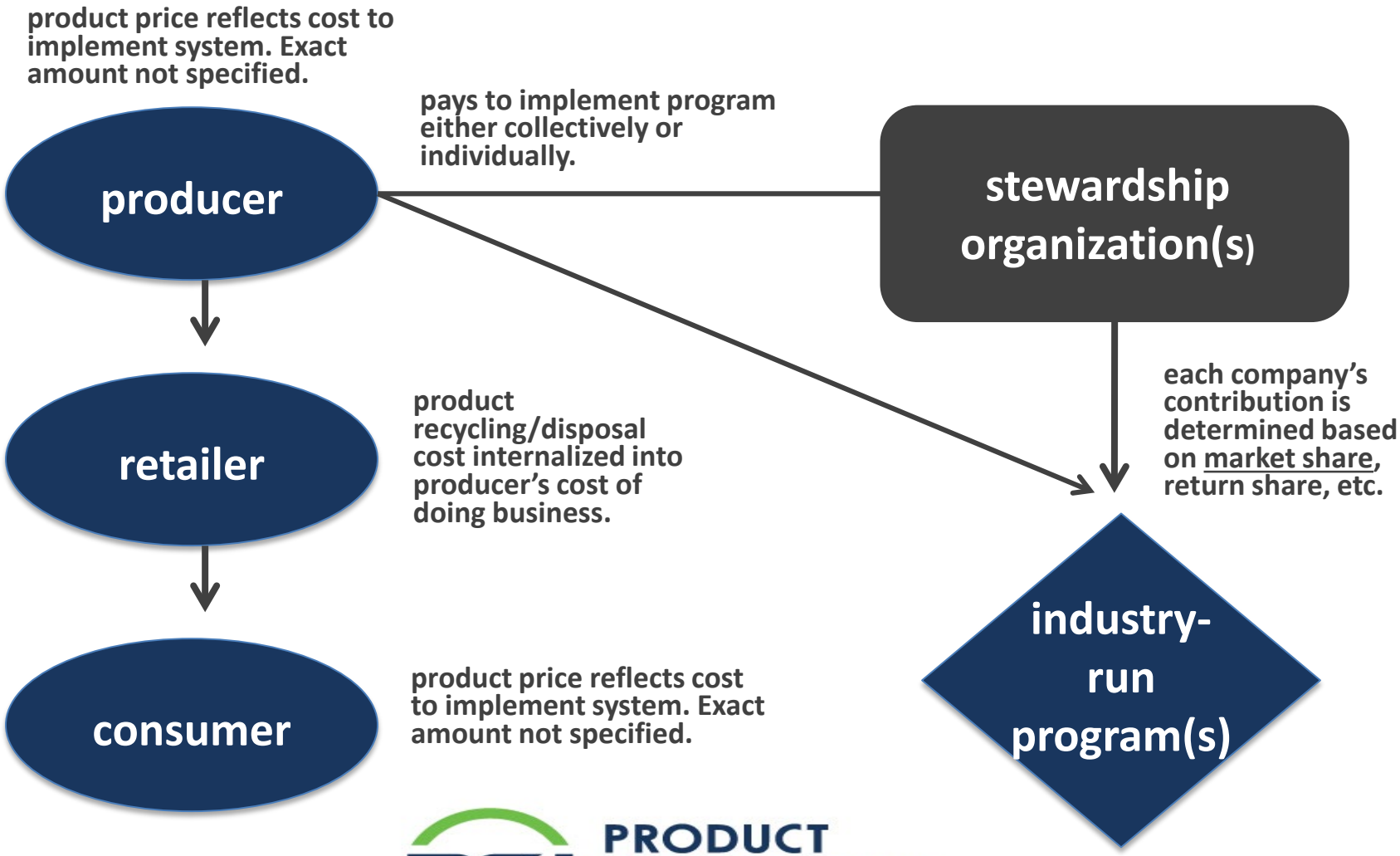
epr funding:
cost internalization



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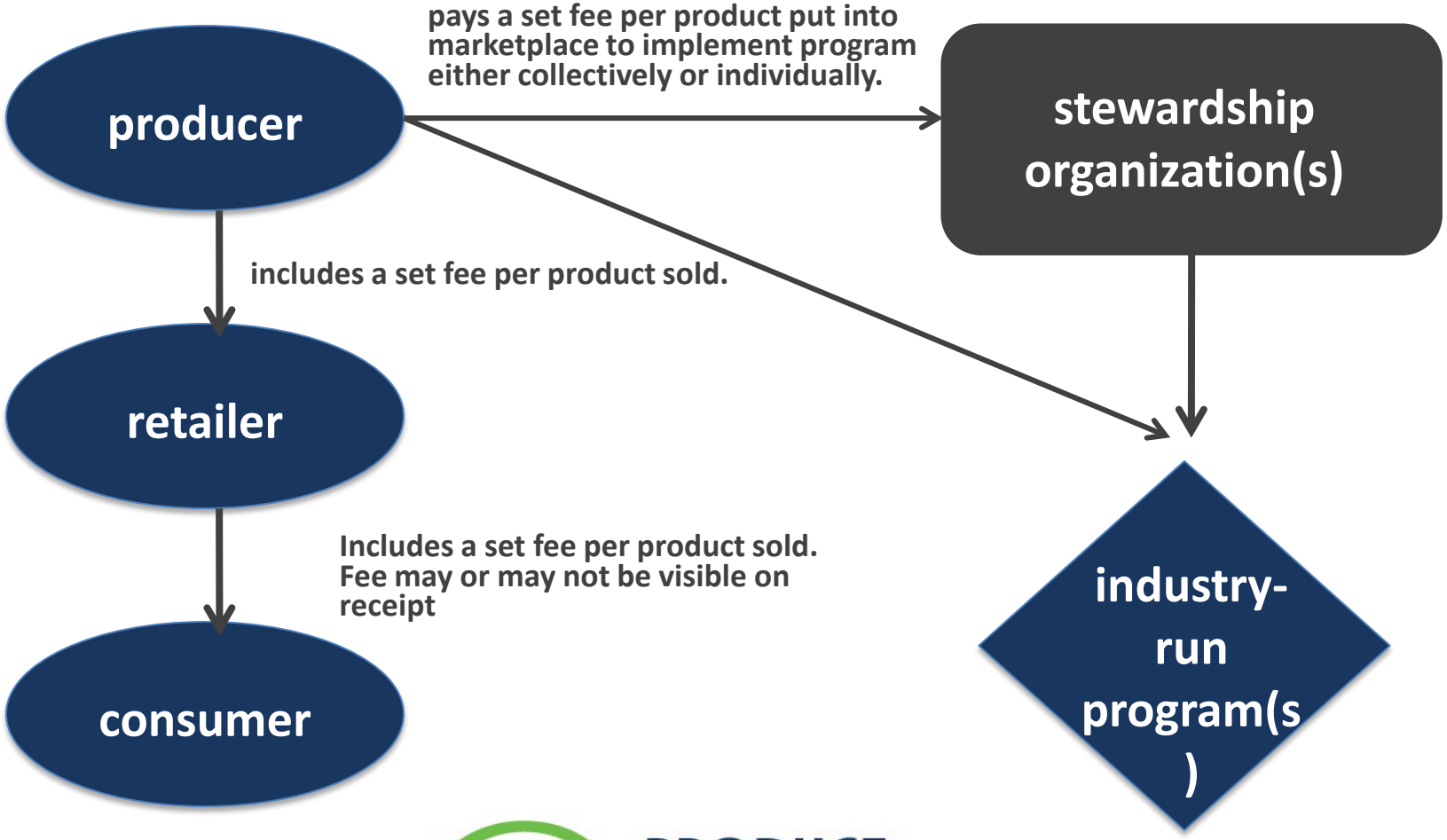
epr funding: **eco-fee**



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two related features of **epr policy**

(1) shifting **financial and management responsibility**, with government oversight, upstream to the producer and away from the public sector; and

(2) providing **incentives** to producers to incorporate environmental considerations into the design of their products and packaging.

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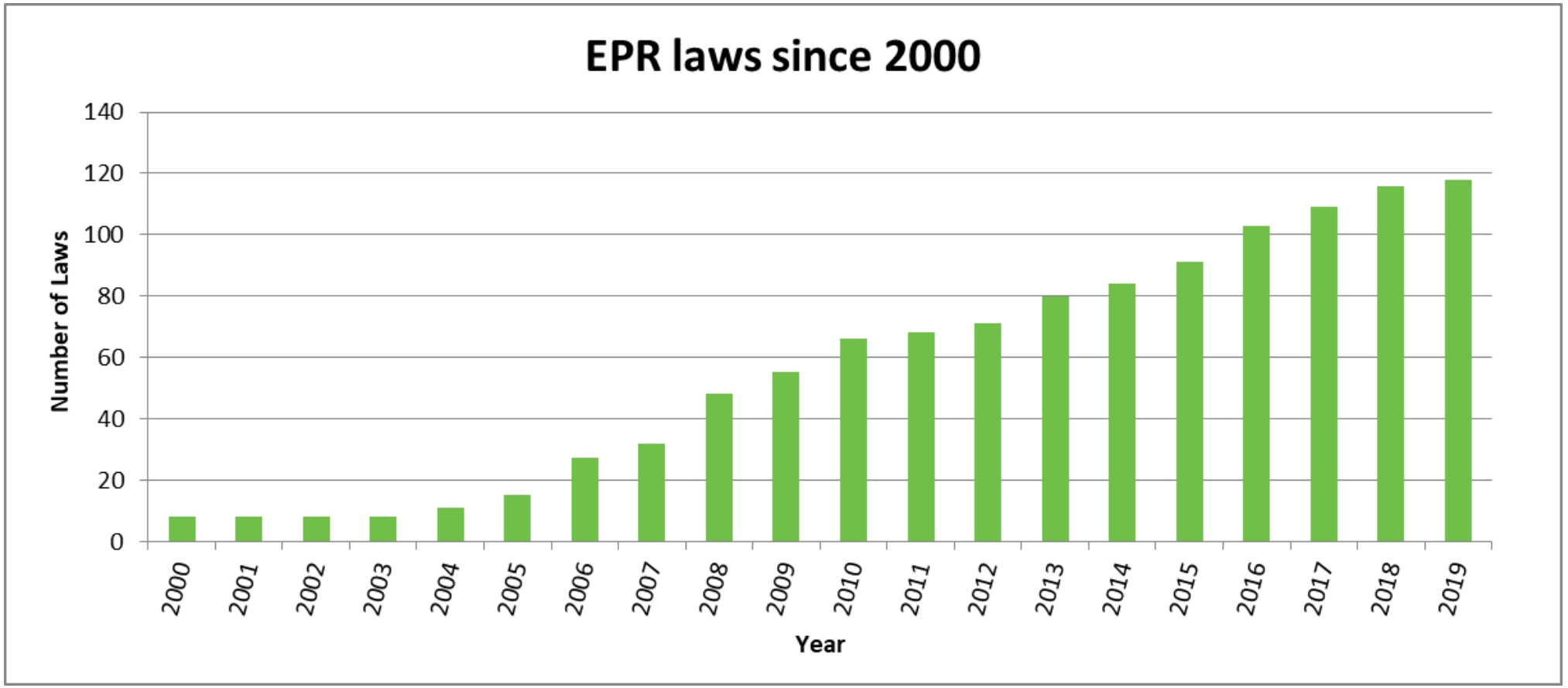
u.s. epr laws **trends**



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