Product Stewardship Institute
Sustainable Solutions to Protect Our Environment

Elements of a Stable Electronics EPR Bill

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This document provides a menu of legislative options for state and local officials to use to develop extended producer responsibility (EPR) bills to better manage used electronics. This menu has been developed by PSI and a working group of state and local government officials who coordinate used electronics recycling programs, and will be updated periodically as appropriate. The "elements" that are included below have been identified as necessary components of successful and effective state EPR legislation in the US. This document has the potential to harmonize some of the disparate e-scrap recycling programs in the US. If you are developing a bill to better manage used electronics, please contact Scott Cassel (617-236-4822) at the Product Stewardship Institute for additional resources.

#1: PRODUCT SCOPE: Electronic devices covered by the EPR law
Preferred Model: Includes a comprehensive range of covered products: TVs, monitors, laptops, tablets, and other devices with a screen size greater than 4 inches; desktop computers; computer peripherals (keyboards, mice, computer speakers, external hard drives, flash drives); set top boxes (DVD players, VCRs, game consoles, cable/satellite boxes); desktop printers (including those that scan, fax and/or copy); and fax machines.
Alternative Approach: Some existing programs (e.g., MN, WI) designate a broad scope of products that are required to be recycled, while manufacturers of a more narrow scope of products, termed "covered electronic devices," are obligated to finance the collection network. The broad scope of products, termed "eligible electronic devices," is counted toward producer collection goals, but producers that only manufacture these products are not required to register or fund the program (See #2 Responsible Producer, below).

Additional Considerations
• Detailed definitions are important and should try to anticipate new/changing technology (e.g., 3D printers)
• Most bills do not include cell phones with a screen size less than 4 inches for the following reasons:
    o Cell phones generally do have a strong infrastructure for collection without EPR law.
    o The number of units sold would far surpass other electronics on a market share basis.
    o There is a high likelihood of strong political opposition to including cell phones as a covered device.

#2: RESPONSIBLE PARTY: Who is responsible for funding the recycling program
Preferred Model: Includes manufacturers, brand owners, or first importers of covered products.
Alternative Approach: Some states (e.g. MN, WI) have elected to obligate a narrower group of producers to be fiscally responsible for the program instead of obligating producers of **all** products that

are required to be recycled. This is reportedly to lessen the state's administrative burden on tracking producers of products that weigh a relatively small amount (e.g., computer peripherals).

#3: STEWARDSHIP ORGANIZATION(S): Groups of producers who work together to collect used electronics

Preferred Model: Allow compliance by individual producers, as well as multiple producers that form a stewardship organization(s).

Alternative Approaches:

1) Legislation could establish a state-wide stewardship organization to coordinate manufacturer programs and require that manufacturers join.
   - Producers are unlikely to voluntarily collaborate due to the diverse and fragmented nature of the electronics industry.
     - South Carolina amended its law in 2014 so that producers could create a producer responsibility organization and collaborate on collection – 3 producers signed up in the first year. (SC Title 48, Chapter 60, Section 48-60-55)
   - Carpet and paint EPR laws have legislatively designated stewardship organizations and required participation.

2) State government may hire a contractor to create central program management and coordination.
   - Ex. Oregon state contractor program (ORS 459A.340(4))

3) State agency taking role of, or creating an entity to undertake, program management and coordination.
   - Ex. Washington Materials Management and Financing Authority (RCW 70.95N.280)

Additional Considerations

- States can provide an incentive in legislation for producers to join a stewardship organization in order to create stability through coordinated collection services.
  - South Carolina allows manufacturers who participate in a statewide recycling organization to opt out of the performance goal and alternatively provide consistent collection service to a fixed percentage of the state's population.
- States might consider requiring stewardship organizations to be non-profit institutions.
  - Transparency concerns may exist with private stewardship organizations.

#4: COVERED ENTITIES: Consumer groups that may use the producer funded recycling program

Preferred Model: Includes households and explicitly states that covered entities cannot be charged for recycling of e-scrap.

Additional Considerations

- Schools, small businesses, small non-profits, small government entities may be included. The term "small" can be quantified using the number of employees at each of the entities. Some existing programs place a cap on the number of electronic devices that can be recycled in each transaction to help collectors better manage the site by eliminating the need to verify the source of the used electronics as commercial or residential.

- Unless goals are set sufficiently high (in a program with a performance goal), including large businesses, universities, and large non-profits is not recommended due to the incentive created within the collection network to focus on materials from commercial and institutional streams that contain fewer costly CRTs. Lower value electronics that come from households will become a low priority within the collection network, which has caused instability in some programs. This has been the case in New York, the state with the broadest definition of covered entity.
- Pros and cons of the breadth of the scope of covered entities depend on the financing structure and goals of the program. Some general benefits and drawbacks are as follows:
    - **Narrow Scope**
        - *Benefits:* Simplicity and the residential sector would receive the greatest focus
        - *Drawbacks:* Potential for increased administrative burden to reach compliance as experienced by some programs where producers have protested the need to register with a program on the basis that their products are not used by covered entities
            - For example, if a state program's covered entities only include households and a producer primarily markets a covered product to the commercial sector, the brand owner does not feel obligated under the law to register. This issue has been a gray area in compliance for some states and producers with the language used by some laws and should be taken into consideration.
    - **Broad Scope**
        - *Benefits:* can simplify education and outreach messaging to reduce confusion and conflicting information.
        - *Drawbacks:* likely includes a broader universe of producers, therefore increasing opposition; unless goals are set sufficiently high in a program with a performance goal, including a broad range of covered entities is more likely to enable manufacturers to reach goals more quickly**.**

#5: FUNDING MECHANISM: Method of defining producers' financial obligations

Preferred Model: Producer internalized funding that will cover all costs of collection, transportation, processing, recycling, disposal (when appropriate), education, program administration, and government oversight/administration. All costs included in these program duties should be apportioned by market share (details below) and defined clearly. The legislation and/or producer plans should explain how the funding mechanism works in detail. Annual fees (also referred to as registration fees) should be assessed to cover administrative and education costs.

Specific Cost Considerations

- Collection and transportation costs
    - States might consider whether producers should be required to provide reimbursement or incentive payments to the collection network
        - Vermont – 10 V.S.A. § 7554(a)(2)(B)
        - Washington – RCW 70.95N.060)
- Recycling cost allocation
    - **Market share:** apportions the producer's financial obligation based on their share of current or recent sales in electronics markets.
        - *Benefits* – simplicity and lack of orphan products (i.e., products that are collected to

be recycled but the producer no longer exists)
        - *Drawbacks* –high costs for newer market players that produce covered products but don't yet have products coming through the collection system
    - **Return share:** apportions costs to producers for products of their own brands returned through the system and their share of orphan products
        - *Benefits* – fair allocation of costs based on what products are actually recycled through the program
        - *Drawbacks* – high administrative cost to track items by brand or audit collectors and the need for a central coordinating entity to manage, audit or oversee cost allocation and billing; orphan products are unaccounted for and must be apportioned among active manufacturers
    - **Combination:** A number of states have chosen return share for IT equipment and market share for TVs.
    - Trend in recent years has been away from return share and toward market share due added administrative and audit burdens.
- Government oversight, administration, and enforcement costs
    - In most state programs these costs are paid for by administrative fees. Often, producers need to register each year to be part of the program and pay a registration fee. This fee can be fixed or variable based on producer sales in units sold or market share.
- Education and outreach costs
    - Most state programs have education and outreach requirements that apply to producers, though there has been a lack of investment by producers as a whole and a lack of enforcement from program administrators. Some programs include requirements for retailers. In some programs the state uses part of the registration fees to pay for education and outreach.
- Consider whether manufacturers should be obligated to cover the full cost of recycling.
    - In some state programs, costs are shared among various stakeholders including producers, retailers, collectors and consumers.
- Specify whether or not consumers can be charged at the time of purchase or at the time of collection and how money can be distributed throughout the network. Many existing programs have a primary goal of providing used electronics recycling to residents at no cost. A few states do not require this and allow collectors to charge residents.

#6: PERFORMANCE GOAL

Preferred Model: Collection goals should be clear and well defined. Goals to create stability should be based on pounds collected in prior years for established programs. In new programs the goal can be set based on amounts collected in similar states with strong existing programs. Goals can be set in one of three ways depending on state specific circumstances: (1) Goals, or a formula to derive goals based on prior year collection data, are set in statute; (2) Statute gives the oversight agency the authority to set goals; or (3) Stewardship organization(s) propose their own goals in their plans, but the oversight agency has the authority to change, approve, or reject them. Goals will apply to all manufacturers and stewardship plans on a market-share basis.

- New York – Environmental Conservation Law 27-2603 (3)
- Vermont – 10 V.S.A. § 7555

Additional Considerations

- Consider whether including a performance goal is a necessary element of your program.
    - Washington State's program has been stable and is a strong performer without having a performance goal in effect.
- To enhance program stability, performance goals should be combined with convenience standards or other mechanisms to ensure that collection sites can access year-round manufacturer support, even if goals are met mid-year.
    - South Carolina amended its law in 2014 to allow manufacturers who participate in a statewide recycling organization to opt out of the performance goal and alternatively provide consistent collection service to a fixed percentage of population.
- Goals need to be set appropriately high based on the product scope and population served within the covered entities (e.g., higher goals for a broader scope of products and wider coverage).
- Goals determined by current or recent sales in electronics markets are unlikely to provide enough funding to match the costs of processing the amount of used electronics collected.
- Allowing reuse (as well as recycling) to count toward performance goals is important to ensure this sector is not at a competitive disadvantage in states with electronics EPR programs. However, unless goals are sufficiently high, providing incentives for reuse in the form of goal weight multipliers (e.g., 1 lb of reused electronics gets 1.5 lbs of credit) can be counterproductive and weaken performance goal driven systems.

#7: CONVENIENCE STANDARD

Preferred Model: Each producer's collection program must be convenient to both urban and rural populations, ongoing, and available at no cost to covered entities statewide to provide maximum convenience. An objective, measurable minimum convenience standard should be defined (e.g., number of collection sites required within a geographic area and/or population served). This standard will be state specific and should apply equally to all manufacturers and stewardship plans. Private businesses, non-profit organizations, municipalities, curbside programs, and other entities may become collection sites if they meet specified operating standards. Convenience standards can be set in one of three ways depending on state specific circumstances: in legislation, developed by the state agency, or proposed in a stewardship plan and approved by the state agency. All stewardship program collection sites must accept all covered electronics, regardless of device type or brand.

Additional Considerations

- The standard used by most of the states that define convenience in their law requires at least one collection site per county and one for each community with a population greater than 10,000.
    - Washington – RCW 70.95N.090
    - Oregon – ORS 459A.320(2)(d)
    - Vermont – 10 V.S.A. § 7552(b)
- Consider whether all sites that want to collect should be accepted as a collector by a stewardship organization if they meet the operating standards.

#8: RECYCLER CERTIFICATION

Preferred Model: Requires recyclers to verify they responsibly handle scrap electronics. Stipulates that recyclers within the program must be certified by third-party certification organizations (e.g., e-Stewards or R2) or meet equivalent operating standards.

Additional Considerations

- *Benefits:* reduces the potential for mismanagement by recyclers; likely to gain producer support
- *Drawbacks:* forced cost for certification imposed on recyclers, which puts small recyclers at a disadvantage; some have questioned the value given that certified recyclers have been found mismanaging used electronics

#9: OPERATING STANDARDS

Preferred Model: Defining standards for collection, transportation, and recycling will ensure that collected materials maintain the highest value possible. Including operating standards in legislation grants proper enforcement authority to regulate the most efficient or effective practices. Private businesses, non-profit organizations, municipalities, curbside programs, and other entities can become collection sites but must be accepted by the stewardship organization.

Additional Considerations

- Examples of operating standards: storage requirements, prohibiting cord cutting or cherry picking practices, palletizing requirements, sorting requirements, etc.
    - Washington
    - Vermont
    - ERCC Guidelines

#10: STEWARDSHIP PLAN CONTENTS

Preferred Model: Describe the elements that a manufacturer must include in the plan submitted to the state environmental agency or managing authority for approval.

Additional Considerations

- Examples of stewardship plan requirements: convenience requirement, education and outreach requirements, collection site operating requirements, plan evaluation requirements, etc.
    - Vermont – 10 V.S.A. § 7552
    - Washington – RCW 70.95N.060(5)
- Some state laws require manufacturers to submit an annual registration in place of a stewardship plan. The annual registration requires an explanation of how the manufacturer will meet their collection obligations.
    - Wisconsin – Wis. Stats. 287.17(3)
    - New York – Environmental Conservation Law 27-2605

#11: OUTREACH & EDUCATION REQUIREMENTS

Preferred Model: At a minimum, a plan must include outreach to consumers and other entities that have a role in the collection program, which includes educational materials for retailers, provided by the producer/stewardship organization. Plans should also include a methodology for evaluating effectiveness of outreach (e.g., a periodic consumer awareness survey).

Alternative Approach: State and local governments are typically tasked with solid waste and recycling outreach and education. In some cases, the outreach and education requirements for the used electronics program should be a state agency responsibility funded by producer registration fees.

Wisconsin's law is structured this way ([Wis. Stats. 287.17(10)(f)]).

#12: ANTI-TRUST & COMPETITION

Preferred Model: Standard elements should be included for all states, although other parts of the anti-trust language will need to be state-specific. Use antitrust language that has passed in your state for other EPR laws, if applicable. Limit anti-trust protection so that it does not adversely affect market competition in the management and recycling of electronics (e.g., exclude actions affecting price, location of electronic device sales, and market competition).

Additional Considerations

- Consider whether anti-trust protection is necessary if the law does NOT designate one state-wide stewardship organization.

#13: PREEMPTION

Preferred Model: State law should not attempt to preempt local government law. Where a state electronics stewardship law results in effective EPR outcomes, the need for local governments to regulate is reduced. Local government regulatory authority provides yet another incentive for producers to perform and meet recycling objectives.

Additional Considerations

- Consider whether there are any circumstances under which preemption would be acceptable or even preferable.

#14: DISPOSAL BAN

Preferred Model: A phased-in disposal ban can be a valuable educational tool to drive program participation. A disposal ban should only be in effect if the "person" (defined as any entity disposing of electronics, including waste management companies) "knowingly" disposes of the covered electronic device.

Additional Considerations

- In established programs, it has worked well to enact a ban 2 to 3 years after the used electronics recycling program is implemented.
- "No ban without a plan." – bans should not be implemented unless there is a functioning collection system in place to manage banned materials.

#15: PENALTIES FOR VIOLATION(S)

Preferred Model: Provisions to ensure compliance must be included to ensure a level playing field. Details of penalties are a state-specific issue. A sales ban set in statute is a valuable enforcement tool. A sales ban places a restriction on sales of covered electronics to any producers that are not in compliance with the recycling law.

Additional Considerations

- Sales of electronics should be limited to registered brands. Brands that do not register with the state but continue to sell products, as well as retailers who sell unregistered brands, should be penalized for such practices.
- If a statewide stewardship organization is established, states might want to consider allowing a 'private right of action' to enable compliant producers and stewardship organizations to recover unpaid fees from non-compliant producers.

#16: ADMINISTRATIVE FEES

Preferred Model: Administrative fees (also known as registration fees) should be paid by producers, and be sufficient to cover state agency oversight costs, including planning, plan review, annual oversight, enforcement, education/outreach (if this obligation will be performed by the state/oversight agency) and other directly related tasks. Specific fee amounts will be determined by individual states.

Additional Considerations

- Determine the essential compliance, oversight, and enforcement functions for your state agency and how can these duties be defined in the legislation to strike the right balance between effective oversight and limited bureaucracy.
- Consider having one or more positions within the oversight agency slated in the law to administer the program (e.g., Wisconsin – Act 50, Section 10)
- Consider including language that all administrative fees for the program are to be allocated only for the electronics EPR program (e.g., Wisconsin – Act 50, Section 11).
- Methods for assessing administrative fees
    - Fixed fees (typically $5000/year for large producers and a lesser amount for smaller producers)
    - Fees based on company size, individual devices produced, or percentage of market share
    - Fees based on full cost accounting (Vermont)

#17: AUDIT REQUIREMENT

Preferred Model: Manufacturer programs should be audited by an outside entity on a regular basis; results should be included in manufacturer plans or reports to the state agency.

Additional Considerations

- Define the type of audits included in this provision. Audits should include financial records and accounting for pounds recycled by each primary processor.
- Define whether the state conducts audits or an independent party should be used.

#18: REPORTING REQUIREMENTS

Preferred Model: Producers or their stewardship organization should, at a minimum, be required to report on: sales, collection, recycling, and processing by product type. Reports should include collection site locations, where materials were sourced and which recyclers handled the collected material. Reporting requirements should include total employment in the electronics recycling sector related to the state program. In addition, collection sites and recyclers should report on volumes collected and their disposition.

Additional Considerations

- Consider whether the state agency should be required to report to the legislature or governor on program progress and, if so, how frequently.
- Consider whether reporting of program costs should be required and, if so, under what circumstances.
- Consider implementing a reporting system that electronically links reports received from manufacturers, collectors and recyclers to identify discrepancies and reduce the likelihood of fraud (e.g., Wisconsin).

#19: IMPLEMENTATION SCHEDULE

Preferred Model: Each state will determine its own implementation schedule.

Additional Considerations

- In some existing programs there is a program year that may follow the state's fiscal year, as opposed to following the calendar year. Recyclers, collectors and producers have stated they prefer to follow the calendar year as opposed to a "program year" that is offset to the calendar year.