

Review of Product Stewardship Programs

Prepared for: Product Stewardship Stakeholder Workgroup

By: Kelly Panciera

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State of Oregon
Department of
Environmental
Quality



This report prepared by:

Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204
1-800-452-4011
www.oregon.gov/deq

Introduction

This paper provides a brief summary of common elements of product stewardship programs, based on a subset of programs. The programs reviewed represent both international and U.S. examples, and cover a wide variety of product areas from electronics to paint to mercury automotive switches. More detailed program-by-program information is included in Appendix A.1, Voluntary Product Stewardship Programs, and Appendix A.2, Legislated Product Stewardship Programs.

Each product stewardship program is summarized based on the following categories:

- Producer-funded government administrative fee
- Financing
- Roles and responsibilities
- Convenience standards
- Performance goals and measures
- Level playing field
- Lifecycle impacts/product design improvements
- Disposal ban

Appendix B includes a more complete listing of product stewardship programs by product category that are currently in place. The information in Appendix B is intended to provide a larger context for the information presented in Appendices A.1 and A.2 and in this paper.

Please note: Any statements or generalizations made about product stewardship programs in this paper refer *only* to those programs listed in Appendices A.1 and A.2 and not to all product stewardship programs as a whole.

Producer-Funded Government Administrative Fee

Some legislated product stewardship programs require producers to pay an annual fee to governments to offset the costs of government administration, such as registering producers and approving plans.

These fees take two forms:

- A flat fee paid by each individual producer or stewardship organization
- A sliding fee (usually based on market share) paid by each individual producer

For example, Maine's electronics program requires manufacturers to pay an annual registration fee of \$3,000 to help support the state's oversight of the program. Minnesota's annual registration fee is \$2,500. Similarly, Oregon's paint program requires manufacturers or a stewardship organization to pay \$10,000 each year to help offset costs of plan approval, oversight, and enforcement (this fee was set based on the expectation that a single plan would be submitted).

Producers participating in both Washington and Oregon's electronics programs pay an annual registration fee based on a sliding scale according to sales of covered products, or market share. Producers are placed in an administrative tier with an associated fee. Producers with a higher market share pay a higher fee. In the Washington program, fees range from \$8 to \$40,084; in Oregon they range from \$40 to \$15,000.

Some programs do not require administrative fees to support government administrative costs. These costs may be covered by things such as general solid waste disposal fees or taxes.

Financing

Most product stewardship programs generally use one of two different types of financing for product stewardship programs:

- Cost internalization
- Eco-fees

In cost internalization, producers are responsible for the costs of establishing a collection, transportation, and recycling system. The costs of the system are incorporated into the cost of doing business on the part of the manufacturer and may or may not be passed on in the price of the product; the costs are invisible to the consumer or retailer.

All of the U.S. electronics programs examined in this paper use cost internalization, as does Maine's mercury lamp program and California's cell phone program. Most of the voluntary programs examined here, including those for mercury switches, rechargeable batteries, and thermostats, are also cost internalization.

An eco-fee is a producer-designated amount paid on each product by either the producer or the retailer to a stewardship organization. The fee may or may not be visible to the consumer.

Oregon's paint program, for example, requires producers to pay a fee to a stewardship organization for each container of paint it sells in the state. The fee must be added to the cost of all paint sold to Oregon retailers, who then add the fee to the purchase price of paint. The stewardship organization determines the fee, but the fee is approved by the state through the submittal of the stewardship organization's annual plan. Alberta's product stewardship program also allows stewardship organizations to impose surcharges, but regulations define the maximum amount that can be charged for each product type.

However, not all product stewardship programs fit neatly into one of these two categories. The EU's Waste Electrical and Electronic Equipment (WEEE) directive employs a hybrid approach in which producers must internalize the costs for new products (those made after August 13, 2005), but may charge a fee for historical waste for a certain period (8-10 years, depending on the product category). The voluntary Carpet America Recovery Effort (CARE) doesn't have a financing mechanism at all, since the program is limited and currently does not address funding a collection, transportation, and recycling system.

Roles and Responsibilities

Product stewardship programs include a variety of roles and responsibilities for a variety of parties. Here we focus on how the following roles and responsibilities are distributed among producers, retailers, and government:

- Collection, transportation, and recycling
- Program financing
- Registration
- Plans and reports
- Education and outreach to consumers
- Compliance and enforcement

Producers

In most product stewardship programs, producers are responsible for the cost of transportation and recycling. Many legislated product stewardship programs also assign responsibility for collection costs to producers, with some exceptions. In Maine's electronics program, for instance, municipalities pay for collection. EU's WEEE directive also does not assign collection costs to producers.

Another commonality in almost all programs is producer registration, either with the government or with a product stewardship organization. In most cases, producers or stewardship organizations must also submit an annual plan and report to government.

Those programs where there is less government administrative involvement also tend to assign producers responsibility for education and outreach to consumers.

Retailers

The most common role for retailers is to ensure that they sell products that are in compliance with various product stewardship laws. In most instances, retailers must check compliance lists maintained either by government or by stewardship organizations to verify producer compliance.

Another common responsibility is providing education to consumers about recycling opportunities, either by displaying information in stores or providing written material directly to customers at the point of sale.

Retailers appear to have less of a role in voluntary programs when compared to their legislative counterparts. In both instances, however, retailers have a potential role as collection sites. EU's WEEE directive, for instance, requires retailers to allow customers to return an old product for recycling when they make a new purchase of the same product.

There are a few product stewardship programs that deviate from norm of producers bearing the cost of the system and instead hold retailers responsible. In California's cell phone program, for example, retailers pay for the cost of collection, transportation, and recycling.

Government

Legislated product stewardship programs have several common responsibilities for government. First, governments usually register producers, except in those instances where producers register with stewardship organizations. In some cases, such as Washington's and Minnesota's electronics programs, government also registers collectors, transporters, and/or recyclers.

Second, governments are typically tasked with reviewing and approving plans submitted by producers or stewardship organizations detailing their systems for collection, transportation, and/or recycling. Governments also generally review and approve annual reports submitted by producers or stewardship programs.

Third, programs with more government oversight generally task government with educating consumers. Even programs that have education requirements for producers or stewardship organizations tend to give governments a role in this area.

Lastly, governments have a large role in compliance and enforcement of programs. This includes maintaining compliance lists, ensuring that all manufacturers selling their products into a program jurisdiction are participating in the system, as well as issuing penalties against producers and stewardship organizations (and in some instances retailers) as appropriate.

Governments have less of a direct role in the voluntary programs examined. In Carpet America Recovery Effort (CARE) and End of Life Vehicle Solutions Corp. (ELVS), for example, governments help evaluate the program. Furthermore, governments are a signatory to the memorandum of understanding that created CARE. Government has no direct role in the Rechargeable Battery Recycling Corp. (RBRC) or the Thermostat Recycling Corp. (TRC).

Convenience Standards

Some product stewardship programs include convenience standards, or minimum requirements for ensuring that consumers have adequate access to collection opportunities. None of the voluntary programs have convenience standards, while a little over half of the legislated programs have convenience standards.

Most convenience standards are vague. The most common terms used to define convenience include:

- Available
- Accessible
- Reasonable
- Open at adequate frequency

Some convenience standards go a little further to require statewide collection or collection in both rural and urban areas.

Washington and Oregon's electronics programs have a more specific convenience standard, defined as having service in every county and a collection site in each city with a population of 10,000 or more.

Performance Goals and Measures

Half of the voluntary programs and half of the legislated programs include performance goals. The most common measures include collection targets:

- By sales
 - For example, in Minnesota's electronics program, manufacturers must currently recycle an amount equal to 80% of what they sold by weight in the previous year.
- Per capita
 - For example, EU's WEEE directive initially set a collection rate of 4 kg (8.8 lbs) per person from private households.

- By recovery rate
 - For example, Carpet America Recovery Effort (CARE)'s goal is to divert 40% of waste carpet from landfills in 2012. British Columbia's product stewardship program requires that plans meet 75% or higher recovery rate as established by government.

In Alberta and Ontario's programs, instead of outlining a specific target in the law, they stipulate that recovery targets need to be addressed in a producer or stewardship organization's plan.

Level Playing Field

Level playing field refers to methods that ensure that all producers contribute to or participate in a product stewardship program. All of the legislated product stewardship programs examined ensure a level playing field through one or both of the following:

- Sales restrictions that prohibit producers from selling covered products unless they are registered or in compliance with the law
- Fines for noncompliance

Exceptions include Alberta's product stewardship program, where retailers – rather than producers – must register in order to sell covered products. The EU's WEEE directive also has a slightly different requirement for producers: producers must provide a guarantee to Member States that waste management of the product will be financed before placing that product on the market. This could include participating in a stewardship organization, paying recycling insurance, or having a designated bank account.

Voluntary programs tend to not have vigorous requirements in this area. By participating in the Rechargeable Battery Recycling Corp. (RBBC) and the Thermostat Recycling Corp., producers meet the requirements of certain states that have legislative requirements in these areas.

Lifecycle Impacts/Design Improvements

About half of the legislated programs include provisions concerning lifecycle impacts or design improvements. The most common provisions address:

- Reuse (either stating a preference for reuse or giving reuse priority)
- Toxics (reporting requirements or meeting certain standards)
- Design for reuse/recycling

Only British Columbia's product stewardship program includes a broader requirement that producers, in their plans, address eliminating or reducing environmental impacts of products throughout the entire lifecycle.

Voluntary programs don't address lifecycle impacts directly. Automobile manufacturers, however, did voluntarily phase out mercury automotive switches as of model year 2002.

Disposal Ban

Only one legislated program – Oregon's electronics recycling program – of all the legislated programs examined included a disposal ban of covered products in the law itself. In five of the other programs, a ban either already existed or was established after the product stewardship law was passed. The remaining half of the legislated programs do not have disposal bans on the products covered in their programs.

Also of note, there are disposal bans in place in some states for covered products addressed in three of the four voluntary programs.

Sources

The following reports, laws, and websites were referenced in the writing of this paper.

Reports

Association of State and Territorial Solid Waste Management Officials (ASTSWMO). *ASTSWMO Product Stewardship Framework Policy Document*. December 2009.

http://www.astswmo.org/files/resources/sustainability/ASTSWMO_Product_Stewardship_Framework_Policy_Document-Dec2009.pdf

Chris Van Rossem, Naoko Tojo, and Thomas Lindqvist of the International Institute for Industrial Environmental Economics. Commissioned by Greenpeace International, Friends of the Earth Europe, and the European Environmental Bureau (EEB). *Extended Producer Responsibility: An Examination of Its Impact on Innovation and Greening Products*. September 2006. <http://www.greenpeace.org/eu-unit/press-centre/reports/extendend-producer-responsibil>.

Computer TakeBack Campaign. Brief Comparison of State Laws on Electronics Recycling. September 2, 2009. http://www.computertakeback.com/legislation/Compare_state_laws_chart.pdf.

Maine Dept. of Environmental Protection. *Report on Maine's Household E-waste Recycling Program*. January 15, 2010.

<http://www.maine.gov/dep/rwm/publications/legislative-reports/pdf/2010ewastereportfinal.pdf>

Northwest Product Stewardship Council. *Product Stewardship in Canada*. October 2009.

http://www.productstewardship.net/PDFs/policies/NWPSCCanadianPSPPrograms10_09.pdf.

Voluntary Product Stewardship Programs

Carpet America Recovery Effort (CARE) Website: <http://www.carpetrecovery.org>

End of Life Vehicle Solutions Corp. (ELVS) Website: <http://www.elvsolutions.org>

Rechargeable Battery Recycling Corp. (RBRC) Website: <http://www.call2recycle.org>

Thermostat Recycling Corp. (TRC) Website: <http://www.thermostat-recycle.org>

Legislated Product Stewardship Programs

Oregon's Electronics Program

- Program website: <http://www.oregonecycles.org>
- Link to law: <http://www.leg.state.or.us/ors/459a.html>

Washington's Electronics Program

- Program website: <http://www.ecy.wa.gov/programs/swfa/eproductrecycle>
- Link to law: <http://apps.leg.wa.gov/RCW/default.aspx?cite=70.95N&full=true>

Maine's Electronics Program

- Program website: <http://www.maine.gov/dep/rwm/ewaste>
- Link to law: <http://www.mainelegislature.org/legis/statutes/38/title38sec1610.html>

Minnesota's Electronics Program

- Program website: <http://www.pca.state.mn.us/oea/stewardship/electronics-law.cfm>
- Link to law: <https://www.revisor.leg.state.mn.us/statutes/?id=115A&view=chapter#stat.115A.1310>

Texas' Electronics Program

- Program website: <http://www.tceq.state.tx.us/assistance/P2Recycle/electronics/computer-recycling.html>
- Link to law: <http://www.capitol.state.tx.us/tlodocs/80R/billtext/html/HB02714F.htm>

British Columbia's Product Stewardship Program

- Program website: <http://www.env.gov.bc.ca/epd/recycling/index.htm>
- Link to law: http://www.bclaws.ca/Recon/document/freeside/--%20E%20--/Environmental%20Management%20Act%20%20SBC%202003%20%20c.%2053/05_Regulation/s/43_449_2004%20Recycling%20Regulation/449_2004.xml

Ontario's Product Stewardship Program

- Program website: <http://www.ene.gov.on.ca/en/land/wda/index.php>
- Link to law: <http://www.wdo.ca/files/domain4116/Waste%20Diversion%20Act.pdf>

Alberta's Product Stewardship Program

- Program website: <http://www.albertarecycling.ca>
- Link to law: <http://www.canlii.org/en/ab/laws/regu/alta-reg-93-2004/latest/alta-reg-93-2004.html>

Oregon's Paint Program

- Program website: <http://www.deq.state.or.us/lq/sw/prodstewardship/paint.htm>
- Link to law: <http://www.leg.state.or.us/09reg/measpdf/hb3000.dir/hb3037.en.pdf>

Maine's Mercury-Added Lamps Program

- Program website: <http://www.maine.gov/dep/mercury/index.htm>
- Link to law: http://www.mainelegislature.org/legis/bills/bills_124th/billtexts/HP067501.asp

California's Cell Phones Program

- Program website: <http://www.dtsc.ca.gov/HazardousWaste/EWaste/index.cfm>
- Link to law: http://www.leginfo.ca.gov/pub/03-04/bill/asm/ab_2901-2950/ab_2901_bill_20040929_chaptered.pdf

EU's Electrical and Electronic Equipment Directive (WEEE)

- Program website: http://ec.europa.eu/environment/waste/weee/index_en.htm
- Link to law: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0096:EN:NOT>

APPENDIX A.1 Voluntary Product Stewardship Programs

Program	Covered Products	Status	Producer-Funded Gvt Admin Fee?	Financing	Roles & Responsibilities			Convenience Standards	Performance Goals & Measures	Level Playing Field	Lifecycle Impacts/Product Design Improvements	Disposal Ban?	Website
					Producers	Retailers	Gvt						
Carpet America Recovery Effort (CARE) - U.S.	Carpet	Formed in Jan 2002.	N/A	None	<ul style="list-style-type: none"> Enhance the collection infrastructure Jointly resp. w/gvt for evaluating progress 	N/A	<ul style="list-style-type: none"> Jointly resp. w/producers for evaluating progress 	No	<ul style="list-style-type: none"> National goals over a ten-year time frame to increase the amount of recycling and reuse and reduce the amount of carpet going to landfills Divert 40% of waste carpet from landfills by 2012. 	N/A	No (But developed model procurement guidelines for environ pref. carpet)	N/A	http://www.carpetrecovery.org
End of Life Vehicle Solutions Corp. (ELVS) - U.S.	Mercury automotive switches	Formed in Aug 2006, as a result of EPA's National Vehicle Mercury Switch Recovery Program (NVMSRP).	N/A	Cost internaliz.	<ul style="list-style-type: none"> Pay for transportation and recycling Educates dismantlers Submit annual report to EPA 	N/A	<ul style="list-style-type: none"> Educate affected entities Help evaluate program 	No	<ul style="list-style-type: none"> Collect 80 to 90% of available mercury switches by 2017 	<ul style="list-style-type: none"> Not all producers required to participate Producers will identify and recruit participants 	<ul style="list-style-type: none"> EPA will explore ways program can provide understanding of environ. and econ. effects of product design choices (Note: mercury automotive switches were voluntarily phased out as of model year 2002)	Other (already in place in some states)	http://www.elvsolutions.org

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					Producers	Retailers	Gvt						
Rechargeable Battery Recycling Corp. (RBRC) - North America	Rechargeable batteries (Ni-Cd, Ni-MH, Li-ion, Ni-Zn, Pb) and cell phones	Formed in 1994. Collection started in 1996 in U.S; 1997 in Canada.	N/A	Cost internaliz.	<ul style="list-style-type: none"> • Pay for transportation and recycling through licensing of Call2Recycle's Battery Recycling Seals and resale of refurbished cell phones 	<ul style="list-style-type: none"> • Serve as collection sites 	N/A	No	No	<ul style="list-style-type: none"> • Mercury Containing and Rechargeable Battery Management Act (1996) requires manufs and marketers of Ni-Cd batteries and products powered by them to provide collection and recycling program • Various states have laws regarding the disposal of Ni-Cd, Small Sealed Lead, and/or all rechargeable batteries; CA, NY, and ME mandate cell phone recycling 	<ul style="list-style-type: none"> • Fees for Ni-Cd batteries are higher than fees for other batteries 	Other (already in place in some states)	http://www.call2recycle.org
Thermostat Recycling Corp. (TRC) - U.S.	Mercury thermostats	Formed in 1998.	N/A	Cost internaliz.	<ul style="list-style-type: none"> • Pay for transportation and recycling • Educate consumers 	<ul style="list-style-type: none"> • Serve as collection sites • Pay small, one-time participation fee 	N/A	No	No	<ul style="list-style-type: none"> • Not all producers required to participate • Partic. helps producers meet legis requirements in CA, ME, MT, NH, PA, and VT 	No	Other (already in place in some states)	http://www.thermostatrecycle.org

APPENDIX A.2 Legislated Product Stewardship Programs

Program	Covered Products	Status	Producer-Funded Gvt Admin Fee?	Financing	Roles & Responsibilities			Convenience Standards	Performance Goals & Measures	Level Playing Field	Lifecycle Impacts/Product Design Improvements	Disposal Ban?	Website
					Producers	Retailers	Gvt						
Oregon's Electronics Program	Desktops, laptops, monitors, and TVs	Signed into law June 7, 2007. Collection started Jan 1, 2009.	Yes	Cost internaliz.	<ul style="list-style-type: none"> • Pay for collection, transportation, and recycling • Register • Participate in a recycling program • Submit plan and annual report if participating in an indep. plan 	<ul style="list-style-type: none"> • Sell only compliant products • Educate consumers 	<ul style="list-style-type: none"> • Maintain compliance list • Register producers • Approve plans and reports • Educate consumers • Compliance and enforcement 	<ul style="list-style-type: none"> • Service in each county; site in each city with a population of 10,000 or more • Sites must be staffed and open to public at adequate frequency • Must be free to covered entities 	<ul style="list-style-type: none"> • No, but manuf recycling programs must meet their RSW to avoid penalties) 	<ul style="list-style-type: none"> • Producers must be in compliance in order to sell • Producers can be fined for noncompliance 	<ul style="list-style-type: none"> • Collectors may reuse and refurbish • Programs must address reuse and refurbish. in plans 	Yes	http://www.oregonecycles.org
Washington's Electronics Program	Desktops, laptops, monitors, and TVs	Signed into law March 2006. Started collection Jan 1, 2009.	Yes	Cost internaliz.	<ul style="list-style-type: none"> • Pay for collection, transportation, and recycling • Register • Participate in a recycling program • Submit plan and annual report if participating in an indep. plan 	<ul style="list-style-type: none"> • Sell only compliant products • Educate consumers 	<ul style="list-style-type: none"> • Maintain compliance list • Register producers, collectors, transporters, and recyclers • Approve plans and reports • Educate consumers • Compliance and enforcement 	<ul style="list-style-type: none"> • Service in each county; site in each city with a population of 10,000 or more • Sites must be staffed and open to public at adequate frequency • Must be free to covered entities 	<ul style="list-style-type: none"> • No 	<ul style="list-style-type: none"> • Producers must be in compliance in order to sell • Producers can be fined for noncompliance 	<ul style="list-style-type: none"> • Collectors may reuse and refurbish • Programs receive 5% credit towards its equiv. share for pounds received for recycling from 501(c)(3) orgs 	Other (some counties have bans)	http://www.ecy.wa.gov/programs/swfa/eprod/uctrecycle

APPENDIX A.2 Legislated Product Stewardship Programs

Program	Covered Products	Status	Producer-Funded Gvt Admin Fee?	Financing	Roles & Responsibilities			Convenience Standards	Performance Goals & Measures	Level Playing Field	Lifecycle Impacts/Product Design Improvements	Disposal Ban?	Website
					Producers	Retailers	Gvt						
Maine's Electronics Program	Laptops, monitors, TVs, portable DVD players, digital picture frames, printers, and video game consoles	Signed into law 2004; modified 2009. Collection started Jan 2006.	Yes	Cost internaliz.	<ul style="list-style-type: none"> • Pay for transportation and recycling • Register 	<ul style="list-style-type: none"> • Sell only compliant products 	<ul style="list-style-type: none"> • Maintain compliance list • Register producers • Approve consolidators • Compliance and enforcement • Municipalities collect and transport to consolidator 	No	No	<ul style="list-style-type: none"> • Producers must be in compliance in order to sell • Producers can be fined for noncompliance 	No	Other (instituted in 2006)	http://www.maine.gov/dep/rwm/ewaste
Minnesota's Electronics Program	Desktops, laptops, monitors, TVs, printers, keyboards, fax machines, and DVD players	Signed into law May 8, 2007; revised in 2009. Collection started Aug 2007.	Yes	Cost internaliz.	<ul style="list-style-type: none"> • Pay for collection, transportation, and recycling • Register • Submit annual report 	<ul style="list-style-type: none"> • Sell only compliant products • Educate consumers 	<ul style="list-style-type: none"> • Maintain compliance list • Register producers, collectors, and recyclers • Approve reports • Educate consumers • Compliance and enforcement 	No	<ul style="list-style-type: none"> • Year 1: Manufs must recycle amount equal to 60% of what they sold by weight in previous year • Year 2+: 80% of what they sold by weight in previous year 	<ul style="list-style-type: none"> • Producers must be in compliance in order to sell 	Manufs must report on video display devices sold to households if they exceed max RoHS levels for lead, mercury, cadmium, hexavalent chromium, PBBs, and PBDEs	Other (predated program)	http://www.pca.state.mn.us/oea/stewardship/electronics-law.cfm
Texas' Electronics Program	Desktops, laptops, and monitors	Signed into law June 15, 2007. Collection started Sept 1, 2008.	No	Cost internaliz.	<ul style="list-style-type: none"> • Pay for collection, transportation, and recycling • Submit plan • Submit annual report 	<ul style="list-style-type: none"> • Sell only compliant products 	<ul style="list-style-type: none"> • Maintain compliance list • Approve plans and reports • Compliance and enforcement 	<ul style="list-style-type: none"> • Collection must be "reasonably convenient and available" 	No	<ul style="list-style-type: none"> • Producers must be in compliance in order to sell 	No	No	http://www.tceq.state.tx.us/assistance/P2Recycle/electronics/computer-recycling.html

Legislated Product Stewardship Programs

Program	Covered Products	Status	Producer-Funded Gvt Admin Fee?	Financing	Roles & Responsibilities			Convenience Standards	Performance Goals & Measures	Level Playing Field	Lifecycle Impacts/Product Design Improvements	Disposal Ban?	Website
					Producers	Retailers	Gvt						
British Columbia's Product Stewardship Program	Electronics and electrical products; lead acid batteries; used lubricating oil, filters, and containers; pharmaceuticals; paint, solvents, and flammable liquids, pesticides, and gasoline; and tires	Environmental Management Act (framework) signed into law July 8, 2004 and Recycling Regulation effective Oct 2004. Preceded by other legis/voluntary programs for some product areas. Collection start dates vary by product area.	No	Varies by product area	<ul style="list-style-type: none"> • Submit plan • Submit annual report • Educate consumers 	<ul style="list-style-type: none"> • Educate consumers 	<ul style="list-style-type: none"> • Add new products 	<ul style="list-style-type: none"> • Requires "reasonable and free consumer access" to collection points 	<ul style="list-style-type: none"> • Plans must meet 75% or higher recovery rate as established by gvt and any perf. reqs in plan 	<ul style="list-style-type: none"> • Producers can be fined for noncompliance 	<ul style="list-style-type: none"> • Plans must address eliminating or reducing environmental impacts of products throughout lifecycle 	Other (some areas have bans)	http://www.env.gov.bc.ca/epd/recycling/index.htm
Ontario's Product Stewardship Program	Current programs: blue box waste (consumer packaging and paper), municipal hazardous and special waste, used tires, and electrical and electronics equipment	Waste Diversion Act (framework) signed into law June 27, 2002. Collection start dates vary by product area.	No	Varies by product area	<ul style="list-style-type: none"> • Notify obligated companies about program • Register and file report • Submit annual report • Educate consumers 	<ul style="list-style-type: none"> • Serve as collection sites 	<ul style="list-style-type: none"> • Approve plans and reports • Educate consumers • Compliance and enforcement 	No	<ul style="list-style-type: none"> • No requirements; targets set in plans 	<ul style="list-style-type: none"> • Producers can be fined for noncompliance 	No	No	http://www.ene.gov.on.ca/en/land/wda/index.php

APPENDIX A.2 Legislated Product Stewardship Programs

Program	Covered Products	Status	Producer-Funded Gvt Admin Fee?	Financing	Roles & Responsibilities			Convenience Standards	Performance Goals & Measures	Level Playing Field	Lifecycle Impacts/Product Design Improvements	Disposal Ban?	Website
					Producers	Retailers	Gvt						
Alberta's Product Stewardship Program	Electronics, paint, and tires	Designated Material Recycling and Management Regulation (framework) signed into law 1996 through the through the Environmental Protection and Enhancement Act. Electronics and tires regulation passed in 2004; paint regulation passed in 2007.	No	Eco-fee	<ul style="list-style-type: none"> Establish collection, transportation, and recycling system Register Submit plan Educate consumers Submit annual report 	<ul style="list-style-type: none"> Serve as collection points Collect fees from consumers and remit to plan 	<ul style="list-style-type: none"> Approve plans and reports Compliance and enforcement 	No	<ul style="list-style-type: none"> No requirements; targets set in plans 	<ul style="list-style-type: none"> Retailers must be registered in order to sell 	<ul style="list-style-type: none"> No requirements, but 2008-2011 plan encourages design for recycling for electronics 	No	http://www.albertarecycling.ca
Oregon's Paint Program (pilot)	Oil-based and latex-based architectural paint	Signed into law July 23, 2009. Collection to begin no later than July 2010.	Yes	Eco-fee	<ul style="list-style-type: none"> Pay for collection, transportation, and recycling Submit plan Educate consumers 	<ul style="list-style-type: none"> Sell only compliant products Educate consumers 	<ul style="list-style-type: none"> Maintain compliance list Approve plans Approve eco-fee/assessment 	<ul style="list-style-type: none"> Requires convenient and available statewide collection in urban and rural areas 	<ul style="list-style-type: none"> No 	<ul style="list-style-type: none"> Producers must be in compliance in order to sell 	No	No	http://www.deq.state.or.us/lq/sw/prodstewardship/paint.htm

**APPENDIX A.2
Legislated Product Stewardship Programs**

Program	Covered Products	Status	Producer-Funded Gvt Admin Fee?	Financing	Roles & Responsibilities			Convenience Standards	Performance Goals & Measures	Level Playing Field	Lifecycle Impacts/Product Design Improvements	Disposal Ban?	Website
					Producers	Retailers	Gvt						
Maine's Mercury-Added Lamps Program	Mercury-added lamps	Signed into law May 28, 2009. Collections start Jan 1, 2011.	No	Cost internaliz.	<ul style="list-style-type: none"> • Pay for collection, transportation, and recycling • Submit plan • Submit annual report • Provide certif. to retailers that products meet mercury content standards or display certif. on shipping container or packaging • Educate consumers 	<ul style="list-style-type: none"> • Sell only compliant products • Educate consumers 	<ul style="list-style-type: none"> • Notify retailers of noncompliant producers • Approve plans and reports 	<ul style="list-style-type: none"> • Collection must be convenient and statewide 	<ul style="list-style-type: none"> • If rate at which household mercury-added lamps sold are recycled is not at least 75%, the state may require modifications to the programs 	<ul style="list-style-type: none"> • Producers must be in compliance in order to sell 	<ul style="list-style-type: none"> • Lamps sold in ME made after Jan 1, 2010 must meet state's mercury content standards (consistent with RoHS) • Preference for lamps with the lowest possible mercury content when making state purchasing decisions 	Other (predated program)	http://www.mainelegislature.org/legis/bills/bills_124th/billtexts/HP067501.asp
California's Cell Phones Program	Cell phones	Signed into law Sept 29, 2004. Collections started July 1, 2006.	No	Cost internaliz.	N/A	<ul style="list-style-type: none"> • Pay for collection, transportation, and recycling • Educate consumers 	<ul style="list-style-type: none"> • Post annual estimated recycling rate 	No	No	<ul style="list-style-type: none"> • Retailers must be in compliance in order to sell 	<ul style="list-style-type: none"> • No, but state must purchase from compliant retailers 	No	http://www.leginfo.ca.gov/pub/03-04/bill/asm/ab_2901-2950/ab_2901_bill_2004929_chaptered.pdf

APPENDIX A.2

Legislated Product Stewardship Programs

Program	Covered Products	Status	Producer-Funded Gvt Admin Fee?	Financing	Roles & Responsibilities			Convenience Standards	Performance Goals & Measures	Level Playing Field	Lifecycle Impacts/Product Design Improvements	Disposal Ban?	Website
					Producers	Retailers	Gvt						
EU's Waste Electrical and Electronic Equipment Directive (WEEE)	Household appliances; IT and telecomm. equipment; consumer equipment; lighting equipment; electrical and electronic tools; toys, leisure, and sports equipment; medical devices; monitoring and control instruments; and automatic dispensers	Approved Nov 8, 2002; enacted Jan 27, 2003. Member States must pass legis. by Aug 13, 2005.	No	Cost internaliz. (can charge for historical waste, i.e. products made before Aug 13, 2005, for 8 years; 10 years for appliances)	<ul style="list-style-type: none"> • Pay for transportation and recycling • Participate in collective scheme or submit individ. plan for approval • Label products with WEEE symbol • Submit reports to Member States 	<ul style="list-style-type: none"> • When supplying a new product, must ensure waste can be returned to them on a one-to-one basis (exceptions apply) • May be required to educate consumers 	<ul style="list-style-type: none"> • Educate consumers • Submit reports to Commission • Compliance and enforcement 	<ul style="list-style-type: none"> • Collection systems must ensure availability and accessibility, taking into account population density • Must be free 	<ul style="list-style-type: none"> • Collection rate of 4 kg (8.8 lbs) per person from private households by Dec 31, 2006; new proposed mandatory collection target equal to 65% of the average weight of electrical and electronic equipment placed on the market over the two previous years in each Member State • Targets for reuse/recycling and recovery for each product category based on amounts collected by weight 	<ul style="list-style-type: none"> • Producers must provide guarantee before placing product on market that waste management of product will be will be financed 	<ul style="list-style-type: none"> • Member States shall encourage the design of products that facilitate reuse and recycling • Producers may not use design features that prevent products from being reused unless have overriding safety or environ. benefits • Producers must give priority to reuse 	No	http://ec.europa.eu/environment/waste/weee/index_en.htm
Washington's Mercury-Containing Lights Act	Mercury-containing lamps	Signed into law March 19, 2010. Collection starts Jan 1, 2013.	Yes	Cost internaliz.	<ul style="list-style-type: none"> • Pay for collection, transportation, and recycling • Participate in a product stewardship program • Stewardship programs must submit plan and annual report • Stewardship programs must educate consumers 	<ul style="list-style-type: none"> • Sell only compliant products • Except from financing program if sell their own brand of lights • Serve as collectors (voluntary) 	<ul style="list-style-type: none"> • Maintain compliance list • Register collectors • Approve plans and reports • Compliance and enforcement 	<ul style="list-style-type: none"> • Service in each county; site in each city with a population of 10,000 or more • Collection must be ongoing, year-round • Must be free to covered entities 	<ul style="list-style-type: none"> • Statewide goal of recycling all end-of-life mercury-containing lights by 2020 	<ul style="list-style-type: none"> • Producers must be in compliance in order to sell • Producers can be fined for noncompliance 	<ul style="list-style-type: none"> • WA may require submission of evaluations documenting effectiveness of mercury vapor barrier packaging in preventing escape of mercury. WA may restrict use of packaging for which adequate documentation has not been provided. 	Yes (Also bans the bulk sale of mercury via the internet and private parties)	http://apps.leg.wa.gov/billinfo/summary.aspx?bill=5543&year=2009

Overview of Product Stewardship Laws, by Product Category

	Framework	Automobiles	Batteries	Electronics	Fluorescent Lamps	Packaging/ Beverage Containers	Household Hazardous Waste	Rx	Mercury Auto Switches	Mercury Thermostats	Recharg. Batteries	TOTAL
U.S.												
Alabama												0
Alaska												0
Arizona												0
Arkansas									X			1
California										X		1
Colorado												0
Connecticut				X								1
Delaware												0
Florida											X	1
Georgia												0
Hawaii				X								1
Idaho												0
Illinois				X					X			2
Indiana				X					X			2
Iowa									X	X		2
Kansas												0
Kentucky												0
Louisiana									X			1
Maine	X		X	X	X				X	X		6
Maryland			X	X					X		X	4
Massachusetts					X				X			2
Michigan				X								1
Minnesota				X							X	2
Mississippi												0
Missouri				X								1
Montana										X		1
Nebraska												0
Nevada												0
New Hampshire										X		1
New Jersey			X	X					X			3
New Mexico												0
New York												0
New York City				X								1
North Carolina				X					X			2
North Dakota												0
Ohio												0
Oklahoma				X								1
Oregon				X		X	X*					3
Pennsylvania										X		1

Overview of Product Stewardship Laws, by Product Category

	Framework	Automobiles	Batteries	Electronics	Fluorescent Lamps	Packaging/ Beverage Containers	Household Hazardous Waste	Rx	Mercury Auto Switches	Mercury Thermostats	Recharg. Batteries	TOTAL
Rhode Island				X					X			2
South Carolina									X			1
South Dakota												0
Tennessee												0
Texas				X								1
Utah									X			1
Vermont			X						X	X		3
Virginia				X								1
Washington				X	X	X						3
West Virginia				X								1
Wisconsin				X								1
Wyoming												0
CANADA												
Alberta	X			X			X					3
British Columbia	X		X	X	X	X	X	X		X	X	9
Manitoba	X					X						2
New Brunswick	X					X						2
Newfoundland and Labrador	X											1
Nova Scotia	X			X			X					3
Ontario	X			X	X	X	X	X		X		7
Prince Edward Island	X											1
Quebec	X					X	X					3
Saskatchewan	X			X			X					3
INTERNATIONAL												
Australia						X						1
EU		X		X		X						3
Japan		X		X								2
Sweden				X								1
TOTAL	11	2	5	28	5	9	7	2	14	9	4	96

* Oregon's paint program is a pilot program.

SOURCES

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3. Northwest Product Stewardship Council. Policies & Legislation. Last updated December 22, 2009. <http://www.productstewardship.net/policies.html>.
4. Recycling Council of British Columbia. B.C. Product Stewardship Programs - January 2010 Update. January 2010. http://rcbc.bc.ca/files/u7/education_programsummary2010.pdf.