

Department of Resources Recycling and Recovery

Product Stewardship Program

Case Study Template

April 20, 2010

The purpose of this template is to provide a consistent approach to preparation of detailed product stewardship program case studies that harmonizes terminology and metrics for evaluation. This template is meant to assist in the development of a staff-level evaluation of economic and other lifecycle impacts of product stewardship programs. Instructions are in *italics*.

Potential data sources include but are not limited to:

- Interviews with key stakeholders (e.g. public agencies, operational entities, stewardship organizations, etc.)
- Data and information available at key stakeholders' websites (e.g. annual reports)
- Review of statute (if applicable)
- Program costs and jobs impact spreadsheets
- Surveys

(Insert Product Stewardship Program Name) Case Study

(Insert Program Location and Year)

[Overview](#) [Materials collected](#) [Collection](#) [Funding](#) [Impacts](#)

Sample summary table:

I. **Overview** (*narrative and chart*)

Possible topics to include:

- What were the driving factors for the development of the program?
- When was it put in place?
- Name of resulting statute / regulation (if applicable) and/or program name
- Program Stakeholder Roles & Responsibilities. Complete a table that provides a description of each stakeholder's roles and responsibilities within the program. The list of stakeholders and their titles will vary

Overview of Impacts: Name of program (Full table on impacts pg X)	
Total program cost (\$) per unit	
Total program cost(\$)/capita	
Percent collected (from available for collection)	
Percent Reused	
Percent Recycled	
Percent Recovered for Energy	
GHG emissions (tons)	
Job impacts	
Local Government impacts (e.g., cost savings)	
Program effectiveness:	

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depending on the product/industry and on how the program is set up.

Table 1: Stakeholder Roles & Responsibilities

Stakeholder	Role & Responsibility	Performance Goal(s)
Consumer		
Product Producers (OEM)		
Retailer		
Public Agency		
Federal Environmental Protection Agency		
Product Stewardship Organization (PSO)		
Recycler/ Refurbisher		
Advertiser		

II. Materials Collected *(narrative)*

- Types of product(s) accepted
- Packaging included/not included
- Geographic program boundary
- Sectors covered (residential, industrial/commercial/institutional)

III. Collection Infrastructure *(narrative)*

- Logistics – e.g. How does the program work? Who are the stakeholders?
- Collection type – identify local gov or private. e.g. depots, retail, mobile events, curbside, others?
- # facilities (total in state/province; # urban, # rural – or a range of high/low per county/region)
- # facilities per capita (total, plus indicate the low and high by county/region)
- # collection events per year
- Driving distance to depots? Or some other indicator of consumer access.
- Location of depots between work & home, home & shopping, etc.

IV. Funding *(narrative, chart, and diagram)*

- Who pays, how much, where is money collected and managed and by whom?
- What the funding covers (collection, hauling, processing, etc.)
- Fee/funding schedule (by product and packaging type, and by volume)
- Are collection facilities compensated? (Y/N by type – local gov, depots, retailers, etc.)

- How collection points are compensated and for what service (formal contracts or other agreement vs. informal or market-based by third-party collector; rent, volume of material, training, equipment, etc.)
- Does fee/funding structure encourage green design? e.g. a program could employ a differential fee structure that assigns a higher stewardship fee to a product containing a greater amount of toxic components or whose components otherwise make it more difficult and expensive to manage as a means of encouraging green design.

Program Funding Table: *(Name of Program)*

Instructions: For each Program Funding Element, **highlight** the particular option employed by that program as it currently exists. This will vary depending on program design. The Stakeholder column describes who is directly impacted by the Funding Element. Elements are defined below.

Program Funding Element	Option Employed, by Element				Stakeholder
Funding Mechanism	Cost Internalization	Fee	Tax		
Funding Approach	Mandatory		Voluntary		
Incentive for Green Design	Incentive for green design		No clear incentive		
Funding Collection Point	Point of Manufacture	Point of Sale	Point of Discard	Public Funding	
Fund Consolidation Point	Producer, Product Stewardship Organization (PSO), State/provincial government, or None				
Fund Oversight	Producer, Product Stewardship Organization (PSO), State/provincial government, or None				
Fund Management	Producer, Product Stewardship Organization (PSO), State/provincial government, or None				

Element Descriptions *(These descriptions may be moved to the end of the case study as an appendix or attachment.)*

Element 1 – Funding Mechanism. The means by which funding for a product management program is obtained. There are three primary Funding Mechanisms: cost internalization, fees (government and PSO fees), and taxes.

Cost internalization. Cost internalization occurs when the producer of a covered product internalizes the costs of implementing the stewardship program into the cost of the product. There is no separate line item on a receipt between any of the stakeholders involved.

Fee. Government Fee. A fee is a charge that, if collected by government, must be dedicated to, and used for, the governmental purpose related to the use of the item on which the fee is imposed. Fees may cover the full or partial cost of the service or program. Examples include advance disposal/recycling fee, franchise fee, solid waste tipping fee, utility fee, etc.

PSO Fee. A fee that is collected by a Product Stewardship Organizations (PSOs) that may cover the full or partial cost of the service or program. Examples include visible and invisible eco-fees.

Tax. A tax is a compulsory payment to government by consumers, producers, or retailers. Products or services paid for with taxes do not necessarily have anything to do with the product or item on which the tax is charged.

Element 2 – Funding Approach. The Funding Approach is the way by which a Funding Mechanism is implemented. There are two funding approaches that can be utilized: voluntary or mandatory.

Voluntary Funding. A voluntary Funding Approach is when there is no government requirement for any party to pay for the collection, transport, and recycling of a product. It relies on the voluntary participation of entities such as producers to pay for the cost to collect, transport, and recycle the product.

Mandatory Funding. A mandatory Funding Approach is when a public agency (city, county, state, or federal government) requires that an entity, such as a producer or consumer, pay for the cost to collect, transport, and recycle the product. Depending on how the fee/tax amount is established, the full cost to start and operate a collection program may or may not be covered.

Element 3 - Incentive for Green Design. Product stewardship programs can be design to provide incentives for green design, that is, product/packaging design that reduces a product's impact on the environment.

No clear incentive. When a fee is applied to all products within a product category, regardless of its environmental impact or cost to manage, then it doesn't provide an incentive to modify the product as no cost reduction is realized.

Incentive for green design. Applies if a producer is able to lower product stewardship program costs through product modification. For example, if a product stewardship program fee structure charges a producer less, if its product is less expensive to manage or easier to recycle.

Element 4 – Funding Collection Point. The Funding Collection Point describes any of the three points during a product's life where the fee/tax can be levied:

Point of Manufacture (POM). The producer pays the fee/tax. The fee/tax, if paid at this point, is generally built into the cost of the product as an invisible fee. For the purposes of this exercise, the POM collection point is defined as the first person or entity in the state to take title to the product.

Point of Sale (POS). The consumer pays the fee/tax when the product is purchased. The retailer remits the money on behalf of the consumer to the entity consolidating the funds for program activities.

Point of Discard (POD). An entity, typically the consumer, pays the fee/tax to the collector or recycler when the product is disposed.

Public Funding. The funds are collected from the general taxpayer or ratepayer, at points other than POM, POS, or POD, such as via property tax or utility bill.

Element 5 – Fund Consolidation Point. The Fund Consolidation Point refers to the entity responsible for receiving the taxes/fees collected either at the Point of Manufacture, Point of Sale, or Point of Disposal. The entity managing the Fund Consolidation Point may be different from the entity responsible for Fund Oversight and Fund Management.

Element 6 – Fund Oversight. Fund Oversight is carried out by the entity responsible for ensuring that the collected money is being used by the program as intended. Responsibilities may include ensuring the transparency of fund allocations through fiscal audits and review of annual reports.

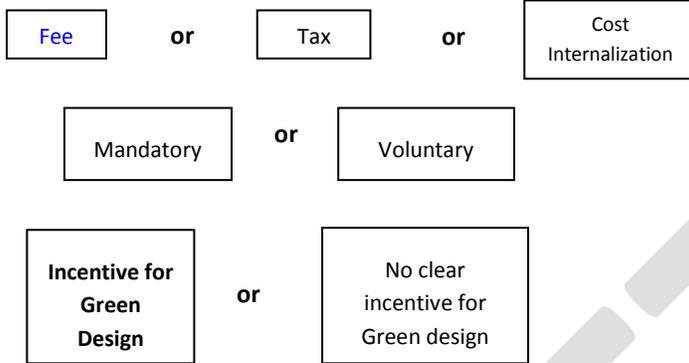
Element 7 – Fund Management. Fund Management is carried out by an entity responsible for managing the administrative duties related to the disbursement of funds that support program activities.

v. Funding Flow Diagram. This flowchart should correspond to the program Elements and stakeholder roles and responsibilities (Sections II and III, respectively).

For "Funding Mechanism and Approach" and "Fee/Tax Collection Point," shade the appropriate option. Labels should match the stakeholders or items described in the narrative and will vary by program. Use **green arrows with \$ sign** to represent the flow of money. Use **dashed orange arrows** to represent the flow of the product.

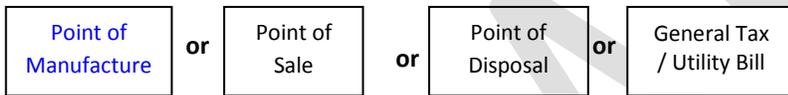
Instruction: highlight the boxes that apply, add arrows to indicate the flows in the Financing and Program Operation Section. These will vary by program!

Funding Mechanism and Approach



Financing

Funding Collection Point:



Fund Consolidation Point:



Fund Management:

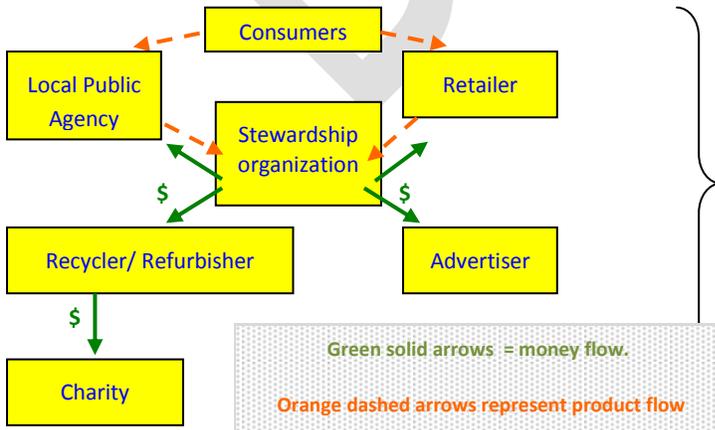


Management

Fund Oversight:

Who oversees management of funds?

Program Operations: Design a flow chart for program, below are some elements that may be included



Program Oversight:

Who oversees management of overall program to ensure a level playing field?

VI. Education/Communications *(narrative)*

- Description of communications/education/outreach plans
- Media used
- \$ invested per capita

V. Governance *(narrative)*

- Governance model
 - Performance-based – government sets & enforces standards, industry designs & operates program
 - Prescriptive – industry delivers gov-prescribed details
 - Gov-designed and operated
- Reporting requirements
- Transparency – What mechanisms are in place for those that run the program to ensure program transparency? e.g. post program info, reports, financial statements online
- Enforcement mechanisms (gov staffing, budget, etc. if possible) Is program enforcement funded by the producer?
- Policy tools to encourage DfE (complementary regulations such as RoHS, standards, etc.)

VI. Impacts *(narrative and table)*

The table below may be expanded. The template provides some key data fields to use in comparing and analyzing programs. Quantitative information is sought, where it exists.

- For all impacts, include a web link or identify the method used to determine results.
- Jobs +/- assessment – see Jobs Analysis document for an approach to calculate this. Provide narrative description of jobs impact.

Summary for (title of program) in (state/jurisdiction): *(Identify program service area)*

Population (insert year)*	
Total program cost (\$)	
Cost(\$)/capita	
Cost (\$)/unit collected	
Education/Communications (% of total program cost)	
EOL materials management (% of total program cost)	
Program administration (% of total program cost)	
Governance (program oversight) (% of total program cost)	
Total cost to local government (if applicable)	
Environmental	
Materials management ¹	

¹ In some cases, it may be necessary to convert unit to material vs. product (e.g. use data on amount of cadmium recycled from an industry assn. to determine amount of batteries collected)

Product sold (mass or volume)	
Product collected (mass or volume)	
Product sold that is available for collection	
Percent collected (from available for collection)	
Percent reused	
Percent recycled	
Percent other (<i>e.g. landfilled, incinerated for energy recovery, etc.</i>)	
GHG emissions (tons)	
\$ invested in product design R&D	
Program effectiveness	
Progress against goals and targets	
Regulatory non-compliances	
Demonstrated improvements in product design	
Public awareness	
Public participation ²	
Total job change from traditional to EPR (+/-/=)	Base year used in comparison: _____
Local Government	
Product Stewards	
State Government	
Materials extraction, processing, & manufacturing	
Collectors & Recyclers	
Retailers	

**all data should be reported for the same year*

VII. Highlights/Successes (*narrative*)

VIII. Lessons Learned (*narrative*)

- Describer key relationships, processes that had a significant impact on program costs, success, outcome, etc.
- Program evolution (if applicable) – e.g., How has the program changed over time and why?
- Are there any factors/issues/impacts that are difficult to quantify or otherwise account for, and if so, why?
- Has the program resulted in green design changes? If yes, describe impacts.

² Via survey results or other reported data (such as Form 303 in CA, which local jurisdictions must report <http://www.ciwmb.ca.gov/hhw/Reporting/>)

IX. Considerations for Next Steps in the Transition to Full Product Stewardship
(narrative)

X. Program Contact Information

Provide contact information for all information and data sources.

Organization name

Contact Person

Phone #

E-mail address

Organization's web address

(Attach appendices as appropriate)

DRAFT