



Task Force to Study Methods for Reducing Consumer Packaging that Generates Solid Waste

Overview

February 16, 2017

*By
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The task force shall analyze and identify:

- (1) Strategies for improving the efficacy of state, municipal and local solid waste recycling infrastructures and systems;
- (2) Consumer education and awareness efforts aimed at increasing awareness of consumer packaging as solid waste and reuse and recycling solutions for such packaging;
- (3) Existing methods employed in the consumer packaging and recycling industry to reduce and minimize the amount, weight and volume of consumer packaging that generates solid waste;
- (4) Incentives for consumer packaging producers to reduce the amount of such packaging that they create;
- (5) Opportunities to cost-effectively increase the proportion of biodegradable, postconsumer recycled and recyclable materials used in the manufacture of consumer packaging;

The task force shall analyze and identify:

(6) Strategies for achieving a reduction of not less than twenty-five per cent of consumer packaging in the state's solid waste stream on and after January 1, 2024, and decreasing municipal costs associated with managing such waste stream through the implementation of:

- (A) Alternative low-cost methods of managing and reducing consumer packaging in an environmentally sustainable manner that additionally yields economic benefits through the creation of job opportunities, or
- (B) an extended producer responsibility program for consumer packaging;

(7) Methodologies for measuring and verifying the reduction described in subdivision (6) of this subsection; and

(8) Incremental performance targets to assure achievement of the reduction described in subdivision (6) of this subsection.

Packaging Waste Management

Initiatives in Other States



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California Model Packaging Program

- On September 21, 2016, CalRecycle Director Scott Smithline approved the development of a model policy for a *mandatory* packaging program
- For several years, CalRecycle has been engaging the packaging industry in discussion of *voluntarily* agreeing to end-of-life management solutions and financing for packaging waste
 - Change of course comes after what CalRecycle describes as “inadequate” industry response
- The model (planned to be completed in December 2017) would serve as a tool to policy makers
 - Might include strategies such as EPR, minimum recycled content requirements for packaging, material bans, or a landfill ban on recyclable materials
- The process of developing the model will include outreach to industry and public participation

California Model Packaging Program

- CalRecycle has announced that its first public Packaging Reform Workshop will be held on March 22nd at its headquarters in Sacramento, CA
- Purpose is to generate discussion and input from stakeholders about their most important considerations
- The meeting will consist of a morning and an afternoon panel
 - Panelists will include: waste haulers, reproprocessors, local government, brandowners/retailers, NGOs, and other experts in the field of packaging and waste management
- Discussion and audience participation will be facilitated by Shannon Davis of EPA Region 9
- CalRecycle plans to release a complete agenda soon

New York Packaging Bill

- Bill 1935, the Environmentally Sound Packaging Act, was introduced in New York on January 11
- After January 1, 2020, packagers would be prohibited from using any packaging that is not “environmentally sound”
- “Environmentally sound” packaging meets one of the following...
 - Reduced:
 - Reduced 15% by weight when compared to same packaging used 5 years earlier, or
 - Minimum efficiency ratio of 90% to 10% by weight
 - Reusable:
 - Designed for refill or reuse a minimum of 5 times within a manufacturer, distributor or retailer refill/reuse program
 - Recycled:
 - % of recycled content required to meet this standard to be defined by implementing regulations but must be 45% within 5 years after 2020
 - Recyclable: Made of material for which...
 - Municipal recycling programs exist and are accessible to 75% of NY state population, or
 - A statewide recycling rate of 50% has been achieved

New York Packaging Bill

- Packagers shall ensure that the words “*complies with New York state packaging law*” (or abbreviation) are marked on all environmentally sound packaging
- Exemptions for:
 - Packaging of food, drugs, cosmetics, medical food, medical devices
 - Packaging of products in a concentrate form
 - Packaging for products destined for export from the state
- Implementing regulations would be required to be adopted by 2018

Indiana Packaging Bill

- Bill 326 was introduced in Indiana on January 9
- After June 30, 2019, in order to sell products resulting in packaging and printed paper waste within the state, producers would need to...
- Register with Indiana's Department of Environmental Management
- Submit, either individually or jointly, a producer recycling program plan (under which producers provide for or finance the recycling of packaging and printed paper) to the DEM for approval
- Participate either individually or jointly in a DEM-approved producer recycling program plan

Indiana Packaging Bill

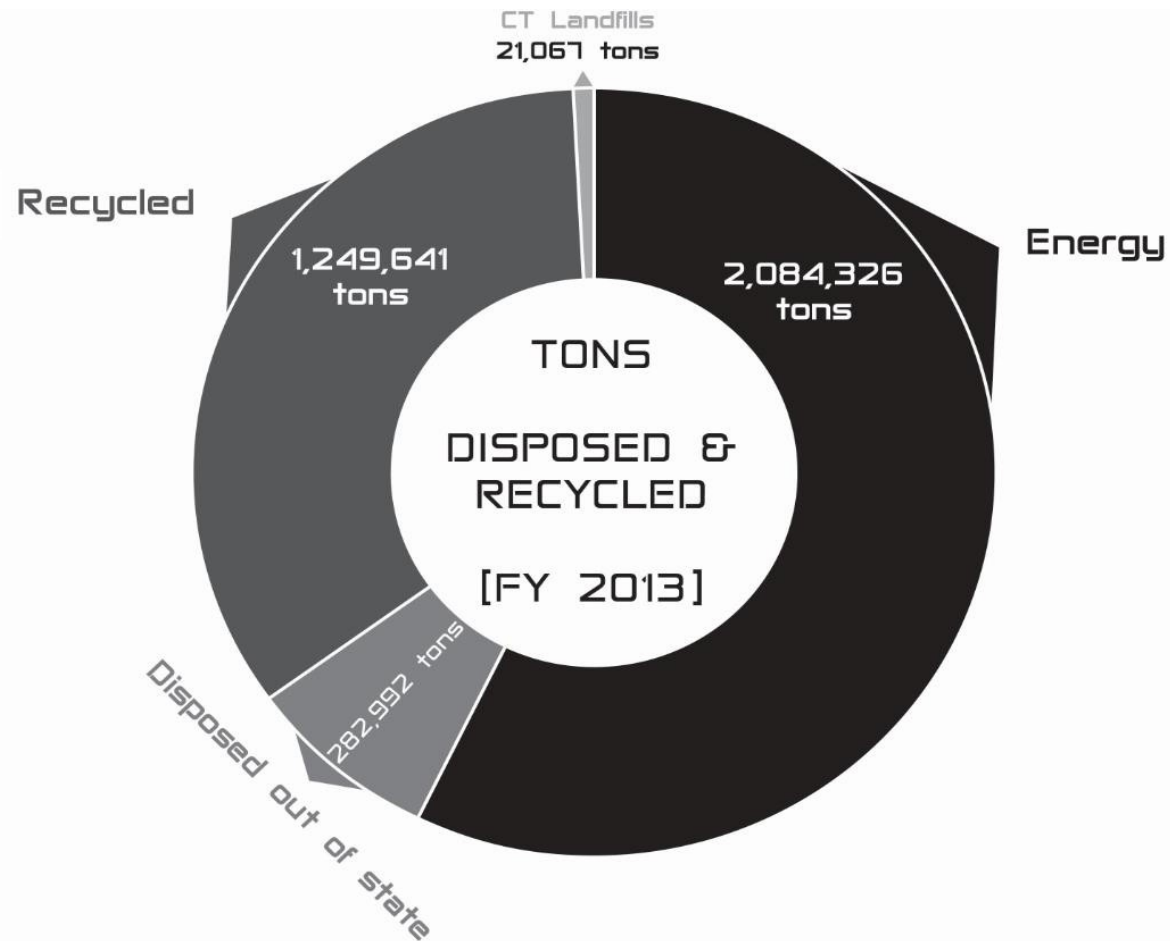
- By July 1, 2023, producers shall achieve an annual recycling rate of 50% by weight for all household packaging and printed paper sold into Indiana. By July 1, 2026, the recycling rate shall be 60%
- Exemptions for:
 - Producers of packaging or printed paper with gross sales in Indiana of less than \$250,000 per year
 - Producers of packaging or printed paper with gross sales in Indiana of at least \$250,000 but less than \$500,000 shall pay an annual fee to a producer recycling organization of not more than \$750 but are not required to pay any other fees or to comply with these regulations in any other way

State of Waste Management in CT

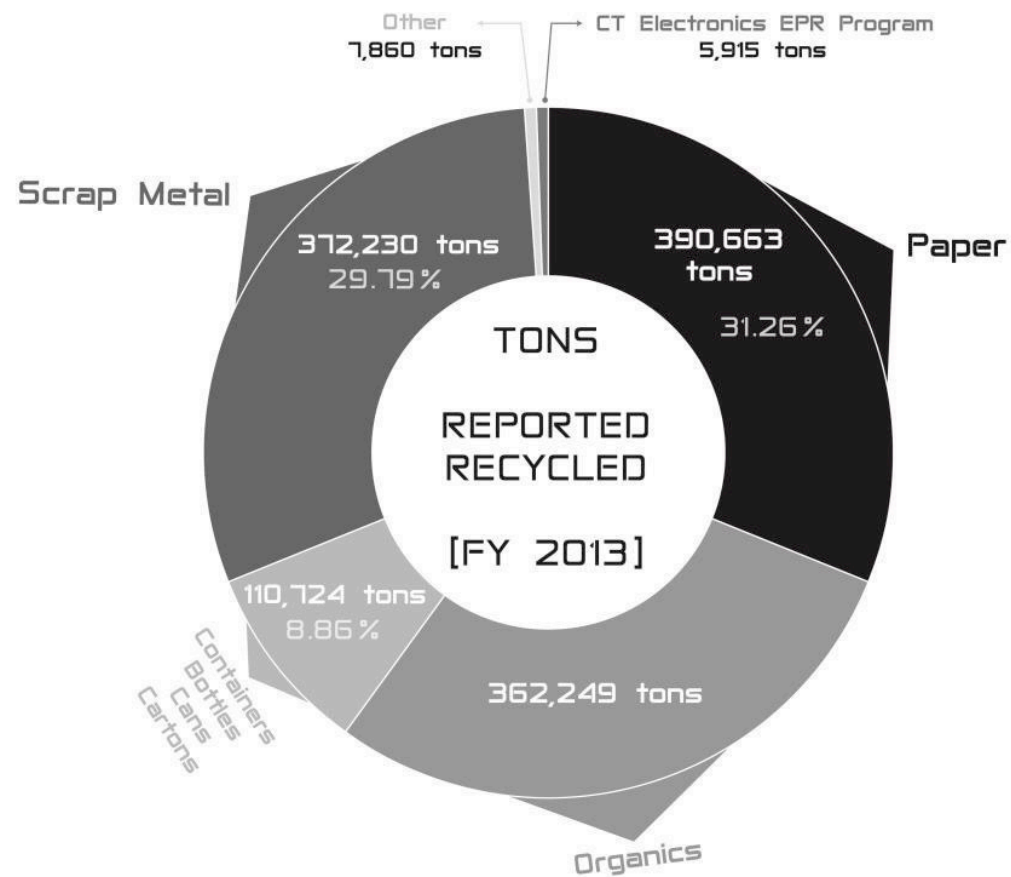
Disposal and Recycling Statistics



CT MSW Destinations 2013

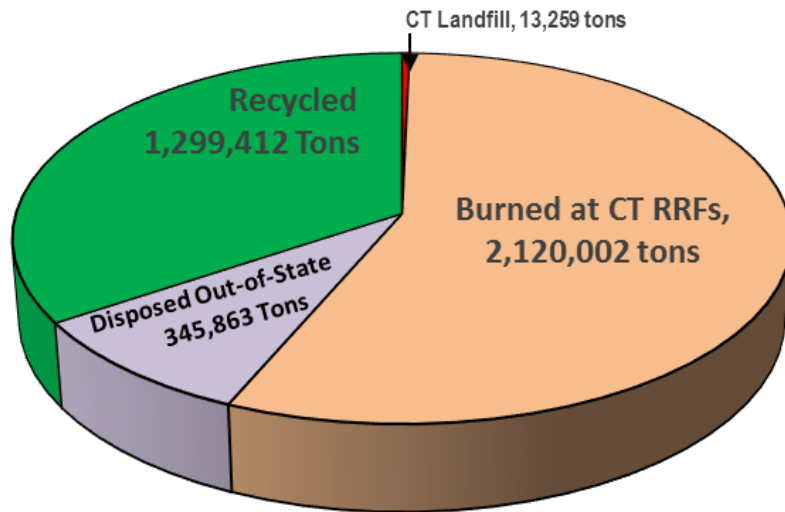


Tons MSW Reported Recycled FY2013

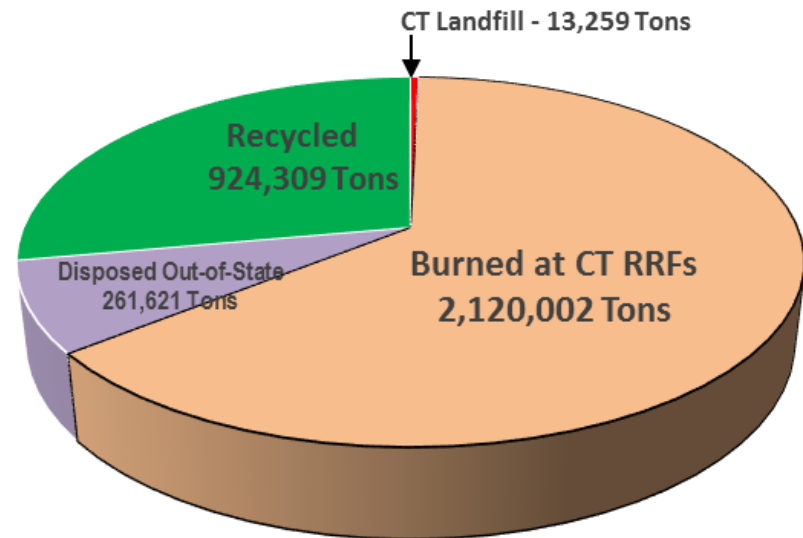


Preliminary 2014 Data

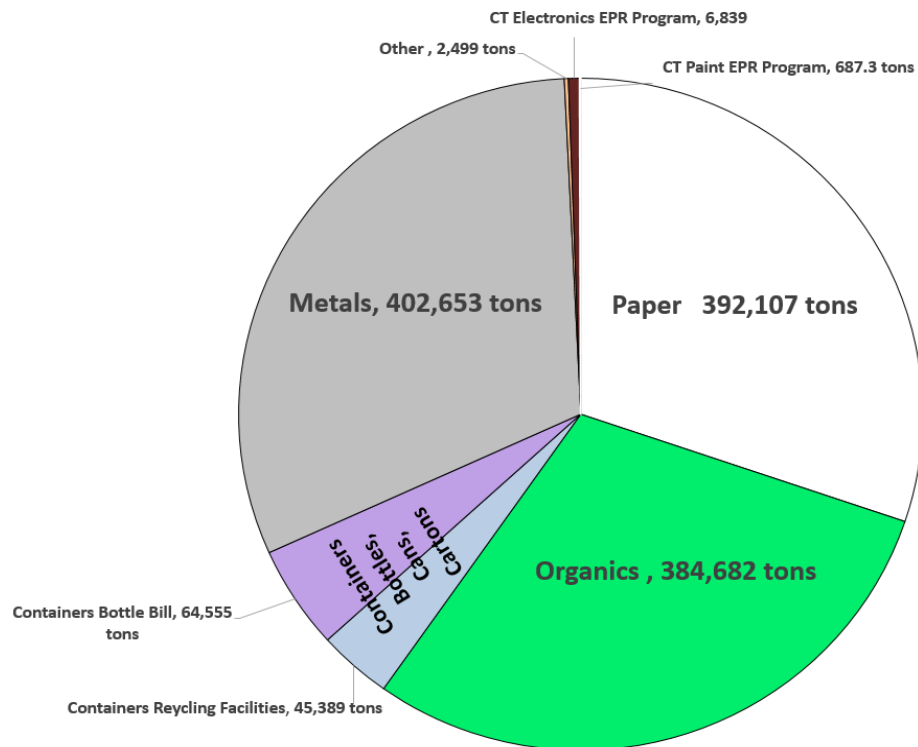
Tons CT MSW Disposed & Recycled FY2014 *(with more complete scrap metal data)*



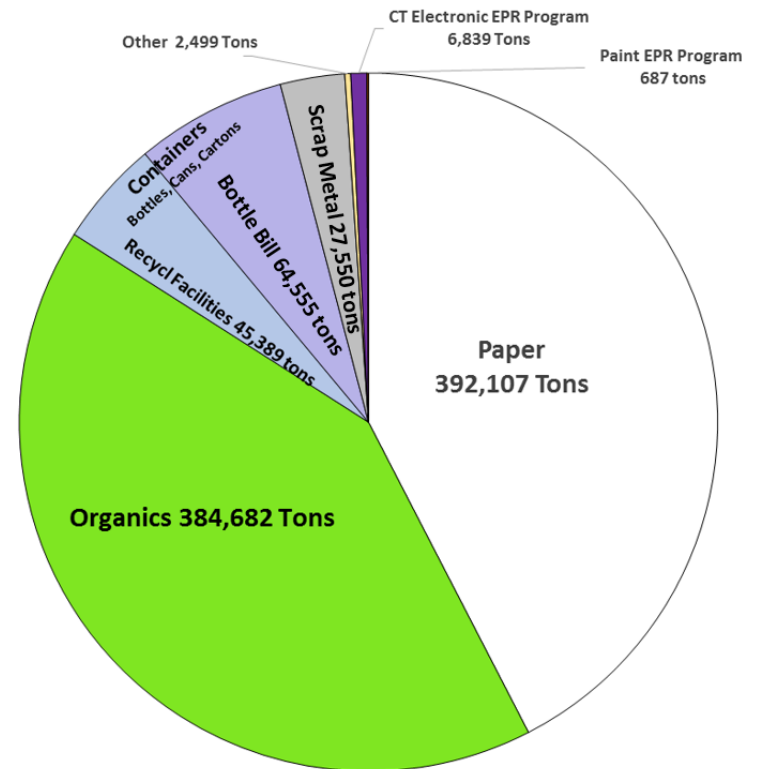
Tons CT MSW Disposed & Recycled FY2014 *(with limited scrap metal recycling data)*



FY2014 Summary MSW Recycled *with* Additional Scrap Metal Data



FY2014 Summary MSW Recycled *without* Additional Scrap Metal Data



CT Current Deposit System

- 56% redemption rate (all containers)
- \$39.5 million in escheats (from non-redemption)
- 74% redemption rate for glass

Source: CRI, 2015; CT DRS Escheats Data, 2015;
CT Deposit System Report, 2015

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Packaging Design

Policy Options



Packaging Design: Policy Options

- Source Reduction
 - packaging weight reduction
 - product concentration
- Reuse/Refill
- Recycled Content
- Recyclability

Packaging Design: EU Packaging Directive

- Mandates that all packaging sold in Europe meet a set of “Essential Requirements” related to:
 - source reduction (mandatory)
 - recovery (must meet at least one)
 - recyclability, organic recovery, energy recovery
 - heavy metals in packaging (mandatory)
 - reduction of other hazardous substances (mandatory)
 - reuse (optional)

Packaging Design: Empty Space & Layer Regulation

- South Korea
 - “Ordinance of the Standards for Methods and Materials, Etc. of Product Packaging” sets limits on the amount of empty space and the number of layers that consumer product packaging can have
- Taiwan
 - Empty space and layer limits for gift boxes of pastries, cosmetics, alcoholic products, and computer program disks went into effect July 1, 2006
- China
 - China Excessive Packaging - Food and Cosmetics regulation has mandatory requirements for empty space ratio, layers, and packaging cost for all food and cosmetics products as of April 1, 2010
 - packaging cost can't exceed 20% of the cost of the product

Source: EPI, 2015

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Packaging Design: Recycled Content

California's Rigid Plastic Packaging Container (RPPC) Program mandates product manufacturers to meet one of the following compliance options:

- 25% post-consumer content
- Reusable (5x)
- Refillable (5x)
- Achieve a 45% recycling rate (by resin type)
- Source reduction
 - Weight reduction by 10%
 - Increase product concentration by 10%
 - Combine weight reduction & increased concentration
 - Weigh 10% less when compared to similar products
- Allows corporate averaging among product lines
- Walmart uses this as criteria in its Sustainability Index

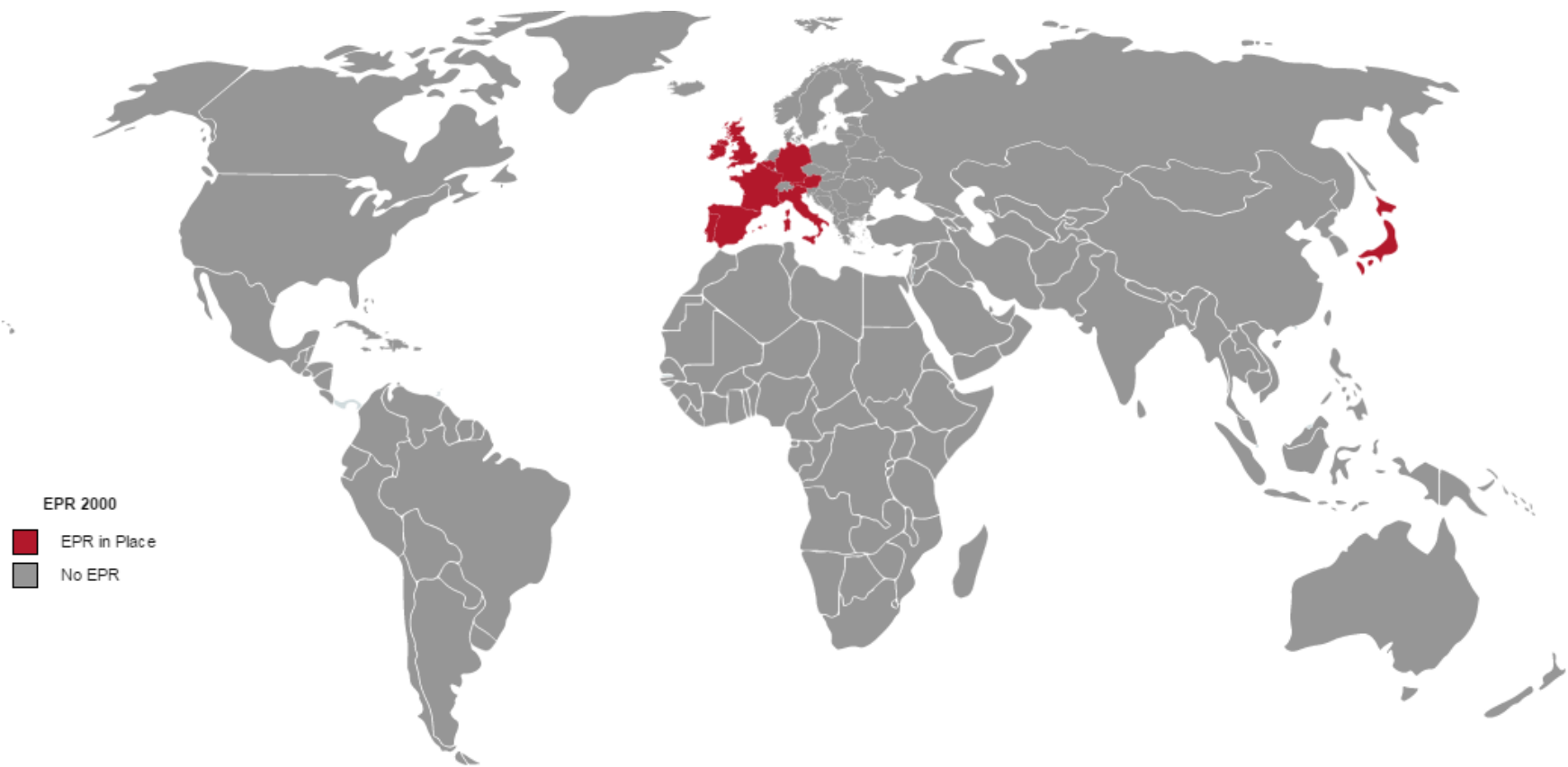
Packaging EPR

Examples from Current Programs



Extended Producer Responsibility: A complicated reality

Packaging EPR in 2000

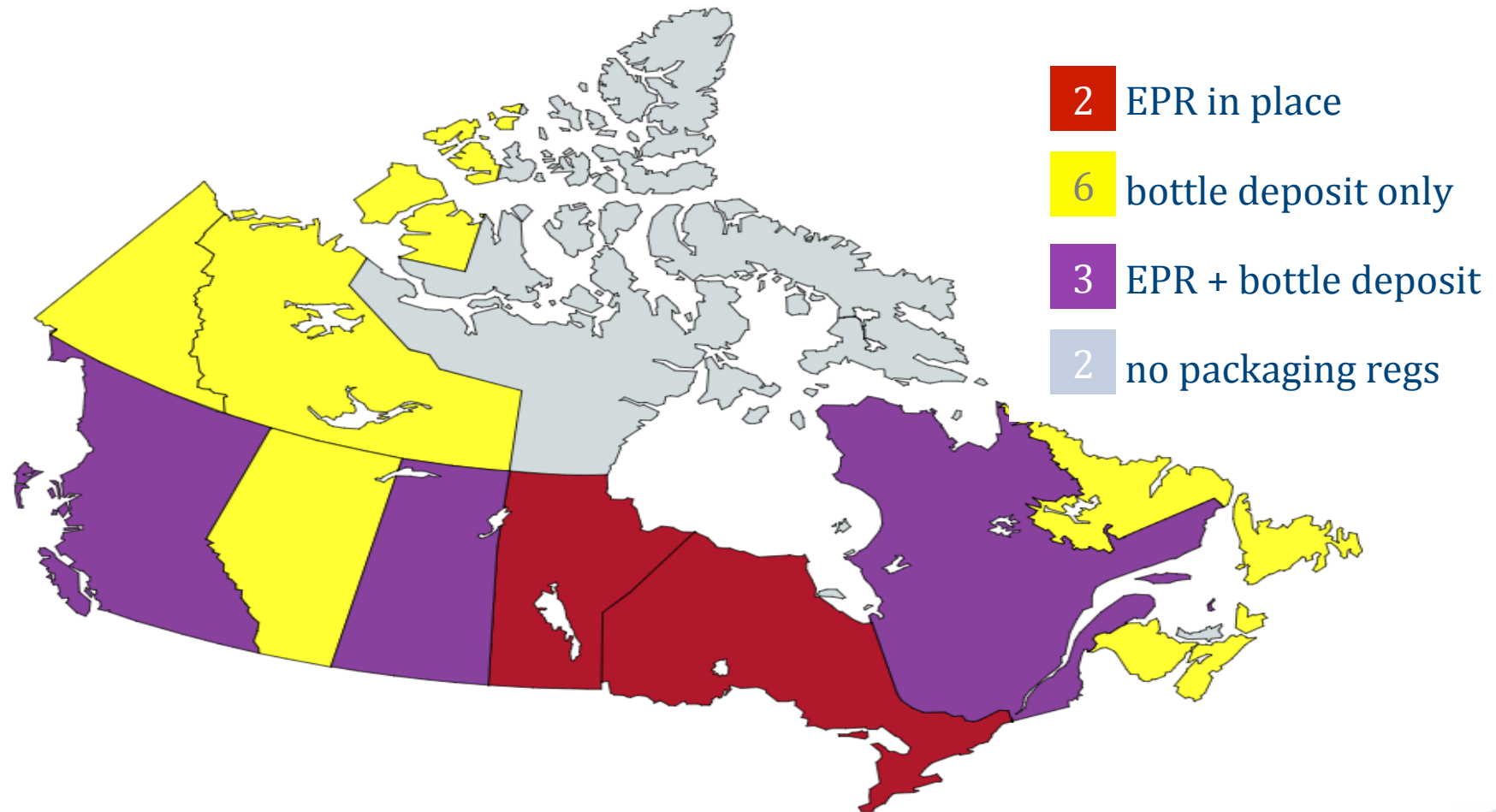


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Packaging EPR in 2016



Canadian Packaging Regulations in 2016



Examples of Existing EPR programs

Funding Schemes

Jurisdiction	Producer funding	Government funding
Ontario	50% (going to 100%)	50%
Saskatchewan	75%	25%
Manitoba	80%	20%
Québec	100%	0%
British Columbia	100%	0%



Source: PSI Summary Report, 2014

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Packaging Design/EPR

PET Example

- **France** one PRO charges lower fees on clear or light blue PET bottles
- **Belgium** one PRO charges less for PET bottles (colorless, blue and green only) and HDPE bottles, lowering its rates for 2013 (2012 sales) by 21% for these materials
- **Ontario** one PRO charges less for HDPE bottles and jugs and PET bottles

Jurisdiction	clear/blue PET fee (USD)		colored PET fee (USD)
France	\$0.0082		\$0.009 (plus unit fee) 
Belgium	\$0.0038		\$0.009
Ontario, Canada	\$0.0037		\$0.009

Source: EPI, 2015

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Disruptor Materials & Eco-Design

Incentives in France

- Packaging that presents problems for recycling stream incur additional fees
 - Glass packaging with ceramic or porcelain cap +50% Fee
 - plastic PET bottles containing aluminum (labels, plugs, caps, inks), using PVC sleeves, or silicone +50% fee
 - packaging paper and cardboard reinforced with polyester +50% Fee
 - non-recoverable packaging or packing with sorting instructions but no recycling stream (stoneware, PVC and PLA bottles) +100% fee
- Packaging that is eco-designed receive discounts
 - 8% discount for the use of on-pack labeling
 - 8% discount for source reduction



Source: EPI, 2015

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Material Fee Examples



Canadian Province Fees for 2015 Sales	PET Bottle	Glass Bottle	Paper + Plastic + Multilayer Combo	Plastic Pouch
Ontario	\$0.00529	\$0.00693	\$0.00472	\$0.00590
Quebec	\$0.00914	\$0.03376	\$0.00617	\$0.00880
British Columbia	\$0.01754	\$0.02755	\$0.01246	\$0.01836
Average Fees	\$ 0.0106	\$ 0.0227	\$ 0.0077	\$ 0.01102

Per unit, in USD

Source: EPI, 2015.

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