# Addressing Packaging Waste in Connecticut

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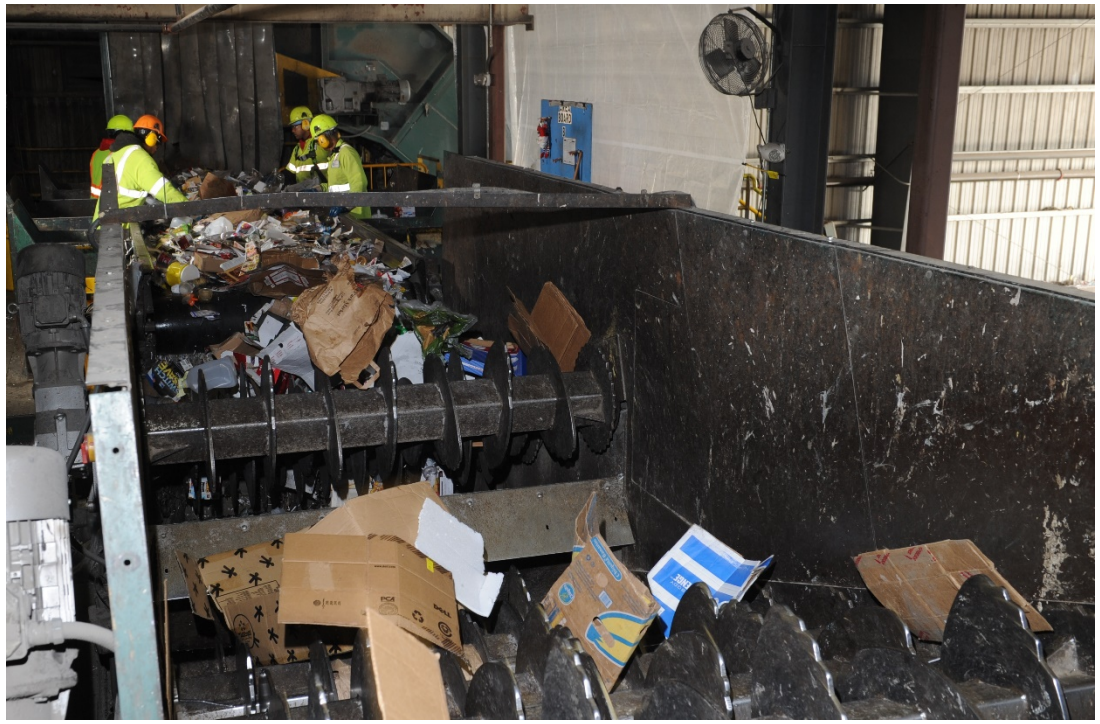
# Packaging-related Challenges in Connecticut

- Financial viability of municipal recycling
- Flexible packaging and the “evolving ton”
- Management of glass packaging
- Residential corrugated boxes
- Marine plastics

# Financial Challenge of Recycling

- Composition of recyclables changing ("evolving ton")
- Stricter standards in China for imports of recyclables
- Low price of oil & gas => inexpensive virgin plastics

In FY 2016, CT Solid Waste System generated no surplus revenues because of steep declines in commodity prices => no rebates to municipalities



Sort line at CT MIRA

# Flexible Packaging and the Evolving Ton


Source: S. Robinson, Waste Management, Inc.

Glass at California redemption center

Glass at California single stream MRF

Source: Susan Collins, *Resource Recycling Magazine*

# Glass in CT single-stream recycling (2015)

- 17.4% of residential recyclables
- 46% arrives broken at MRF
- < 40% of collected glass is recycled
- $20/ton for disposal

Source: 2016 CT Comprehensive Materials Mgmt Strategy

# Public and scientific concern about marine plastics is growing

# Increasing OCC in residential waste

Photo credit: Nick Rice

- High value
- Decline in commercial waste
- Difficult to fit in bins and cart
- Contamination from glass and other recyclables

# Options for Addressing Packaging Waste Challenges

- Status quo
- Voluntary programs
- EPR
- Bottle bill expansion

# PRO Packaging Fees, 2016

## Quebec

| Class of materials | Sub-class of materials | Materials | Annualized contributions $/kg |
|---|---|---|---|
| Printed matter | | • Newsprint inserts and circulars | 0.15101 |
| | | • Catalogues and publications | 0.22534 |
| | | • Magazines | 0.22534 |
| | | • Telephone books | 0.22534 |
| | | • Paper for general use | 0.22534 |
| | | • Other printed matter | |
| Containers and packaging | Paperboard | • Corrugated cardboard | 0.2647 |
| | | • Kraft paper shopping bags | 0.2647 |
| | | • Kraft paper packaging | 0.2647 |
| | | • Boxboard and other paper packaging | 0.16938 |
| | | • Gable-top containers | 0.16295 |
| | | • Paper laminants | 0.18199 |
| | | • Aseptic containers | 0.2848 |
| | Plastics | • PET bottles | 0.22027 |
| | | • HDPE bottles | 0.21741 |
| | | • Plastic laminants | 0.51781 |
| | | • Plastic HDPE and LDPE films | 0.51781 |
| | | • HDPE, LDPE plastic shopping bags and others | 0.51781 |
| | | • Expanded Polystyrene – food packaging | 0.68133 |
| | | • Expanded Polystyrene – cushioning packaging | 0.68133 |
| | | • Non expanded Polystyrene | 0.68133 |
| | | • PET containers | 0.26637 |
| | | • Polylactic acid (PLA) | 0.68133 |

## Spain

| MATERIAL | FEES 2014 |
|---|---|
| Steel | 0.085 Euro / KG |
| Aluminum | 0.102 Euro / KG |
| PET, HDPE (Rigid body or Reusable bag-UNE standard ) | 0.377 Euro / KG |
| Flexible HDPE, LDPE and other plastics | 0.472 Euro / KG |
| Cardboard for food and drinks | 0.323 Euro / KG |
| Paper and cardboard | 0.068 Euro / KG |
| Ceramic | 0.020 Euro / KG |
| Wood and cork | 0.021 Euro / KG |
| Other materials (*) | 0.472 Euro / KG |
| Glass | 0.0028 Euro / Unit + 0.0197 Euro / KG |

Source: EXPRO, 2016

# Eco-Emballages Modulated Packaging Fees, 2015

| | |
|---|---|
| Fee reduction of 10% | Paper/cardboard packaging with more than 50% of recycled content |
| Fee increase of 50% | Glass packaging with ceramic cap<br>Paper/cardboard Packaging for liquids with less than 50% of fibres<br>Reinforced paper/cardboard packaging<br>PET bottles that contain PVC or silicones with density more than 1 |
| Fee increase of 100% | Non-recyclable packaging materials, e.g. ceramics |
| Fee reduction of 8% | Packaging that carries specific sorting instructions for consumers<br>Applies to producers that organize additional prevention campaigns |

Source: OECD, 2016