Should You Support Extended Producer Responsibility for Packaging and Printed Paper?

Southeast Recycling Development Council Summit 2012
October 4, 2012

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What is Extended Producer Responsibility?

- Governmental mandate placed on producers
- Shifts responsibility for post-consumer materials from municipalities to producers
- Intended to provide design for the environment incentives
What this Presentation Addresses

• Data and conclusions are only presented for extended producer responsibility for packaging and printed paper.
• Whether extended producer responsibility may be appropriate for other products is not addressed by this presentation.
Claims Made in Support of Extended Producer Responsibility

**EPR Cost Shift**
- From tax/rate payer funding through government
- To individual consumer funding through industry

1. **Industry Incentive**
   - Design for the environment
   - Less use of packaging
   - Less landfills (land use)
   - Less CO₂ (climate change)
   - Less pollutant emissions
   - Sustainable resource use

2. **More Money**
   - Expanded infrastructure
   - Promotion & education
   - Increased recyclability
   - Less cost to recycle
   - Higher recycling rate

3. **Industry Incentive**
   - Improve program efficiency
   - Less cost to society
   - Consuming individual pays (fairness)

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Claim 1 – EPR Has Caused Packaging Changes – “Packaging in Europe has De-Coupled from GDP”

Relationship of Packaging Growth to Real GDP Growth
The Claim is Not Supported – Comparison of United States and European Data

Relationship of Packaging Growth to Real GDP Growth
Industry Perspectives on Packaging Design and Influence of Extended Producer Responsibility

- Packaging decisions are complex at consumer packaged goods companies
- Even without EPR companies already have a direct financial incentive to reduce packaging quantity to reduce cost and increase profits
- Corporate social responsibility commitments and programs are driving design for recycling and lifecycle assessment in package choices at companies
  - Builds brand loyalty
  - It is the right thing to do
- Consumer Goods Forum notes:
  - Products have a far greater utilization of resources and environmental impact than their packaging
  - Forcing packaging reduction to point of increased product loss is “likely to cause much greater adverse effects on the environment than the gains made through excessive packaging reduction”
## Industry Perspective: Who Decides What the “Best” Package is?

<table>
<thead>
<tr>
<th>Package Format</th>
<th>Packaging (g. per 100 g. of product)</th>
<th>Energy Consumed (MJ/11.5 oz.)</th>
<th>Greenhouse Gas (kg CO₂e/11.5 oz.)</th>
<th>U.S. Packaging Disposed (g./11.5 oz.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal can and plastic lid</td>
<td>29.6</td>
<td>4.2</td>
<td>0.3</td>
<td>35.6</td>
</tr>
<tr>
<td>Plastic canister and plastic lid</td>
<td>18.3</td>
<td>5.2</td>
<td>0.2</td>
<td>39.4</td>
</tr>
<tr>
<td>Flexible brick pack</td>
<td>3.5</td>
<td>1.1</td>
<td>&lt;0.1</td>
<td>11.3</td>
</tr>
</tbody>
</table>

**Recycling rate**

- Energy use
- Greenhouse gas
- Landfill volume
- Least resources

Claim 2 – EPR Provides More Funding Leading to Higher Recycling Rates and Achievement of Goals

- Comprehensive approach to municipal solid waste better achieves environmental goals
- Like bottle bills, EPR covers a smaller subset of municipal solid waste
  - Packaging only (Europe)
  - Residentially generated materials only (Canada)
  - Ontario’s residential packaging and printed paper EPR only applies to 11 percent of Ontario’s waste stream

- Comparison of municipal solid waste recycling rates

![Municipal Solid Waste Recycling Rate](chart)

- United States: 24%
- European Union - 27: 23%
- Canada: 18%

2008 data
Claim 3 – EPR Will Reduce Recycling Program Costs Though Enhanced Efficiency

- EPR as a governmental mandate increases bureaucratic and administrative costs
  - Governmental regulatory agency staff
  - Producer responsibility organization costs
  - Corporate costs – registration, documentation of compliance, participation in meetings
  - Varied from 2.4 to 4.6 percent, not including unknown corporate costs, from case study review of a few programs

- Additional tax on extended producer responsibility fees
  - State and local sales tax charged on extended producer responsibility fees embedded in products

- Cost and efficiency data from elsewhere may not apply to U.S. states
  - Population density
  - Covered materials/consumption differences
  - Social factors
  - Disposal tip fee levels
  - Control over recycling programs (industry or municipalities)
Ontario Cost Trends Under Extended Producer Responsibility

- Ontario funds efficiency initiatives and has tried to limit program cost increases
- Cost per metric tonne has continued to rise

Note: Cost figures are in Canadian dollars per metric tonne and are shown before recovered material revenue offsets.
# Residential Recycling Cost and Performance Comparison

<table>
<thead>
<tr>
<th>EPR Jurisdictions</th>
<th>Recovery rate</th>
<th>Recovery quantity (pounds/person)</th>
<th>Net Cost (US$/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>84%</td>
<td>282</td>
<td>Over $98</td>
</tr>
<tr>
<td>Manitoba, Canada</td>
<td>68%</td>
<td>130</td>
<td>Over $166</td>
</tr>
<tr>
<td>Ontario, Canada</td>
<td>65%</td>
<td>148</td>
<td>$202</td>
</tr>
<tr>
<td>Quebec, Canada</td>
<td>65%</td>
<td>147</td>
<td>not available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-EPR Jurisdiction</th>
<th>Recovery rate</th>
<th>Recovery quantity (pounds/person)</th>
<th>Net Cost (US$/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramsey County, Minnesota</td>
<td>not available</td>
<td>164</td>
<td>$156</td>
</tr>
</tbody>
</table>
Claim 4 – Consuming Individuals Pay for Their Own Consumption

• Pay-as-you-throw disposal pricing can achieve the same effect plus
  • Additionally covers all municipal solid waste
  • Additionally provides financial incentive to reduce waste and divert materials from disposal
• Consumers prefer whichever system will result in the least cost to them
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   - Promotion & education
Conclusions Regarding Claims for Extended Producer Responsibility

1. There is no indication that legislated EPR has caused packaging design changes

2. It is better to take a more comprehensive approach to recovery of resources from municipal solid waste
   - EPR is narrowly focused on packaging, often only from residences
   - United States municipal solid waste recycling rate is as good or better than Europe on average and Canada
   - A more comprehensive approach has higher impact on ultimate objectives
     - Less landfills
     - Less greenhouse gases
     - Less pollutant emissions
     - Sustainable resources utilization
Conclusions Regarding Claims for Extended Producer Responsibility

3. Case study examination questions whether costs and efficiency will improve under EPR
   - EPR adds administrative costs and inefficiency
   - Consumers will pay more sales tax when packaging EPR fees are added and embedded in product prices

4. Pay-as-you-throw disposal pricing is better than EPR if the goal is individuals paying for their consumption
   - More comprehensively applies to all discards
   - Direct financial incentive to reduce consumption and divert materials from disposal
Extended Producer Responsibility
Limitations

- Extended producer responsibility only covers designated products and materials often only from the residential generating sector

Source: SAIC estimate, derived from US EPA 2010 Municipal Solid Waste Data
Extended Producer Responsibility
Limitations

- Extended producer responsibility only covers designated products and materials
- Total system costs under EPR are not fully accounted for and are often not transparent
  - Corporate compliance costs are not documented or reported
  - Total costs under EPR are embedded in the price of products and not conveyed to consumers
  - Depending on the jurisdiction, consumers may be informed of the cost of municipal recycling programs
- Obligated producers are not experts in the management of discards
- The private sector does not have legal authority to implement many policy mechanisms that have been proven to result in increased recovery
  - Government must play a central role
Public Policy Approaches to Increase Recovery

- Public policy is a system of laws, regulatory measures, plans (including permits and approvals), and funding priorities
- Different policies available to state versus local governments
- Policies available to higher tier governments
  - Pay-as-you-throw disposal pricing
  - Disposal bans
  - Mandatory recycling (require materials or service levels)
  - Recycling program management
  - Integrated solid waste management plans
  - Diversion goals
  - Landfill surcharge/tax
  - Advanced recycling/disposal fees
  - Recycling infrastructure/program grants
  - Mandatory retail take-back
  - Building design standards
  - No direct landfilling of unprocessed waste
Public Policy Approaches to Increase Recovery

- Local governments can implement many of prior policies plus
  - Universal recycling enrollment
  - Disposal limits
  - Recycling rewards and rebates
  - Mandatory participation
  - Penalties
Ramsey County Minnesota Example

- Metropolitan Minneapolis-Saint Paul urban area
- Includes nineteen municipalities
- Policies supporting diversion include
  - Pay-as-you-throw disposal pricing
  - Universal recycling enrollment
  - Municipal program funding support, including state grant funding
  - Solid waste master plan with explicit policy direction
  - Extensive promotion, education, and outreach
  - Public spaces recycling
- Results
  - 47 percent of municipal solid waste is recycled
  - 55 percent municipal solid waste is diverted (includes composting/organics)
Summary

• Ultimate environmental objectives won’t be met if the focus is only on packaging and only from the residential sector
• The public always pays regardless of how consumer recycling programs are funded
  • Either utility bill or local taxes
  • Embedded in price of products (extended producer responsibility)
• Government has public policy tools that most impact recovery programs, which are not available to industry
• U.S. states and local governments can achieve high municipal solid waste diversion rates without extended producer responsibility
  • California – 65 percent
  • Ramsey County Minnesota – 55 percent
  • Minnesota – 43 percent
  • Numerous others
Questions?

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