

# CFL Recycling: Retail-based Program Options

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# Agenda

- In-store collection basics
- Discussion of cost recovery mechanisms
- Overview of program options
  - IKEA
  - Minnesota
  - Vermont
  - Oregon

# In-store Collection Basics

- All types of fluorescent lamps collected (various sizes of linear tubes, CFLs, circulars, U-tubes, HIDs, etc.)
- The four-foot linear fluorescent lamp is the most popular type of lamp returned (80% or more in the programs where data were available)
- Lamps accepted only at designated locations

# In-store Collection Basics

- Linear tubes are stored in special drums (generally for eight- and four-foot)
- Odd-shaped lamps are stored in covered plastic bins; frequently have plastic bags that can be sealed closed
- The recycling company retrieves the lamps from the store
  - Generally, the retailer schedules an appointment for lamp retrieval on an as-needed basis

# In-store Collection Basics

- The retailer uses “reverse distribution”
  - Lamps collected from stores as product deliveries are made
  - Stored in the warehouse (approved containers are placed on pallets and shrink-wrapped) for retrieval by the lamp recycler
  - Advantage of keeping most lamp storage in warehouse facilities instead of in prime retail space

# In-store Collection Basics

- Prepaid “mail-in” boxes
  - Service includes shipment of box containers, return freight, recycling and on-line tracking and reporting
  - Particularly attractive to regions with no recycling facilities or lamp haulers



# Costs Recovery Mechanisms

- Covering the cost is biggest challenge
- Internally financing isn't feasible

Lamp Type	Fee Range
CFLs:	\$0.35 - \$2.00 per lamp (averages ~\$0.50 - \$0.75 per lamp)
Linear Tubes:	\$0.05 - \$0.83 per linear foot
Circulars and U-Tubes:	\$0.35 - \$0.95 per lamp
HID, metal halide and mercury vapor	\$0.95 - \$2.17 per lamp

# Cost-recovery Mechanisms

<b>Option:</b>	<b>Free to customer</b>
<b>Description:</b>	<b>Retailer absorbs cost of recycling for customers as a business cost without increasing the purchase price of the lamp; sometimes covered by local government as well.</b>
<b>Advantages:</b>	<b>Is an effective public relations tactic and limits the time demands required on staff to implement some of the other fee options.</b>
<b>Disadvantages:</b>	<b>Little certainty of annual financial impact.</b>

# Cost-recovery Mechanisms

<b>Option:</b>	<b>Free to customer with purchase of fluorescent lamp</b>
<b>Description:</b>	<b>Retailer accepts fluorescent lamp for recycling with proof of purchase of a new lamp.</b>
<b>Advantages:</b>	<b>Helps ensure that foot traffic related to lamp disposal is resulting in new sales of energy-efficient lighting.</b>
<b>Disadvantages:</b>	<b>This process can be challenging to enforce from a customer service perspective (i.e., it loses much of the “convenience” appeal).</b>

# Cost-recovery Mechanisms

<b>Option:</b>	<b>End-of-life fee</b>
<b>Description:</b>	<p>Retailer passes its cost of disposal to the customer using a designated price per bulb:</p> <ul style="list-style-type: none"><li>• Straight pass through (i.e., if the recycler charges \$0.50 per lamp, the customer is charged that amount)</li><li>• Can factor in other costs, such a labor and cost of floor space</li></ul>
<b>Advantages:</b>	<p>Minimizes the financial impact on the retailer.</p>
<b>Disadvantages:</b>	<p>Loses some of the “convenience” appeal for the customers, and requires additional staff time to complete the transaction.</p>

# Cost-recovery Mechanisms

<b>Option:</b>	<b>Advanced recovery fee</b>
<b>Description:</b>	<b>A small fee (e.g., \$0.10 or \$0.15) is added to the cost of new lamps purchased by all customers and goes into the retailer's "recycling fund".</b>
<b>Advantages:</b>	<b>Helps to minimize the retailer's financial risk while maximizing the most convenient system for the customers (i.e., the customer simply drops off the lamp at the designated location). This option also minimizes time demands on staff.</b>
<b>Disadvantages:</b>	<b>The initial price of the fluorescent lamp increases, essentially making the incandescent lamp more attractive to price-conscious consumers.</b>

# Retail-based Solutions: IKEA

- 29 stores nationwide with another 6 scheduled to open soon
- Accepts all types of fluorescent lamps (but mainly focuses on CFLs)
- Free to customers
- Does not actively advertise service



# Retail-based Solutions: Minnesota

- State-wide program run by a lamp recycler and independent hardware retailers
- Longest-running program in the country
- Retailer charges fee to consumer
- Some utilities offer coupons to help cover some of the cost (paid through Conservation Improvement Program funds)

**BUDGETSMART** from  
**Xcel Energy**

**THIS COUPON IS GOOD FOR 50¢ OFF THE RECYCLING FEE FOR ONE FLUORESCENT, COMPACT FLUORESCENT OR HID LAMP.**

**50¢ OFF  
FLUORESCENT BULB RECYCLING**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ ZIP \_\_\_\_\_

Limit one coupon per bulb. Limit 10 coupons per customer per year. Coupon valid only when completed.  
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**NEED MORE COUPONS?**  
Visit [xcelenergy.com](http://xcelenergy.com) and select **Residential/Programs & Resources/Bulb Recycling**.

**RESTRICTIONS:**  
Coupon is valid only when redeemed at a participating retailer.  
Only Xcel Energy residential electric and small business electric customers living in Minnesota can redeem coupons.  
Coupon must be completed.  
Cash value 1/100¢.  
COUPON EXPIRES 12/31/07.

# Retail-based Solutions: Vermont

- Effort between independent hardware stores and Vermont Mercury Reduction and Education Campaign
- Currently free to consumers, funded through Supplemental Environmental Project (SEP) funds
  - Two-thirds of survey respondents indicated willingness to pay for convenience
- Uses reverse distribution system



Free lamp recycling

Ace stores have teamed up with the State of Vermont to offer free fluorescent lamp recycling (limit six per customer per visit).



If you would like more details, please drop by or call our store.



Vermont law prohibits disposal of mercury containing lamps in the trash.

[www.mercvt.org](http://www.mercvt.org)

# Retail-based Solutions: Oregon

- Small independent hardware stores in Eugene and Springfield offer free recycling of CFLs and tubes
  - Linear tubes represent more than 80% of lamps collected (mostly four-foot)
  - Estimated recycling rate of 6%
- Managed and paid for by the Lane County Solid Waste
- Electric utilities play active role in promoting



Questions?