Electronics Program

Options for Implementation

ENERGY STAR® Partner Meeting
October 2010
Overview

- Considerations for developing a new electronics program
- Midstream marketing
- Implementation techniques
- Strengths and challenges
- Xcel Energy program
- Tips for a successful program
Status of the Industry

- Increasing regulatory requirements and energy savings goals
- Declining energy savings for CFLs
- Growing demand related to plug load

Electronics program presents opportunity to address increasing issues for utilities and program sponsors
Techniques to Increase Market Share

- Rebates or incentives
  - Upstream - Manufacturer, distributor
  - Midstream - Retailer
  - Downstream - Customer
- Research and development projects
  - Demonstrations, research
- Education, awareness
  - ENERGY STAR
Midstream Marketing

- Nature of the electronics market points to a “midstream or upstream” strategy
  - Small energy savings per unit allows for small rebates
  - Small rebates in relation to price of the unit are ineffective

*More effective* to impact what is being sold than what is being bought
Midstream Characteristics

Motivate retailer to:

- Increase inventory of units that meet or exceed ENERGY STAR
- Train sales employees
- Improve merchandising
- Market ENERGY STAR
Midstream Characteristics

- Rebates typically not passed on to the customer
- If rebate is not passed to customer, the rebate cost needs to be treated as cost in the Total Resource Cost test for the cost benefit analysis*
- Need substantial savings to balance the costs and benefits, and make a cost effective program

Consider two options of program design:

1. “Lift” concept to shift market share to ENERGY STAR units
2. Traditional midstream rebates
"Lift" Concept

Maximum net energy savings from a product incentive program

• Obtain historic sales data
• Establish "baseline" sales figure
• Monitor movement of market share
• Provide financial incentive for sales above baseline
Strengths of “Lift” Concept

- Reduces costs, not paying for free riders
- Higher involvement/commitment by all parties
- Involves decisions about “attribution” at beginning of process
- May relegate EM&V to an “audit” function
Challenges of “Lift” Concept

- Recruiting retailers:
  - Requires retailers to accept some risk
  - Requires retailers to agree to baseline and provide pre- and post-data
- Long development lead time
- Rapidly changing technologies
Traditional Midstream Rebates

- Provide rebates per unit sold to retailer
- Determine sales goals
- Design the rebate criteria
- Establish agreement with retailers
- Monitor sales
- Pay rebates on qualifying units
Strengths of the Traditional Midstream Rebates

- Simple concept
- Attractive to retailer
- Reduces retailer barriers and risks
- High familiarity with concept
Challenges with Traditional Midstream Rebates

- Increased costs, pay for free riders
- Need to incorporate current market saturation levels per device
- Need to develop net-to-gross ratios
- EM&V more complicated than “Lift Concept”
Xcel Energy Pilot

- Xcel Energy launched an electronics program to run 2009 – 2010
- Combined appliances for additional potential:
  - ENERGY STAR TVs, clothes washer, dishwasher, refrigerator and ceiling fans
- 2009 Implemented “Lift” concept
- 2010 Implemented “Traditional Midstream Rebate” concept
2009 Pilot

- Implemented “Lift” Concept
- Recruited only one retailer
- Provided minimal savings
- Program development time extensive – 1 year
- Rapidly changing market made rebate criteria outdated very quickly
Goals for 2010 Pilot

- More cost effective program
- Offer more energy savings
- Attract more retailers
- Reduce barriers for retail participation
Modifications for 2010 Program

- Used traditional midstream rebate model to reduce barriers for retailers and encourage more participation
- Increased budget to provide more options
- Adjusted assumptions to improve cost effectiveness
Adjustments to Assumptions

- Increased baseline and the rebate criteria to use higher ENERGY STAR criteria or CEE tiers
- Modified assumptions for TVs including size of unit, operating hours and lifetime
- Changed participation mix to reflect higher percentage of TVs
Adjustments to Assumptions

- Examined and updated incremental costs
- Developed net-to-gross assumptions. Decreased rebate amounts to match the market rate
- Increased overall participation
2010 Participating Retailers

Signed Agreements

◆ Best Buy (17 stores) – TVs and appliances
◆ Sears & K-Mart (39 stores) – TVs and appliances

In Progress

◆ Lowe’s (14 stores) – Appliances
◆ Walmart (40 stores) – TVs
◆ Ultimate Electronics – TVs
◆ Appliance Factory Outlet – Appliances
## Rebate Criteria

<table>
<thead>
<tr>
<th>Measure</th>
<th>NTG</th>
<th>Efficient Product</th>
<th>Incremental Cost</th>
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<tbody>
<tr>
<td>Television</td>
<td>74%</td>
<td>ENERGY STAR 4.1</td>
<td>$30.00</td>
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<tr>
<td>Television</td>
<td>95%</td>
<td>ENERGY STAR 5.1</td>
<td>$362.00</td>
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<tr>
<td>Clothes Washer</td>
<td>50%</td>
<td>CEE Tier 3</td>
<td>$200.00</td>
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<tr>
<td>Dishwasher</td>
<td>78%</td>
<td>CEE Tier 1</td>
<td>$85.00</td>
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<tr>
<td>Refrigerator</td>
<td>65%</td>
<td>ENERGY STAR</td>
<td>$30.00</td>
</tr>
<tr>
<td>Room AC</td>
<td>80%</td>
<td>ENERGY STAR</td>
<td>$30.00</td>
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# Rebate Amounts

<table>
<thead>
<tr>
<th>Measure</th>
<th>Rebate Amount</th>
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<tbody>
<tr>
<td>TV ES. 4.1</td>
<td>$20</td>
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<tr>
<td>TV ES. 5.1</td>
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<tr>
<td>Clothes Washer</td>
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<td>Dishwasher</td>
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<tr>
<td>Refrigerator</td>
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</tr>
<tr>
<td>Room AC</td>
<td>$20</td>
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Retailer Requirements

- Document Plan - Requires retailer to write a plan
- Employee Sales Training – Educate sales people which units are eligible and the energy efficiency benefits
- Point of Purchase Displays – On each eligible unit
- Merchandising – Strategic grouping and showcasing of energy efficient units
- Marketing – Local marketing and/or advertising
- Sales Data – Submit detailed sales data on a timely basis
Program Management

WI Energy Conservatory Corporation (WECC)
- Retailers
- Contractors
- Negotiations
- Daily Operations

Castanea Labs
- Rebate Validation Process
- Keep database of eligible models, SKU numbers and zip code area

Xcel Energy
- Goals
- Budgets
- Strategy
- Marketing
- Work done by WECC
## Estimated Achievements

<table>
<thead>
<tr>
<th></th>
<th>2009 Achievements</th>
<th>2010 Estimated Achievements*</th>
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<tbody>
<tr>
<td><strong>Number of Units</strong></td>
<td>3,803</td>
<td>40,000</td>
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<tr>
<td><strong>Savings kWh</strong></td>
<td>210,707</td>
<td>7,500,000</td>
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<td><strong>$ Spent</strong></td>
<td>$233,975</td>
<td>$1,845,714</td>
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<td><strong>TRC</strong></td>
<td>.93</td>
<td>1.12</td>
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Marketing Materials
Creating a Successful Program

- Reduce barriers to participation for retailers
- Research equipment sizes, incremental costs, lifetime, operating hours
- Try different assumptions in the cost benefit modeling
- Higher energy saving options may not be the most cost effective because of incremental costs
- Develop rebate criteria that can be easily modified due to rapidly changing market
Creating a Successful Program

- Talk to the right people (retailers, manufacturers)
- Get help in analyzing model numbers and tracking data, paying rebates
- Provide marketing assistance – coop advertising
- Keep the program fresh, provide new motivations
- Allow extra time
- Be flexible
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