

# Electronics Program *Options for Implementation*



**ENERGY STAR® Partner Meeting**  
**October 2010**

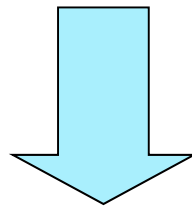
# Overview

- 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

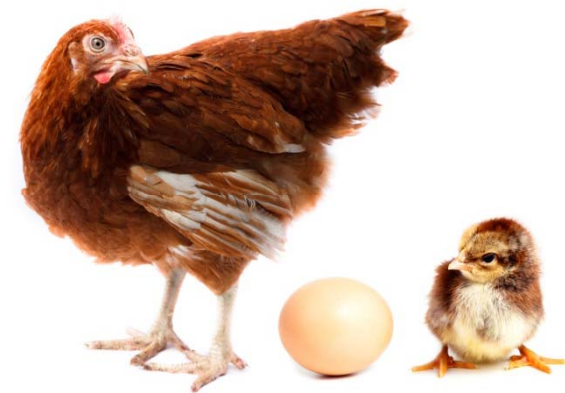
- **Rebates or incentives**
  - ◆ **Upstream - Manufacturer, distributor**
  - ◆ **Midstream - Retailer**
  - ◆ **Downstream - Customer**
- **Research and development projects**
  - ◆ **Demonstrations, research**
- **Education, awareness**
  - ◆ **ENERGY STAR**



# 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

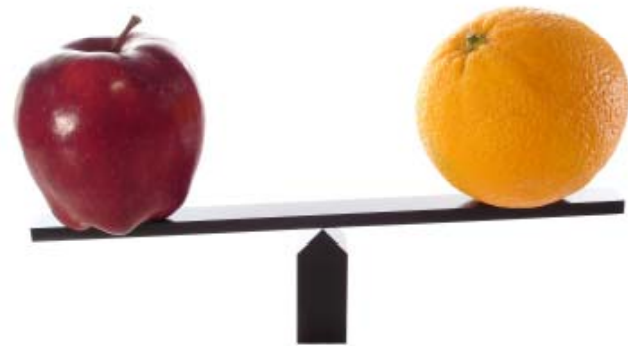
\*California Standard Practices Manual





# Program Design Options

- 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

Measure	NTG	Efficient Product	Incremental Cost
Television	74%	ENERGY STAR 4.1	\$30.00
Television	95%	ENERGY STAR 5.1	\$362.00
Clothes Washer	50%	CEE Tier 3	\$200.00
Dishwasher	78%	CEE Tier 1	\$85.00
Refrigerator	65%	ENERGY STAR	\$30.00
Room AC	80%	ENERGY STAR	\$30.00



## Rebate Amounts

Measure	Rebate Amount
TV ES. 4.1	\$20
TV ES. 5.1	\$25
Clothes Washer	\$25
Dishwasher	\$20
Refrigerator	\$20
Room AC	\$20

# 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

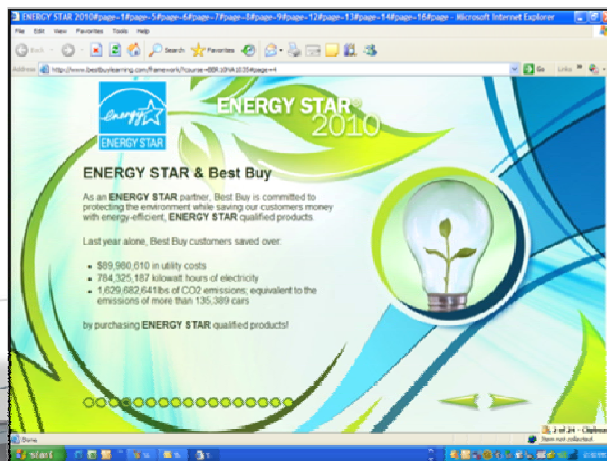
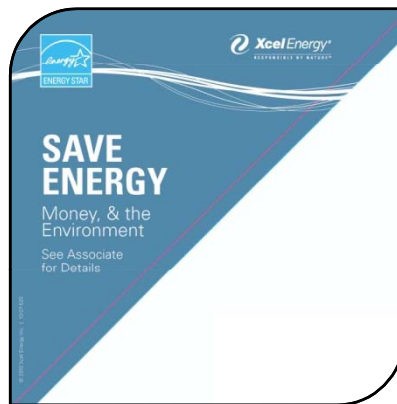
Marketing

Work done by  
WECC

## Estimated Achievements

	<b>2009 Achievements</b>	<b>2010 Estimated Achievements*</b>
<b>Number of Units</b>	3,803	40,000
<b>Savings kWh</b>	210,707	7,500,000
<b>\$ Spent</b>	\$233,975	\$1,845,714
<b>TRC</b>	.93	1.12

# 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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