Scaling Behavior-Based Programs:
The Tradeoffs of Opt-In vs. Opt-Out Design

Behavior Energy Climate Change (BECC) Conference 2011
Efficiency 2.0 Overview

- Our Personal Energy Efficiency Rewards (PEER) program generates verified energy savings through consumer engagement.

- Direct and community marketing to drive utility customers online.

- Personalized savings recommendations and information to drive energy reductions.

- Regular feedback and reward points to drive continuous engagement.
### Opt-out versus opt-in approaches

<table>
<thead>
<tr>
<th>Opt-out approach</th>
<th>Opt-in approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households receive unsolicited</td>
<td>Households take affirmative action to join program (e.g. give email address)</td>
</tr>
<tr>
<td>“passive” treatments (e.g. mailers)</td>
<td></td>
</tr>
<tr>
<td>Broad program reach, shallow savings (~2%)</td>
<td>Narrow program reach, deep savings (~6%)</td>
</tr>
<tr>
<td>High continuing costs to maintain savings</td>
<td>Upfront cost to acquire, low continuing cost</td>
</tr>
</tbody>
</table>
Challenge is savings vs. scale

Savings

Scale

Opt-in

Opt-out
Opt-out challenge: cost-effectiveness linearly decreases

Number of mailers vs. cost-effectiveness ($ / MWh saved)

* Assumes 1.5% opt-out savings with 4 mailers, $1 / mailer, 0.25% more savings for every 2 mailers, 6% opt-in savings, and 10 MWh usage / yr.
**Opt-in challenge: requires reasonable scale**

Total savings (MWh / yr) versus opt-in conversion

* Assumes 2% opt-out savings, 6% opt-in savings, and 10 MWh usage / yr.
Hybrid challenge: mail can optimize opt-out or opt-in

Passive savings versus direct mail response rate

* Assumes 2% opt-out savings, 6% opt-in savings, and 10 MWh usage / yr.
Optimized for opt-in

Western Mass Saves is a FREE program that gives you personalized recommendations to save on your electric bill and rewards you based on how much you save.

YOU CAN GET REWARDS LIKE THESE IMMEDIATELY. YOU’LL GET 100 REWARDS POINTS
Just for signing up at www.WesternMass Saves.com
YOU’LL NEED YOUR WMECO ACCOUNT NUMBER TO SIGN UP: 54818103055

PLUS, IF YOU SIGN UP NOW, YOU’LL GET MORE REWARDS POINTS
If you had signed up for Western Mass Saves when it launched in November, and followed the personalized electric savings recommendations,
YOU COULD HAVE SAVED ENOUGH ENERGY TO EARN 748 REWARDS POINTS

Sign up at WesternMassSaves.com by April 30th and we’ll give you these rewards points anyway.
Act now to claim your rewards points and find more ways to earn points by savings!

You can stay receiving these mailings by calling (877) 702-2582 and entering your account number: 54818102044.
All savings recommendations are estimates.

Follow these personalized recommendations to earn 1,551 rewards points:

1. Use more natural lighting.
   Save up to $20/year
   Keep your blinds open when possible and remember to turn off lights when you leave the room.
   384 Rewrarks are doing this. Free
   Learn more or shop for this product at www.westernmasssaves.com/naturallighting

2. Dry your clothes with a drying rack or clothesline.
   Save up to $30/year
   You can buy a drying rack for less than $35 at your local home merchandise store.
   279 Rewards are doing this. Pays for itself in 7 months
   Learn more or shop for this product at www.westernmasssaves.com/dryingrack

3. Use the cold setting on your washing machine.
   Save up to $83/year
   Washing your clothes in cold water cleans them almost as well as hot water without the bump in your energy bill.
   120 Rewards are doing this. Free
   Learn more or shop for this product at www.westernmasssaves.com/ColdWash

Community Update:
When you sign up, you energy saving efforts impact your community.

Easthampton & Westhampton are currently in 2nd place out of 59 Western Mass communities!

How Western Mass Saves Works:
1. We connect to your WMECO account to track your electric use — all you need to provide is your account number. 54818103055.
2. We send you email messages when a new bill arrives to track your progress and give you rewards points for your savings.
3. You act on personalized recommendations to lower your electric bill.
4. You use your points for great discounts while helping the environment, your community, and your wallet.

Go to WesternMassSaves.com today!
Sign up with your WMECO account number: 54818103055

Community Update:
When you sign up, your energy saving efforts impact your community.

Easthampton & Westhampton are currently in 2nd place out of 59 Western Mass communities!
If successful, opt-in strategy provides most value

<table>
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<tr>
<th>Metric</th>
<th>Opt-out</th>
<th>Opt-in</th>
<th>Hybrid Opt-Out / Opt-in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings / Customer (%)</td>
<td>2.5%</td>
<td>6%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Net LTV per Customer</td>
<td>$15</td>
<td>$55</td>
<td>$20</td>
</tr>
<tr>
<td>$ / MWh Saved</td>
<td>$50</td>
<td>$35</td>
<td>$40</td>
</tr>
</tbody>
</table>

* Assumes 9.2 average annual MWh / household, LTV over 5 years, value of $40 / MWh, 7% discount rate, 30% conversion from targeted population to opt-in.
Engagement software has low ongoing costs

Ways to Save

- **My actions (5)**
  - **Use blinds during the summer days**
    - I do it
    - Estimated Yearly Savings: $30
  - **Reduce air leakage**
    - I did it
    - Estimated Yearly Savings: $377
  - **Turn off AC before leaving**
    - I do it
    - Estimated Yearly Savings: $22
  - **Use a ceiling fan, not the AC**
    - I do it
    - Estimated Yearly Savings: $27

Categories:
- Most popular
- **Summer essentials**
- No cost
- Low cost
- Home investment
- All
Email enables regular engagement at no cost
Rewards provide highly leveraged incentives

### My Points

| 658 | My points balance |

1 bulb for 1 day = 1 kWh = 2 points

We give you points for using less energy than you did last year. For every kWh you save we give you 2 rewards points.

Points are issued when you are billed by WMECO. If you used the same or more electricity than last year, we do not issue points.

<table>
<thead>
<tr>
<th>Reward</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>15% off at Perfume.com</td>
<td>35 points</td>
</tr>
<tr>
<td>15% off $75 or more at Footlocker</td>
<td>75 points</td>
</tr>
<tr>
<td>15% off any order at Puritan's Pride</td>
<td>75 points</td>
</tr>
<tr>
<td>10% off non-Rx order + 5% in drugstore dollars</td>
<td>75 points</td>
</tr>
<tr>
<td>$10 off $50 or more online at Omaha Steaks</td>
<td>100 points</td>
</tr>
</tbody>
</table>
Opt-in requires evaluations that account for self-selection

“Rolling Control” Design

Pre-Program Year  Initial Recruitment  Recruitment Wave

Y₀  Participation  Y₁

Participant A  Participation

Control  Participant B
Key questions

- Are there characteristics of households that respond best to opt-out versus opt-in treatments?

- What, if any, effects occur from “clustering” in opt-out & opt-in programs?

- Is it possible and/or desirable to target households that are more likely to participate in an opt-in program?
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