2015 ENERGY STAR Flip Your Fridge – An early refrigerator replacement and recycling promotion

Thursday, December 18, 2014
12:00 – 1:30pm Eastern Standard Time
There are ~19.5 million refrigerators throughout the U.S. that are 15 years or older, and still in use. They use twice as much energy as a new ENERGY STAR certified refrigerator.

They are made up of a mix of primary refrigerators (12.4M) and secondary refrigerators (7.1M)

On September 15, the V5.0 Refrigerator specification went in effect — this is an opportunity to spotlight ENERGY STAR as innovation in the marketplace (e.g., connected functionality)

Industry is reinvesting in the refrigeration product category to reflect the increase in kitchen upgrades for sleek, connected, and stylish refrigerators
Who and Where are the 19.5 Million?

- 74% are in single family detached homes
- 70% are in households of 1 or 2 people
- 80% are owners of their homes
- Evenly distributed geographically
  - NE: 21%; MW: 27%; S: 29%; W: 22%
- 63% in households with income <$60,000
- Skews towards empty nesters and younger new home buyers
Existing ENERGY STAR Refrigerator and Recycling Incentives

Incentives for New ENERGYSTAR Refrigerators
Incentives for Recycling Refrigerators
Incentives for Both New Purchases and Recycling

Total Program Numbers Listed in Parentheses (# of New and/or # of Recycling Incentives)
Existing RAD Recycling Infrastructure

Appliance Recycling Facilities Servicing RAD Partners

34 facilities in 23 states

Map courtesy of EPA's Responsible Appliance Disposal
I just learned my utility will give me a rebate for my old refrigerator and properly recycle it! Maybe I can take another day off work to make that happen…Ken and I could use some extra fridge space for our annual hoola hoop party though…
**WHAT:** A nationally coordinated, targeted promotion to prompt early replacement and increase sales of ENERGY STAR refrigerators, while encouraging proper recycling

**GOALS:**

- Increase demand and sales of ENERGY STAR certified refrigerators while encouraging proper recycling

- Generate national momentum/coordination among utilities, retailers, and manufacturers in promotion of ENERGY STAR refrigerators and proper recycling—reducing the number of older units that will remain in service

- Capture the attention of key consumer groups across the country around the benefits of replacing their old refrigerator with a new ENERGY STAR certified refrigerator

**WHEN:** Earth Day thru Memorial Day 2015
Flip Your Fridge Campaign

3-Layer Strategic Approach

- **Channel Partners**
  - Select very specific media channels that best reach target audiences of new home buyers and empty nesters
    - Paid niche channels
    - Partner channels, e.g. retailers
  - Work with **channel partners** to deploy outreach tactics that effectively engage audiences and incent replacement

- **National Awareness-Building Overlay**
  - Establish a BIG media partnership promotion that generates broad appeal and builds national momentum around early replacement among all audiences

- **Leverage owned and shared media to support strategy**
  - Find products, rebates and other offers at energystar.gov
  - Engage partners for mutual benefit
**Owner IQ**

**Description:** Owner IQ is one of the largest networks of active shoppers with access to more than 126 million unique consumers. Online display ads are served to select shoppers across multiple devices and sites throughout their path to purchase. Owner IQ is a programmatic buying platform.

**Rationale:** Connect with consumers who are currently shopping for appliances and home goods

**Recommended Targeting:**
- Refrigerator shoppers (includes those visiting customer support and product support pages)
- All appliance shoppers
- Wedding/Engagement
- Movers/New Homeowners
- Empty Nesters

**Estimated impressions:** 13.6 million

**Recommended Timing:** 4 weeks to coincide or build upon the Ellen contest

**Ad Sizes:** 160x600, 300x250, 728x90, 120x600, 300x600, 180x150, 970x90, 336x280, 99x72+Text; Mobile: (jpg, gif or png) 300x250, 320x50, 728x90
AARP.org

**Description:** AARP is a nonprofit, nonpartisan organization with more than 37 million members that helps people 50 and older improve the quality of their lives. AARP.org has an estimated 6.6 million unique visitors per month.

**Rationale:** Connect with the Empty Nester middle income target

**Recommended Placements/Targeting:**
- Your Home page, 5 day goal post/takeover unit
- Home and Family Channel ROS
- Home and Family Channel embedded content
- Behavior targeting to appliance shoppers, new home buyers and appliance repair researchers
- Facebook Post on AARP’s Facebook page

**Estimated impressions:** 1.3 million

**Recommended Timing:** 4 weeks to coincide or build upon the Ellen contest
TheNest.com

Description: The Nest is a website for young and newly married couples with content on Real Estate, Money, Décor, Food, Love, Pets and Babies. TheNest.com has an estimated 2.5 million unique visitors per month. It is a sister site of The Knot and The Bump.

Rationale: Connect with new couples who are more likely to be appliance shoppers and new home buyers in a relevant, trendy environment

Recommended Placements:
- Run of Site
- Décor Channel
- e-Mail to 80,000 opt-in users

Estimated impressions: 1.0 million

Recommended Timing: 4 weeks to coincide or build upon the Ellen contest

Ad Sizes: 300x250, e-mail creative
Ellen Show Partnership

Kick-start a national conversation about early replacement/recycling, connect ENERGY STAR to engaged Ellen audience, and integrate a human interest/charity angle.

Partnership includes two on-air Ellen segments:

**Exclusive Ellen Earth Day Partner**
- Host an ENERGY STAR certified refrigerator giveaway on April 22 segment, with messaging about ENERGY STAR and national campaign
- On-air kick off of national online promotion to nominate friends and family to receive a new certified refrigerator (photos, text, video)
  - Ellen blog, e-newsletter, social media promotion

**Human Interest story**
- During “sweeps” in May, on-air “reveal” segment showing full kitchen makeover for viewer in need – ENERGY STAR certified appliances, lighting, etc. included
  - Drive to online promotion to see other winners

**Audience:** average of 14.6 million viewers per week during sweep
Flip Your Fridge Campaign – Partner Engagement and Call to Action!

- **Utility/Efficiency Program Ask:** Good, Better, Best
  - Let us know what you can do/what you need help with

- **Incentives:**
  - Promote ENERGY STAR rebate and recycling opportunities at retail
  - Link rebate and recycling incentives
  - Offer bonus incentives/promotions during time of promotion

- **Recycling:**
  - Work with retail partners and recycling program implementers to advance recycling at the time of new unit delivery

- **Consumer outreach and education:**
  - Promote Flip Your Fridge and related incentives to your customers
  - Use existing retail program channels to ensure information is available at time of sale
  - Promote contest through available channels

That was easy! I love my new ENERGY STAR refrigerator and I feel good about helping the environment!
Flip Your Fridge Campaign – Partner Engagement and Call to Action! (continued)

- **Retailers**
  - Utilize retailer-owned customer segmented (new home buyers, empty nesters) channels to promote offers
  - Utilize other channels, as available, to promote contest

- **Manufacturers**
  - Provide Ellen refrigerators for her audience on Earth Day segment
  - Provide prizing for contest on Memorial Day segment
  - Promote contest through available channels

- **Recyclers**
  - Establish working relationships with retailers and utilities to properly recycle
  - Build new plants as demand increases and prices reduce
Sample Consumer Call to Action messaging

- Now is the time to Flip Your Fridge! Replacing and properly recycling a 15-year old refrigerator with one that has earned the ENERGY STAR could save you $260 in utility costs over the first five years … and prevent about 10,000 pounds of greenhouse gas emissions.

- *Earth day specific:* This Earth Day, Flip Your Fridge! On average, a 15-year old refrigerator uses twice as much energy as a new ENERGY STAR refrigerator. Replacing and properly recycling a 15-year old refrigerator with an ENERGY STAR model can prevent about 10,000 pounds of greenhouse gas emissions.

- If all refrigerators 15 years or older in the United States were replaced with an ENERGY STAR certified refrigerator, Americans would save more than $1 billion and prevent 12 billion pounds of greenhouse gas emissions annually, equivalent to the emissions from more than 1 million vehicles or the annual electricity use of 800,000 homes.
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ENERGY STAR Certified Dryers

Thursday, December 18, 2014
12:00 – 1:30pm Eastern Standard Time
Key Criteria
ENERGY STAR Clothes Dryers, the Opportunity

- Since 1990, clothes washer energy use has dropped 70%, but dryers have not seen the same efficiency gains!
- Dryers are the largest energy-using appliances in the home
- There are 89 million clothes dryers in the U.S. (75% electric, 25% gas)
- If all dryers sold in the U.S. were ENERGY STAR:
  - Americans could save $1.5 billion in utility costs each year
  - Prevent greenhouse gas emissions equivalent to 2 million vehicles

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Energy Use in kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dishwasher</td>
<td>206</td>
</tr>
<tr>
<td>Clothes Washer</td>
<td>590</td>
</tr>
<tr>
<td>Clothes Dryer</td>
<td>769</td>
</tr>
<tr>
<td>Refrigerator</td>
<td>596</td>
</tr>
</tbody>
</table>

Energy used is based on unit energy consumption in kwh (Source: U.S. EPA)
### Summary of Clothes Dryer V1.0 Specification – Finalized May 2014

| Drivers                                                                 | • Significant savings opportunity, in particular, with more effective automatic cycle termination  
| • Recognize new efficient technology being introduced to U.S market |
| Included Products                                                      | • Standard Electric Clothes Dryers    
| • Standard Gas Clothes Dryers                                          
| • Compact Clothes Dryers (<4.4 cu-ft)                                  |
| Savings                                                               | • 20% energy savings                  
| • National: $1.5 billion                                               
| • Per Unit: $9-18/year                                                 |
| Other Requirements                                                    | 1. Cycle Time: Max 80 mins for test cycle  
| 2. User Information: a) cycle and settings used for energy rating   
|   b) guidance about energy use of other cycles and settings           |
| “Connected” Criteria                                                  | Included (Optional)                   |
| Effective Date                                                        | January 1, 2015                       |
| Metrics, Test Method                                                 | CEF¹                                  
| DOE Appendix D2                                                       |
| In development: Demand response test                                  |

¹ Combined Energy Factor (CEF)
Efficiency Criteria

<table>
<thead>
<tr>
<th>Product Category</th>
<th>CEF&lt;sub&gt;B&lt;/sub&gt;ASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vented Gas</td>
<td>3.48</td>
</tr>
<tr>
<td>Vented and Ventless Electric, Standard (4.4 cu-ft or greater capacity)</td>
<td>3.93</td>
</tr>
<tr>
<td>Vented and Ventless Electric, Compact (120V) (less than 4.4 cu-ft capacity)</td>
<td>3.80</td>
</tr>
<tr>
<td>Vented Electric, Compact (240V) (less than 4.4 cu-ft capacity)</td>
<td>3.45</td>
</tr>
<tr>
<td>Ventless Electric, Compact (240V) (less than 4.4 cu-ft capacity)</td>
<td>2.68</td>
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</table>

- 5% connected functionality allowance
- Products must be certified using final (TBD) ENERGY STAR test method to use allowance

**Equation 1. Calculation of Minimum CEF**

\[ CEF_{MIN} = CEF_{BASE} - CEF_{Adder\_Connected} \]

<table>
<thead>
<tr>
<th>Connected Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Type</td>
</tr>
<tr>
<td>All Electric Clothes Dryers</td>
</tr>
</tbody>
</table>
ENERGY STAR Dryer Resources – Savings Methodology

- EPA developed a **modified baseline** to account for the differences in test methods being used by U.S Department of Energy and the ENERGY STAR program.

- Baseline modification is informed by test data gathered by DOE in their test method development rulemaking.
Efficiency Vermont – Planned Program Savings for ENERGY STAR Clothes Dryers*

• Assumptions:
  – 322 clothes dryer cycles per year, informed by 2009 RECS clothes washer data for the northeast region
  – Load size of 10.4 lbs is used to reflect the average test load for the paired ENERGY STAR clothes washers
  – Dryer savings are discounted because of the existing Efficiency Vermont CEE Tier 3 clothes washers program

<table>
<thead>
<tr>
<th>Efficiency Level</th>
<th>CEF (lbs/kWh)</th>
<th>Load Weight (lbs)</th>
<th>% Energy Reduction from Paired Efficient Washers</th>
<th>Annual Dryer Savings (kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENERGY STAR Version 1.0 Estimated Baseline (Electric)</td>
<td>3.11</td>
<td>10.4</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>ENERGY STAR Version 1.0 Estimated Baseline (Gas)</td>
<td>2.84</td>
<td>10.4</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>ENERGY STAR (Standard Electric)</td>
<td>3.93</td>
<td>10.4</td>
<td>14%</td>
<td>194</td>
</tr>
<tr>
<td>ENERGY STAR (Standard Gas)</td>
<td>3.48</td>
<td>10.4</td>
<td>14%</td>
<td>36</td>
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</tbody>
</table>

*Efficiency Vermont has not received regulatory approval for their proposed energy savings
“Connected” Product Features

- EPA continues to seek ways to further advance products with intelligent features in ways that deliver immediate consumer benefit and support a low-carbon electricity grid over the long term

- Optional “Connected” criteria are designed to enable:
  - Energy savings
  - Convenience
  - Smart grid interconnection with the option to override when necessary
“Connected” Functionality Opportunities

- Demand responsive; today clothes dryers draw about 6kW:
  - Delay start cycle
  - Reduce power draw during cycle by 80%, temporarily
- Alerts: filter blocked, using the “eco” cycle is saving you 20 percent on your energy
- Start the wash cycle an hour before you’re home so it can go into the dryer immediately
- New possibilities for increasing the efficiencies of paired communicating washer and dryer
Market Potential & Availability
Clothes Dryers

• Market Potential
  – Forecast of 6.5 million dryer units to be shipped in 2015
    • Forecast of 8.2 million washer units to be shipped in 2015
  – Consumers are inclined to buy washer and dryer pairs together (if they can afford it)
    • 79% of clothes washers and dryers are purchased as a pair
    • About 70% of all dryers are sold as half of a laundry pair

Could this be an opportunity to pursue a paired washer-dryer rebate or promo?

Clothes Dryers

- Market Potential continued
  - Sales potential
    - Consumers have spent $2.5 billion on dryers in the U.S. in 2012 – forecasted to be more in 2015
    - Over 50 million U.S. households with washers or dryers older than average product lifetime (RECS, 2009)
ENERGY STAR Dryer Products are in store NOW!

- Currently, there are ~45 certified dryers available in the U.S.
  - ~38 electric clothes dryers
  - ~8 gas clothes dryers
- Five different brands, including:
  - Whirlpool
  - Maytag
  - LG
  - Kenmore
  - Safemate
## ENERGY STAR Clothes Dryer Resources – Certified Products

### LG - DLE3170*
- **Type:** Electric
- **Drum Capacity (cu-ft):** 7.4
- **Combined Energy Factor (CEF):** 3.94
- **Estimated Annual Energy Use (kWh/yr):** 607

### Kenmore - 6146####
- **Type:** Electric
- **Drum Capacity (cu-ft):** 7.3

### LG - DLEX3370*
- **Type:** Electric
- **Drum Capacity (cu-ft):** 7.4

### Whirlpool - WED8740D**+
- **Type:** Electric

### Kenmore - 6142####
- **Type:** Electric

### LG - DLEX4270**
- **Drum Capacity (cu-ft):** 7.4

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**Specifications**

<table>
<thead>
<tr>
<th>Type</th>
<th>Vented or Ventless</th>
<th>Drum Capacity (cu-ft)</th>
<th>Height (inches)</th>
<th>Width (inches)</th>
<th>Depth (inches)</th>
<th>Combined Energy Factor (CEF)</th>
<th>Estimated Annual Energy Use (kWh/yr)</th>
<th>Estimated Energy Test Cycle Time (min)</th>
<th>Additional Dryer Features</th>
<th>Connected</th>
<th>Paired ENERGY STAR Clothes Washer</th>
<th>ENERGY STAR Model Identifier</th>
<th>Date Available on Market</th>
<th>Date Qualified</th>
<th>Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>Vented</td>
<td>7.3</td>
<td>38.0</td>
<td>27</td>
<td>30.0</td>
<td>3.94</td>
<td>607</td>
<td>66</td>
<td>Drum light, Time remaining display, Wrinkle prevention option, Steam cycle, Other Energy monitor indicator, Sanitization cycle, Filter cleaning indicator</td>
<td>No</td>
<td>Paired ENERGY STAR Clothes Washer</td>
<td>ENERGY STAR Model Identifier</td>
<td>04/25/2014</td>
<td>07/01/2014</td>
<td>United States</td>
</tr>
</tbody>
</table>

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*Types of dryers:
- Electric Clothes Dryer
- Gas Clothes Dryer
- Do not filter

**Brands:**
- Kenmore
- LG
- Maytag
- Whirlpool

**Drum Capacity (cu-ft):**
- Less than 4.4 cu-ft
- 4.4 - 6.9 cu-ft
- 7.0 cu-ft and greater

**Other Features and Characteristics:**
- Connected
- Vented
- Ventless

**Markets:**
- Clear selections
- United States
- Canada
Consumer Marketing
Consumer Savings Messaging

- ENERGY STAR clothes dryers are, on average, **20% more efficient** than standard clothes dryers

- Replacing your old clothes dryer with an ENERGY STAR certified model can **save you $245**

- It will cost you $75 per year to dry your clothes with your new full size electric ENERGY STAR certified clothes dryer
  - If you have a standard electric clothes dryer that is more than 10 years old, it’s costing you, on average, $100
ENERGY STAR Certified Dryer Announcement

Objectives

- Increase awareness that ENERGY STAR now certifies dryers
- Create national momentum among retailers, manufacturers, and utilities in promotion of ENERGY STAR certified dryers

**Paid**
- Facebook / YouTube boosting
- Other online paid channels

**Owned**
- Energystar.gov
- Social media
- Current Blog
- ENERGY STAR Newsletter

**Earned**
- Traditional
- Online
- Bloggers

**Shared**
- Partner social
- Partner online
- Partner digital
- Other
ENERGY STAR Certified Dryer Announcement

Strategic Approach
• Earned media channels
  – Use mainstream national media to officially launch dryers and reach broad base of consumers
  – Work with trade media to reach appliance buyer audience
• Owned media to support effort
  – Social media messaging and supporting graphics targeted to consumers
• Paid media
  – Paid search marketing to capture product seekers
• Shared partner media
  – Work with partners towards high-profile presence at retail and online, as well as leveraged incentives

Send all traffic to energystar.gov dryer promotion landing page with comprehensive content and list of what brands are available at which stores

Timing
• January through President’s Day (mid-February)
Earned Media Outreach

Trade Show Reveal
- Attend the International Builders’ Show Jan. 20-22 in Las Vegas, reveal new ENERGY STAR certified dryers
- Offer briefings to media attending the show, featuring ENERGY STAR spokesperson

Mainstream Media Opportunities
- Work with key media contacts to create a national exclusive story
  - Follow up with pitching to additional consumer reporters
- Pitch media on a lifestyle story that focuses on habits and behaviors, discussing benefits of certified dryers
  - Key targets include Good Housekeeping, First for Women, Better Homes & Gardens, Real Simple, BlogHer
- Blog Partnership with mainstream parenting blogger, MommyShorts

Trade Media Outreach
- Reach out to trade outlets geared toward appliance buyers for major retailers, energy efficiency managers, sustainability officers and retail industry analysts
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