Super Efficient Dryer Initiative

ENERGY STAR Partner Meeting
October 7, 2010
What is SEDI?

Mission: Bring super high efficiency dryers in to the North American market

2010 Milestones

• 2010 funding from NJCEP (Electric focus)
• Develop a core stakeholder group of industry, EEPS and ENERGY STAR
• Research the market & technologies
• Develop a program plan and specification for super high efficiency dryers
SEDI Primary Goals

2010
Industry, Efficiency Programs and ENERGY STAR Collaboration

2011
Product Development & Field Data

2012
Pilots in N. American Market of Super Efficient Clothes Dryers

2013
ENERGY STAR & Full Market Launch

2020
50% Energy Reduction in Clothes Dryer Usage
NRDC/Ecos 2010 Evaluation of Clothes Dryer Savings Potential
Current Market Clothes Dryer Savings

- ENERGY STAR clothes washers
  - Lower RMC = Reduced dryer usage
- Automatic Termination w/ moisture sensing
- Fuel switch (Site vs. Source Energy)
- Databases – ID Best in Class
  - California Energy Commission
    http://www.appliances.energy.ca.gov/
  - NRCan
# Clothes Dryer Potential

**Table 1: North American Clothes Dryer Stock (2005)**

<table>
<thead>
<tr>
<th>Market Penetration</th>
<th>US</th>
<th>Canada</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total households</td>
<td>111.1 mil</td>
<td>12.6 mil</td>
<td>123.7 mil</td>
</tr>
<tr>
<td>% electric</td>
<td>60.5%</td>
<td>81%</td>
<td>62.5%</td>
</tr>
<tr>
<td>Total with electric</td>
<td>67.2 mil</td>
<td>10.2 mil</td>
<td>77.4 mil</td>
</tr>
<tr>
<td>% natural gas or propane</td>
<td>18.3%</td>
<td>2.5%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Total natural gas or propane</td>
<td>20.3 mil</td>
<td>318,000</td>
<td>20.6 mil</td>
</tr>
<tr>
<td>% without dryers</td>
<td>21.2%</td>
<td>16.7%</td>
<td>20.1%</td>
</tr>
<tr>
<td>Homes without dryers</td>
<td>23.6 mil</td>
<td>2.1 mil</td>
<td>25.7 mil</td>
</tr>
</tbody>
</table>
SEDI Clothes Dryer Savings

<table>
<thead>
<tr>
<th>Model</th>
<th>Bosch WTS86513CH</th>
<th>Bosch WTW86561CH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>3.36 kWh</td>
<td>1.35 kWh</td>
</tr>
<tr>
<td>Technology</td>
<td>Air condensor</td>
<td>Heat pump</td>
</tr>
</tbody>
</table>

> 50% Reduction in energy

* Courtesy Eric Bush, TopTen International, Zurich
SEDI Clothes Dryer Savings

60-80% Reduction in power with heat recovery

Picture source: Schulthess AG, Switzerland
SEDI Clothes Dryer Savings

Ventless drying = No HVAC impacts
Vented = 150 Air changes annually (2000 sqft)

* Source U.S. EPA
Is it Possible?

• > 20 “A” labeled super efficient dryers from multiple manufacturers available on EU market

• Rapidly increasing market share in EU
  – 25% in Switzerland / 100% by 2012

• Research documents 50% direct savings

• SNOPR on Clothes Dryer Test Procedure
  – Automatic Termination
  – Ventless Standard Dryer
Movement so far…

1. Research and Market Potential Report
   • TopTen EU
   • NRDC / Ecos Report (October 2010)
   • SNOPR Dryer Test Procedure

2. Draft tech spec and program design

3. Regional program provider meetings
   • Vancouver (July 26)
   • Chicago (July 30)
   • Iselin, NJ (August 5)
   • ACEEE Summer Study (August 16)

4. Manufacturer Meeting
   • Core stakeholders and industry meeting this afternoon!
Next Steps

• Become a SEDI Core Stakeholder
  • Help shape the SEDI efficiency target and program design
  • Staff time only in 2010
  • Research and possibly pilot testing in 2011

• Plan for 2012-2013
  • Retail price incentives
  • Marketing
  • Bulk purchase
Contacts

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