

Super Efficient Dryer Initiative

2012 ENERGY STAR Partner Meeting

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Super Efficient Dryer Initiative (SEDI)

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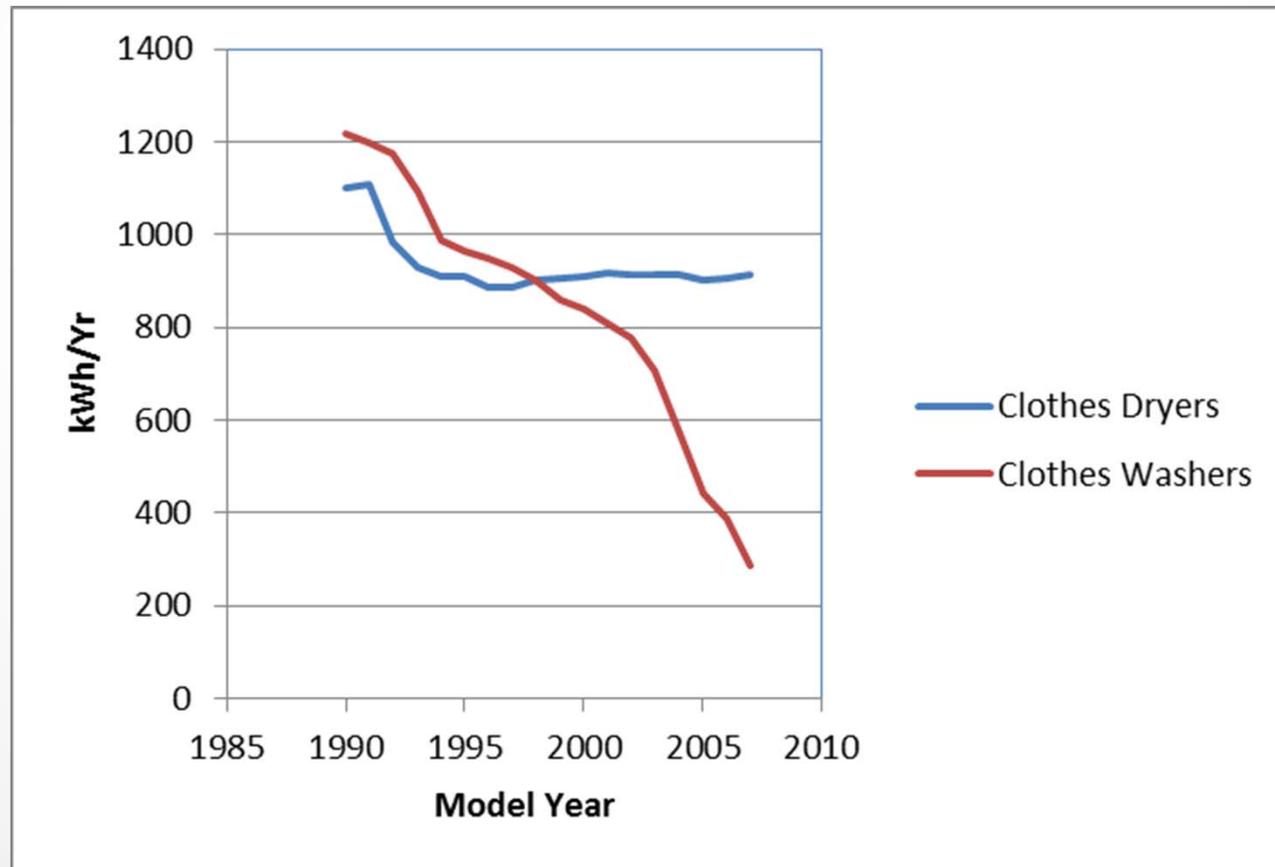
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With Support from EPA ENERGY STAR

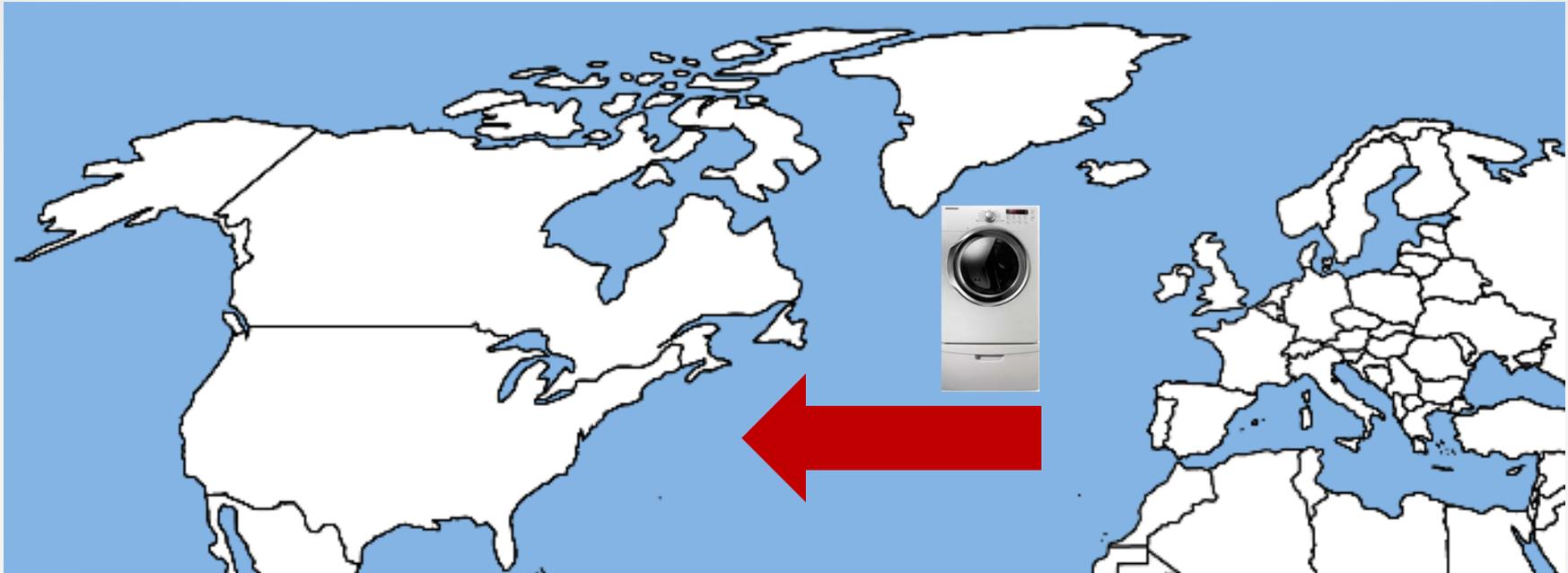


No Efficiency Gains Over the Past Ten Years

- Average energy consumption of clothes washers declined over 75% from 1990
- Opportunities to leverage ENERGY STAR brand and efficiency program experience with clothes washers



Advanced Clothes Dryers are Ready for Market Introduction



- Heat pump technology is one example of an advanced technology
- Over 25 different models of heat pump clothes dryers currently available in EU market
- Switzerland established aggressive minimum energy performance standard in 2012 – 100% market share of heat pump clothes dryers

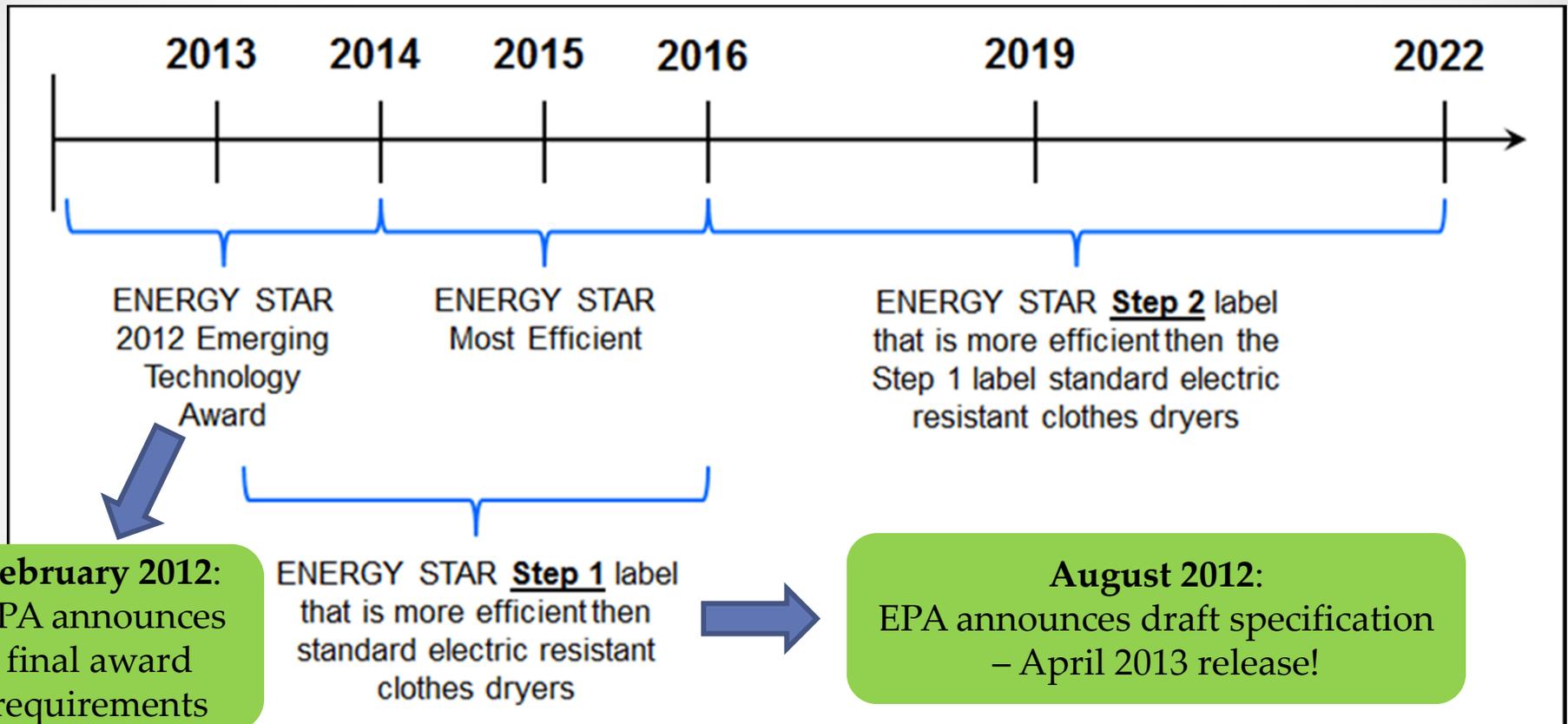


SEDI Strategy for Market Transformation

Market Barriers	SEDI Activities in 2012/2013
1. No Products Available	<ul style="list-style-type: none">• Build on European Successes• Engage U.S. Manufacturers & Retailers
2. Unproven Product Performance	<ul style="list-style-type: none">• Support ENERGY STAR & Emerging Tech Award• Assist Manufacturers in Securing Underwriters Laboratory (UL) Approval
3. Unknown Energy Savings	<ul style="list-style-type: none">• Conduct Field & Lab Testing• Improve DOE Test Procedure
4. Likely Higher Product Pricing	<ul style="list-style-type: none">• Research and Define Incremental Costs• Help Efficiency Programs Develop Incentives (Including Support for Cost-Benefit Analyses)
5. Low Consumer Awareness	<ul style="list-style-type: none">• Help Efficiency Programs Market New Dryers• Support Efficiency Programs in Addressing Multifamily and Retail Markets



Roadmap for Advanced Clothes Dryers



Defining Energy Savings in Dryers

- Savings estimates developed by SEDI based on estimates of total cycle energy consumption through laboratory testing (NRDC/ECOVA)
- Includes direct and secondary benefits from reductions of HVAC interactive effects of venting dryers
- Fall 2012 – Results from NEEA In Situ Testing of Clothes Dryers in 50 homes
- Fall 2012 - Results from CLASP funded testing of standard and heat pump dryers

Advanced Clothes Dryer Cost-Effectiveness

Annual Savings (kWh/yr)	462
Annual Savings (\$/yr)	\$76
Lifetime Savings (kWh)*	5,541
Lifetime Savings (\$)	\$909
Price Premium (\$)	\$405
Payback on Price Premium (yr)	5.3
Present Value of Net Benefits (\$)	\$297
Benefit-to-Cost Ratio	1.86



Understanding the Market

Market	Size	Base Price	Price Adder	Other Factors
Retail	27"	>\$1000	>\$300	<ul style="list-style-type: none"> National rollout / regional promotion Stacked brand potential (Utility/Mfg/Retailer) Requires broad efficiency program support
Distributor/ Multifamily	24"			<ul style="list-style-type: none"> Price Sensitive Avoided venting cost ~ \$300 per unit Bulk purchase

- First advanced clothes dryers are likely to be premium models
- Incentive dollars critical in both retail and multifamily sector
- Secondary benefit for multifamily applications is avoiding cost of central or individual dryer venting



Manufacturers are Poised to Enter Market

In 2011, SEDI interviewed 12 major clothes dryer manufacturers:

- 9 of these 12 manufacturers offer heat pump clothes dryers directly or through sub-brands in Europe
- One, maybe two, manufacturers are interested in or have plans to bring a product to market in 2013/2014
- Retailers and manufacturers are sensitive to depressed market and conservative in new product introductions
- Clear indication of partnership opportunities between efficiency programs, retailers, and manufacturers



Efficiency Programs are Getting Ready

- SEDI is sponsored by six leading efficiency programs
 - Pacific Northwest/Canada: Northwest Energy Efficiency Alliance, BC Hydro
 - Northeast: National Grid, Long Island Power Authority, Efficiency Vermont
 - Mid-Atlantic: New Jersey Clean Energy Program
- 20 Million residential customers are covered by these Sponsors
- SEDI is working to mobilize these—and more—programs so that incentives can be offered quickly once an advanced dryer is introduced



Driving Consumer Demand is Key

SEDI is...

- Working with efficiency programs, industry, and EPA to identify both traditional retail and multifamily opportunities
- Supporting national and regional marketing strategy to effectively communicate the primary and secondary benefits of advanced clothes dryers
- Supporting EPA and industry in promoting both advanced Emerging Technology Award and future ENERGY STAR qualified products
- Leveraging strength of ENERGY STAR brand and efficiency program experience with clothes washers



ENERGY STAR 2011
Emerging Technology Award

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