Program Opportunities for ENERGY STAR® Clothes Dryers

2014 ENERGY STAR Partner Meeting

October 27th, 2014

Purpose

Advance the North American Market for Super Efficient Clothes Dryers

SEDI Organizers:

SEDI Sponsors

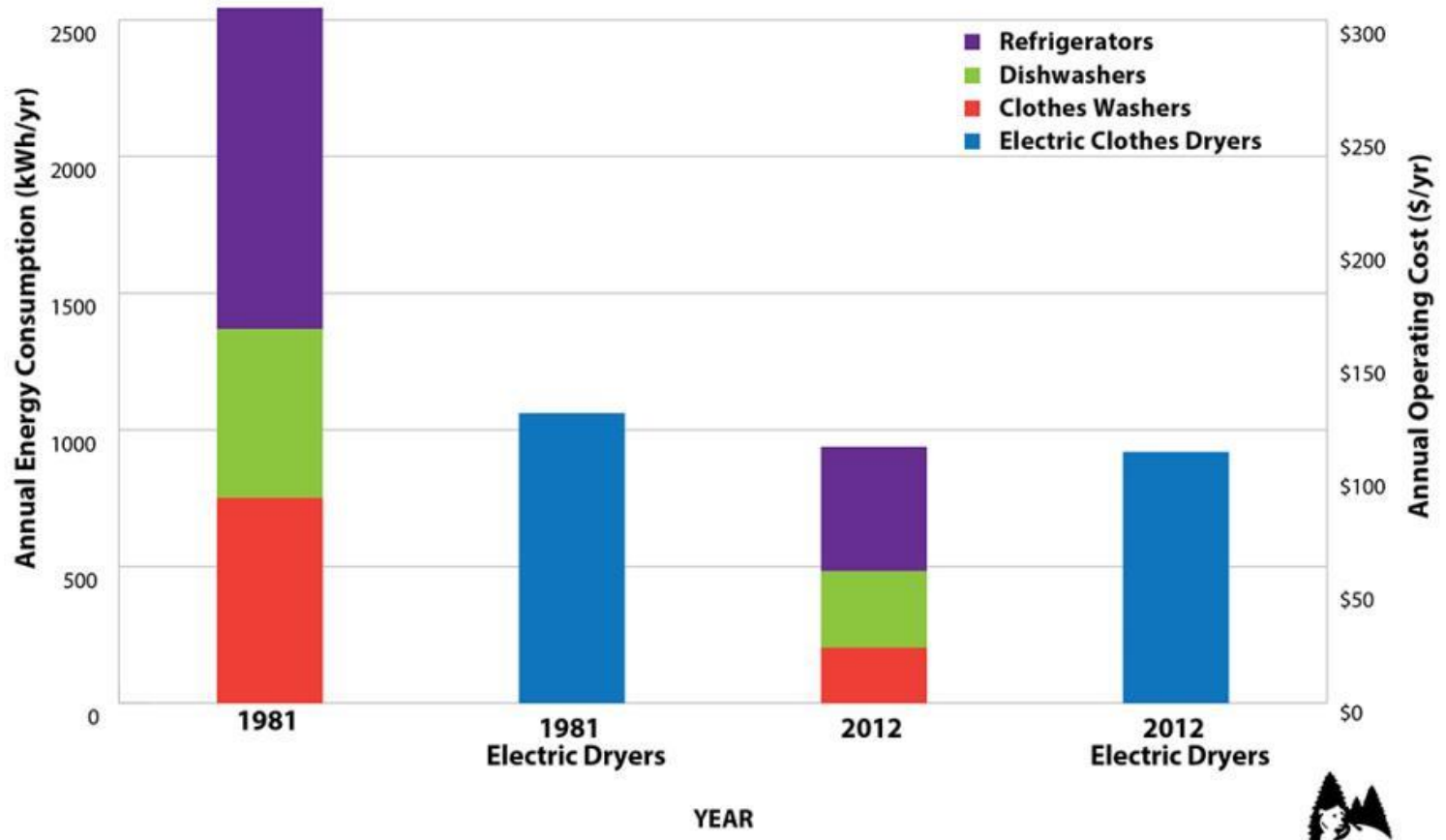
Northeast Utilities

A UIL HOLDINGS COMPANY

NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS
FACILITATING PARTNERSHIPS TO ADVANCE ENERGY EFFICIENCY

A Call to Action on Dryers

Figure 1. Annual energy consumption of electric clothes dryers vs. other major home appliances, 1981 and 2012



Source: Data for refrigerators, dishwashers, and clothes washers from the Association of Home Appliance Manufacturers on new purchases. Data for dryers estimated from a collection of field studies conducted over the past four years by Ecova and others.

NRDC
THE EARTH'S BEST DEFENSE

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On the Path Forward

Efficiency

Full Heat Pump ?

Hybrid Heat Pump
Spec: 2013
Products: Q4 2014

ENERGY STAR 2014
Emerging Technology Award

Better Termination
Spec: Jan 2015
Products: Now!

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Myth Busting

"There is not an ENERGY STAR label for clothes dryers because most dryers use similar amounts of energy."

Specifications		CEF (lbs/ kWh)	Dry Time (min)	Annual Energy (kWh)	Annual Eelctric Savings (kWh)	Gas Savings (MMBtu)	% Savings over Federal Standard
Federal Baseline	Electric	3.11	50	769			
	Gas	2.84	50	842			
ENERGY STAR	Electric	3.93	67	608	**160**		**21%**
	Gas	3.48	57	687	**30**	**0.43**	**18%**
2014 Emerging Technology Award	Normal	4.3	67	556	**213**		**28%**
	Highest Efficiency	5.3	80	451	**318**		**41%**

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HE Laundry = Paired Savings

Dryers driving purchase of HE Front Load washers?

- **Paired washers with ENERGY STAR dryers are all front load**
  - **Higher performing washers improve drying performance of new high efficiency clothes dryers**
  - **Increase in both energy and water savings for efficiency programs**

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Advancing Test Procedures

- Field testing supports a 20-60% higher baseline than represented in DOE Test Procedure (D1)
- Recent lab and field testing supports programs attributing additional savings for ENERGY STAR dryers
- CA & NEEA led development of Supplemental Test Procedure for dryers (2014)

	DOE 2005 Test Procedure, Standard	DOE 2013 Procedure, Lab Tests	NEEA Field Study Averages	NEEA "Real World" Test Procedure
Moisture	66.5%-73.5%	57.5% +/- 0.3%	62%	62% +/- 0.3%
Termination	Manual	Auto	Auto	Auto
Load Composition	2-Dim	2-Dim	3-Dim	3-Dimy 3D
Drying Time	23 min	47	58	47
Field Use Factor	1.04	0.8	1	1
Adj. Use/Load	2.3 kWh	1.7 kWh	3.1 kWh	2.5 kWh
Washer Loads Dried	107%	91%	124%	124%
Loads/year	416	283	337	337
kWh/year	967	570	920	840
CEF	3.01	4.2	2.4	3.0

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Multiple Program Opportunities

Products / Retail

Existing & New Home Programs

Multifamily Programs

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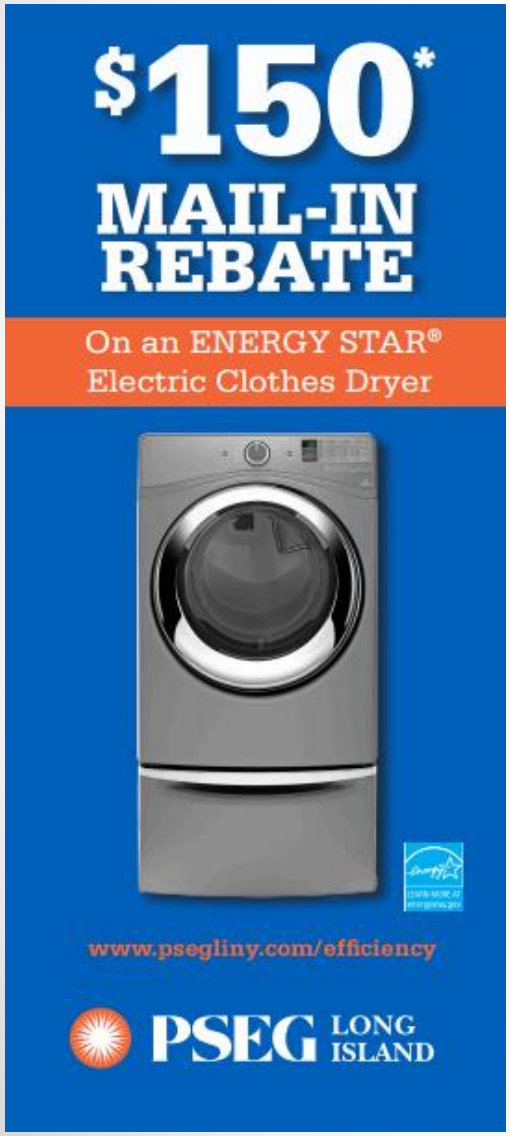
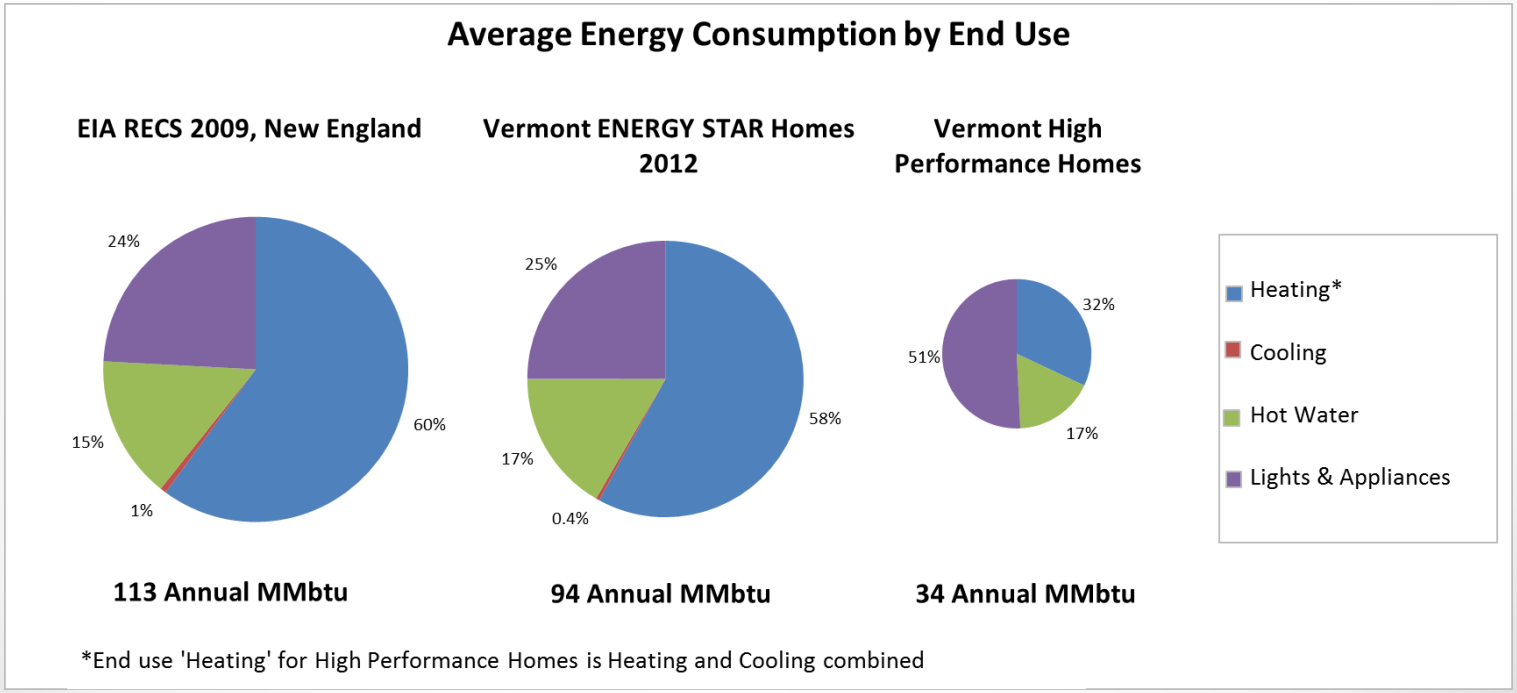
Early Promotions



- Paired High Efficiency Laundry Promotions
- Two-tier Incentive Programs
  - ENERGY STAR
  - 2014 Emerging Technology Award
- Addressing program cost-effectiveness
  - National Retail Products Program

New Construction

- Opportunity to add ENERGY STAR dryers as a prescriptive requirement within New Construction programs
- Particularly important in super-efficient homes
  - Electric dryers are 3rd largest load in high performance homes (Efficiency Vermont)



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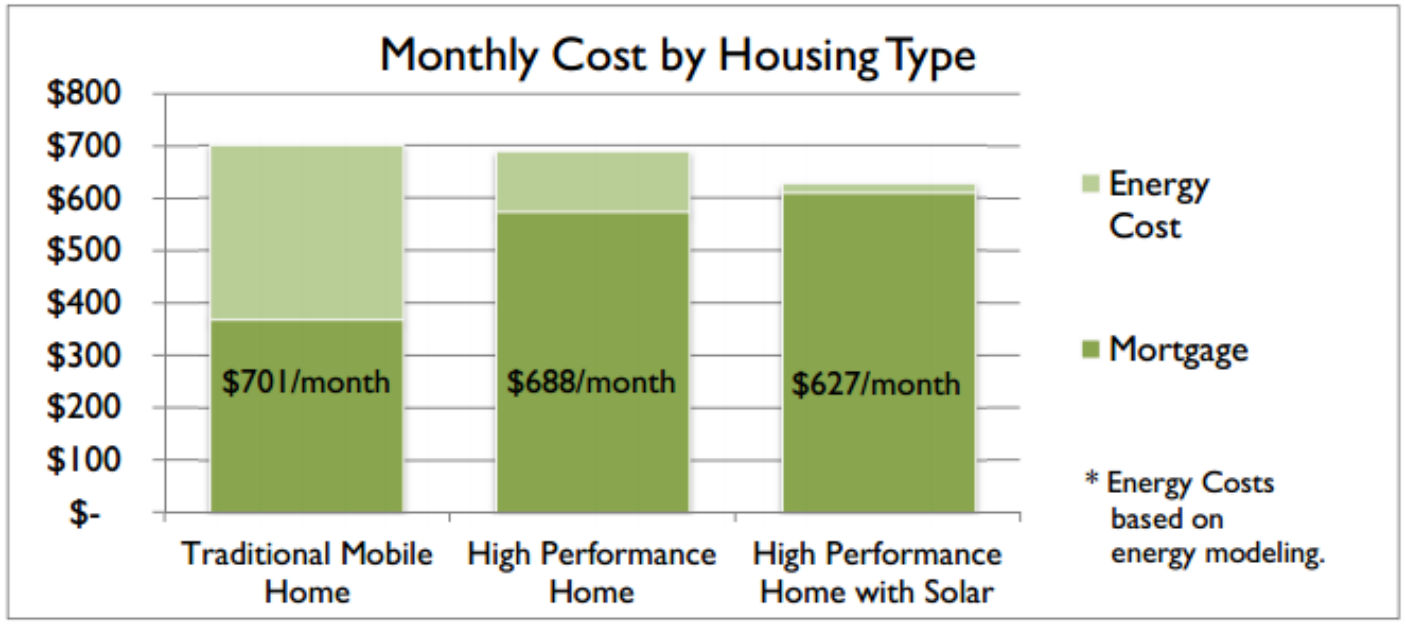
Low Income Programs

- Some low income programs already upgrade clothes washers
- High Performance Manufactured Homes
  - Venting Not an Option



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Multifamily Programs

- Multifamily properties including apartments, condos & senior living all offer significant opportunities for high efficiency in-unit laundry
- Upstream options for builders

"Space saving ventless washer and dryers…allow architects to design installations virtually anywhere in the residence, while saving important dollars in construction costs."

"The construction savings in simply rerouting electrical and plumbing lines rather than installing new vents and pluming stacks throughout a building can be anywhere from $700-$2000 per unit."

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SEDI in 2015

SEDI Sponsor Activity in 2014/2015

- New Rebate programs for ENERGY STAR and 2014 Emerging Technology Award dryers
- Lab & Field Evaluations to support improved test procedures, advanced performance specifications and increased energy savings
- Developing new opportunities for ventless, heat pump dryers in high performance buildings

Join us!

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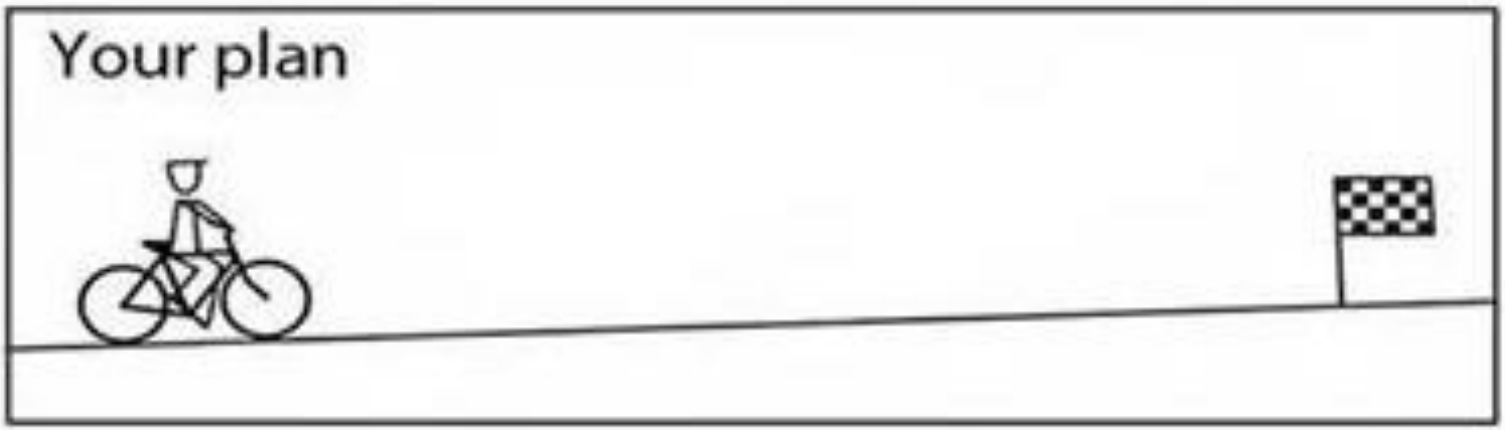
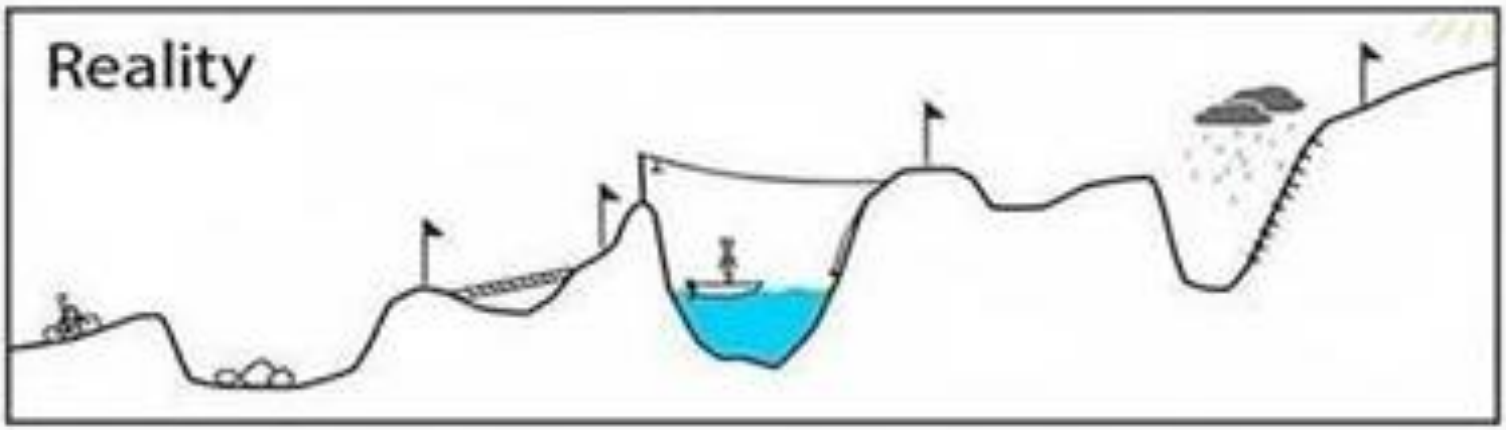
If it was easy….





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Contacts

Chris Badger
VEIC
802-540-7765
cbadger@veic.org

My Ton
CLASP
503-706-1191
mton@clasponline.org

Rebecca Foster
VEIC
802-540-7882
rfoster@veic.org

Chris Wold
CLASP
615-651-0131
cwold@clasponline.org

Chris Granda
Grasteu Associates
802-922 7005
granda@grasteu.com

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