



0.67 Water Heater Market Creation



Energy Trust of Oregon

Dedicated to helping customers of:

- Portland General Electric
- Pacific Power
- NW Natural
- Cascade Natural Gas

Our work helps keep energy costs as low as possible, creates jobs and builds a sustainable energy future



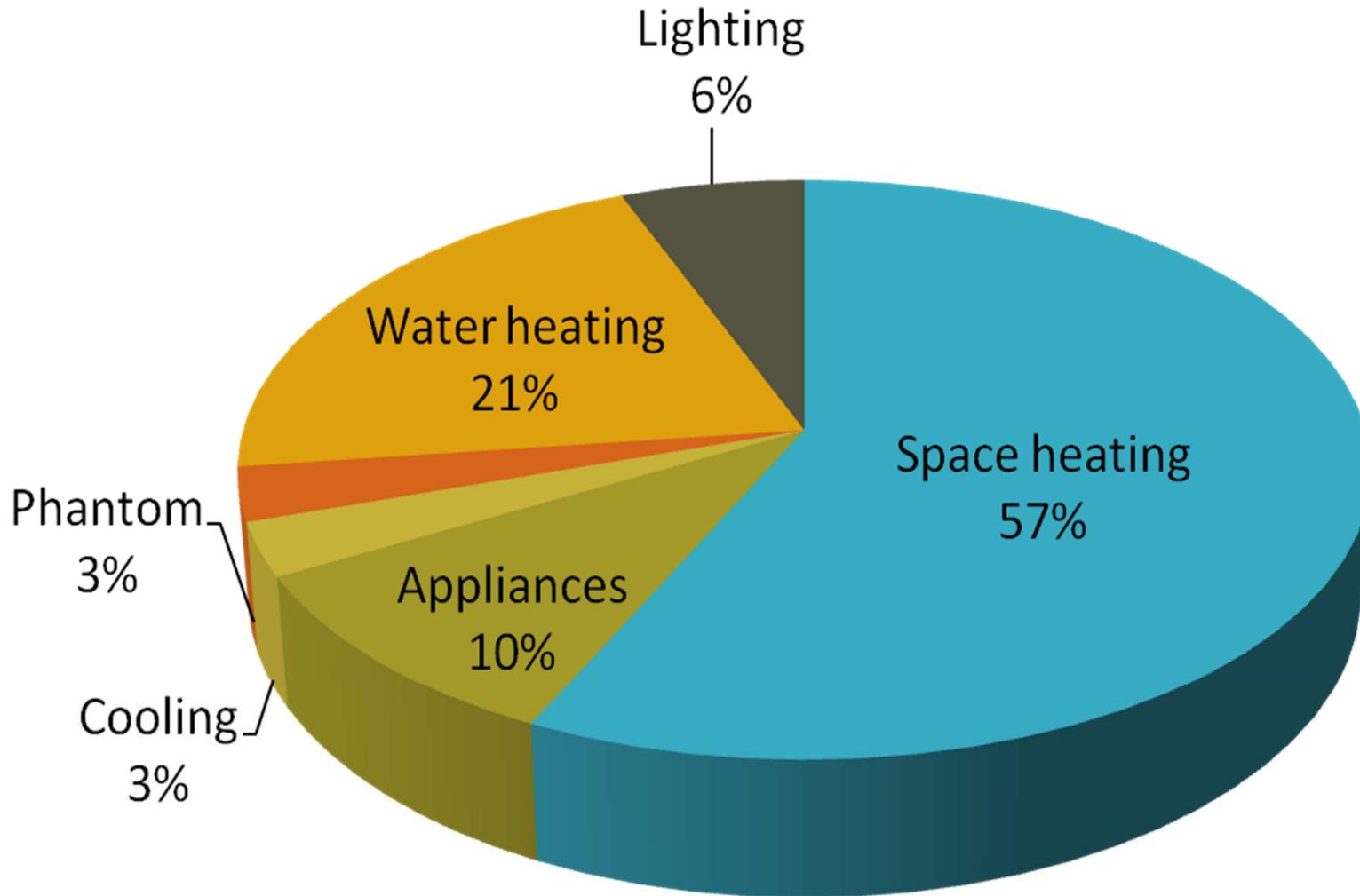
Cumulative Results

Since 2002:

- Helped participating customers save over \$1 billion on their utility bills
- Saved and generated 426 aMW of electricity, enough clean energy to power 320,000 Oregon homes
- Saved 23.2 million annual therms, enough clean energy to heat 46,000 Oregon homes with natural gas
- Prevented nearly seven million tons of carbon dioxide emissions, the equivalent of removing more than 1.2 million cars from the road



Average energy use in Oregon homes



Source: Energy Trust of Oregon, 2008

Initiative Context



Water heating savings potential

- 2nd largest energy expense in a home
- More than 52,500 SF water heaters replaced annually
- DHW fuel split in Energy Trust territory is assumed to be 55% electric / 45 % gas
- More than 23,000 opportunities per year for gas upgrades



Gas water heating in 2010

- 0.62 EF tank:
 - \$35 incentive
 - 16 therms
- ENERGY STAR tank (0.67 EF or greater):
 - \$100 incentive
 - 33 therms
- Tankless (0.80 EF or greater)
 - \$200 incentive
 - 65 therms



Tankless phase-out

- Tankless found to be not cost effective
 - 0.25 societal test BCR
 - Costs went up
 - Savings below initial estimate
- Phase out announced in late 2011
- Removed from program in April 2012



0.67 EF gas tank

- Energy efficient alternative to tankless
- Mid-grade option:
 - Half the total cost
 - Half the savings
- \$200-\$400 incremental cost
- Direct/power vent options
- ENERGY STAR rated

ENERGY STAR
Water Heater Market
Introduction



Identified barriers

- Product availability
- Minimal distributor interest
- Low market awareness



Identified solutions

- Product availability
 - Stocking incentive
- Minimal distributor interest
 - Distributor outreach
- Low market awareness
 - Increased incentives and marketing



Upstream goals

- Collaborate with manufacturers and energy efficiency organizations
- Educate/train distributor/retailer sales reps and contractors
- Test if incentives will motivate distributors and retailers to stock qualifying units



Stocking incentive requirements

- Payable to any distributor or retailer
- 100 unit maximum per distributor or retailer location
- Minimum EF of 0.67 and ENERGY STAR approved
- Limit one stocking incentive per unit
- For products intended for distribution within Oregon and/or greater Portland Metro



Maximize incentive channels

- Initial market introduction maximized incentive to BCR limit
 - \$100 consumer incentive
 - \$150 distributor incentive
- Phased decrease in distributor incentive levels with market acceptance



Consumer engagement

- May 2011
- Promotion with Northwest Natural
- Reached 700,000 customers
- Single partner – Fast Water Heater
- Temporary consumer incentive increase to \$200 to support marketing (May – August)



Instant incentive

- Agreement to offer incentive at point of sale
- Reduces incremental cost
 - Eases pain of upgrade on unplanned purchase



2012 and evolution

- Dedicated outreach staff member
- Increase consumer incentive (\$100 to \$150)
- Limited time bonus (\$50) to drive demand
- Trade Association incentive (\$25) to continue market integration
- Goal: 990 homeowner incentives claimed

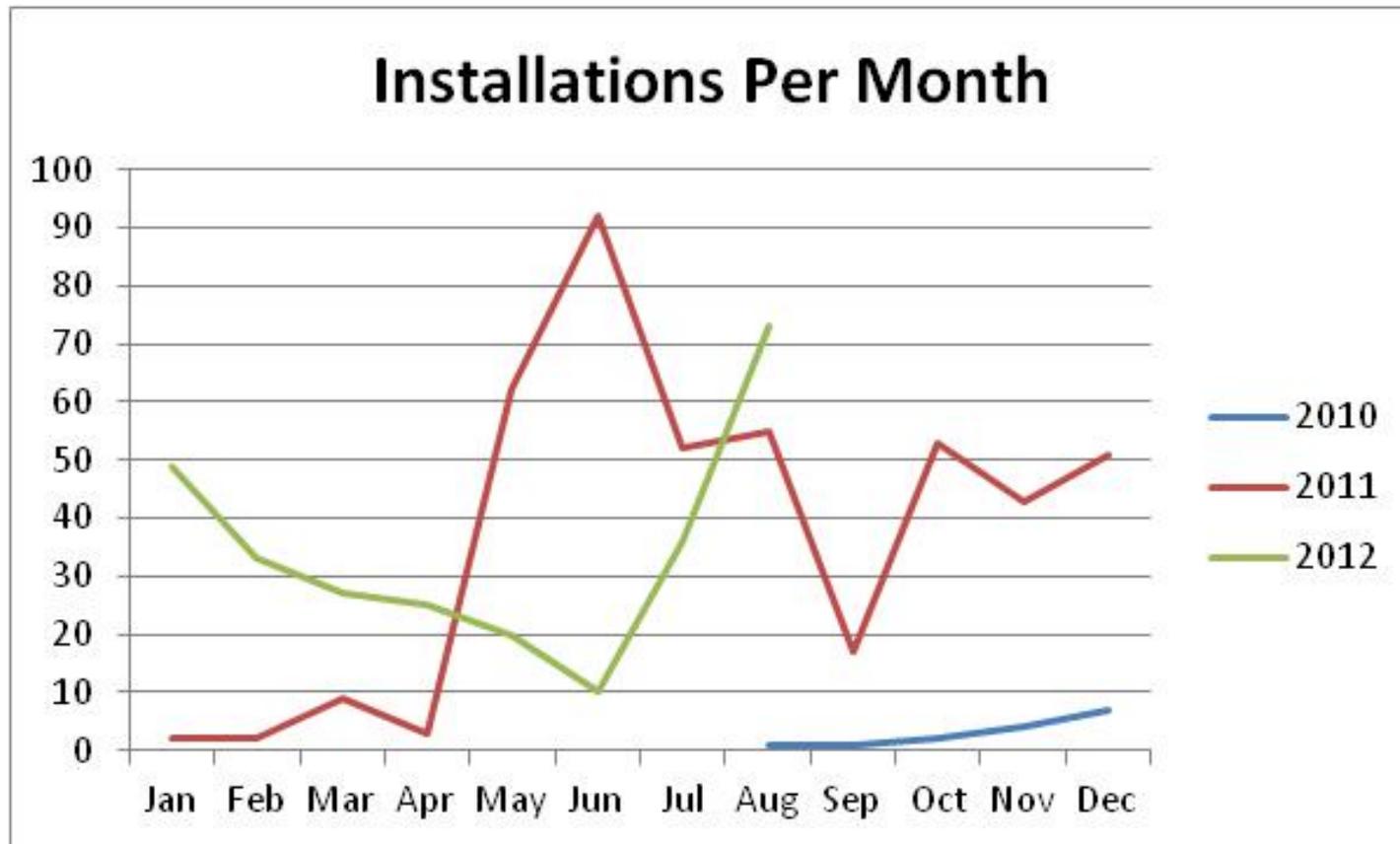


Results

- Pre-initiatives (May 2010 – April 2011)
 - 27 units installed
 - 16 contractors participating
- Post-initiatives (May 2011- April 2012)
 - 494 unit installed
 - 348/494 installations were instant incentives
 - 70 contractors participated
 - 500 distributor incentives paid
 - 6 distributors participating



Results (continued)



Lessons Learned



Lessons learned

- Stocking incentive will strongly influence some, provide minimal interest for others
- Supply side support is critical to success
 - Manufacturer's reps and distributors have more influence than you do



Lessons learned

- The market is price sensitive
 - 60-80% are unplanned replacements
- Branding matters
 - Consumers view water heaters as an appliance
 - Energy factor (EF) doesn't resonate
 - ENERGY STAR is a recognized brand



Questions?

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