



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



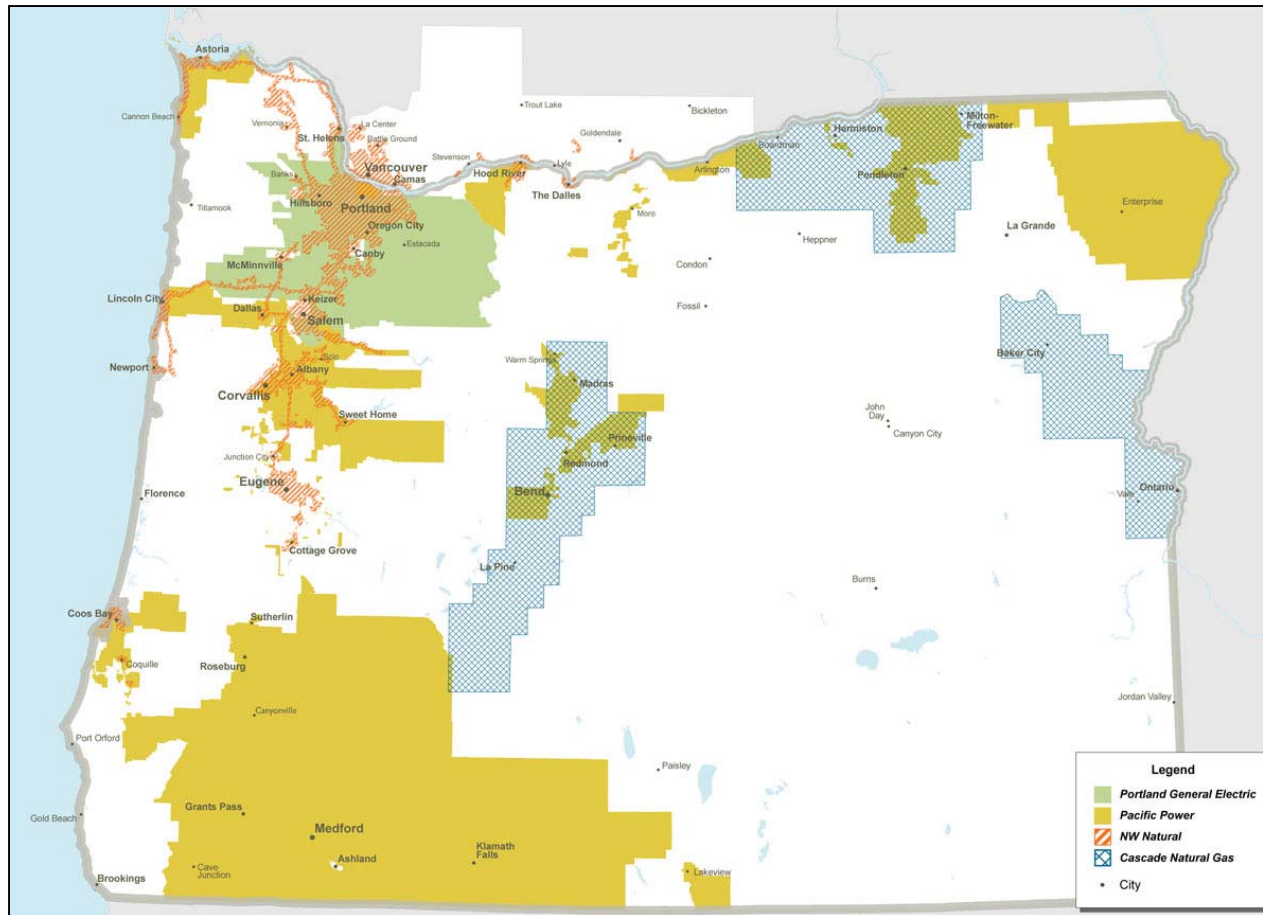
Cumulative Results

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

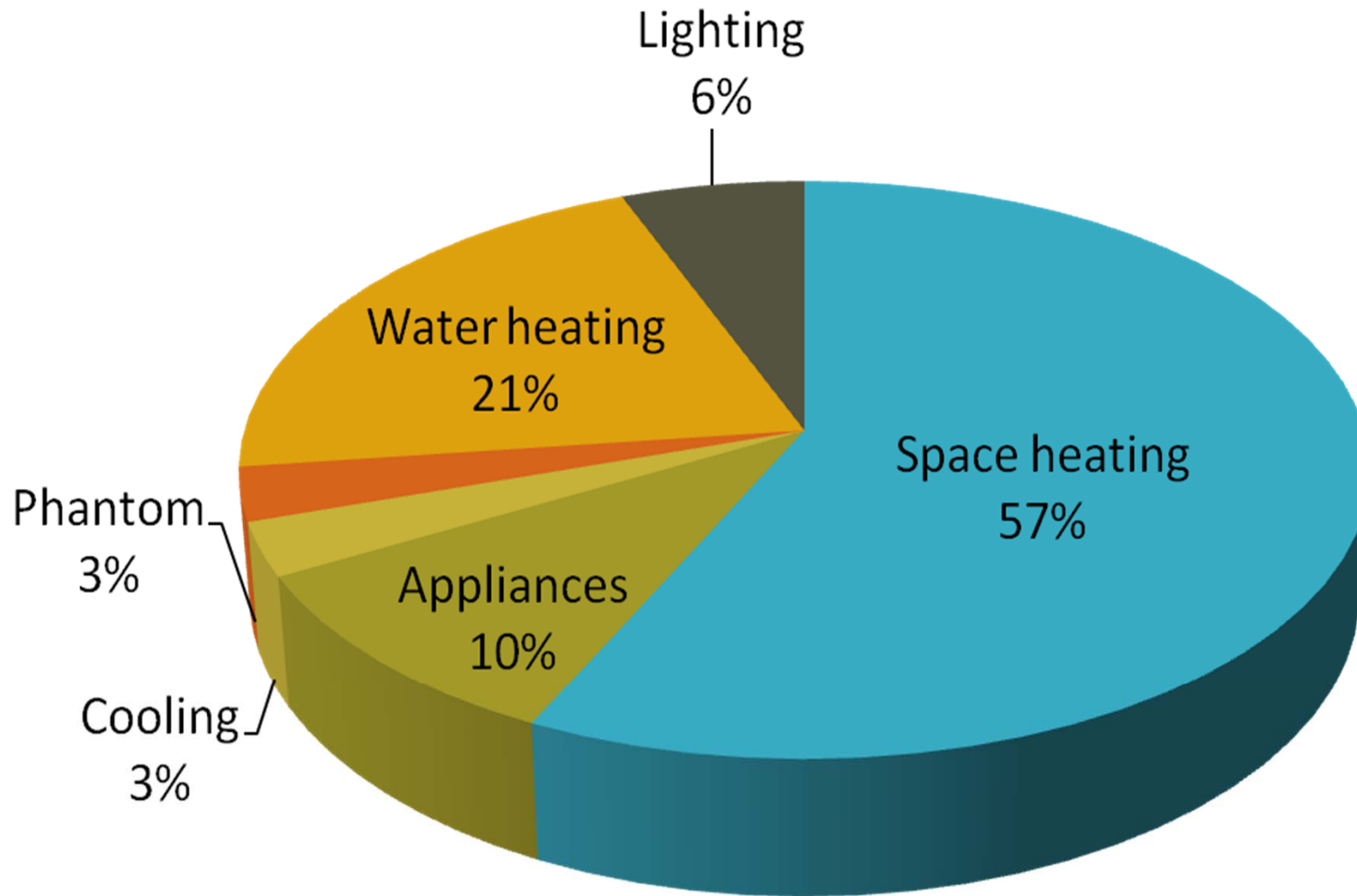


Energy Trust service territory





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

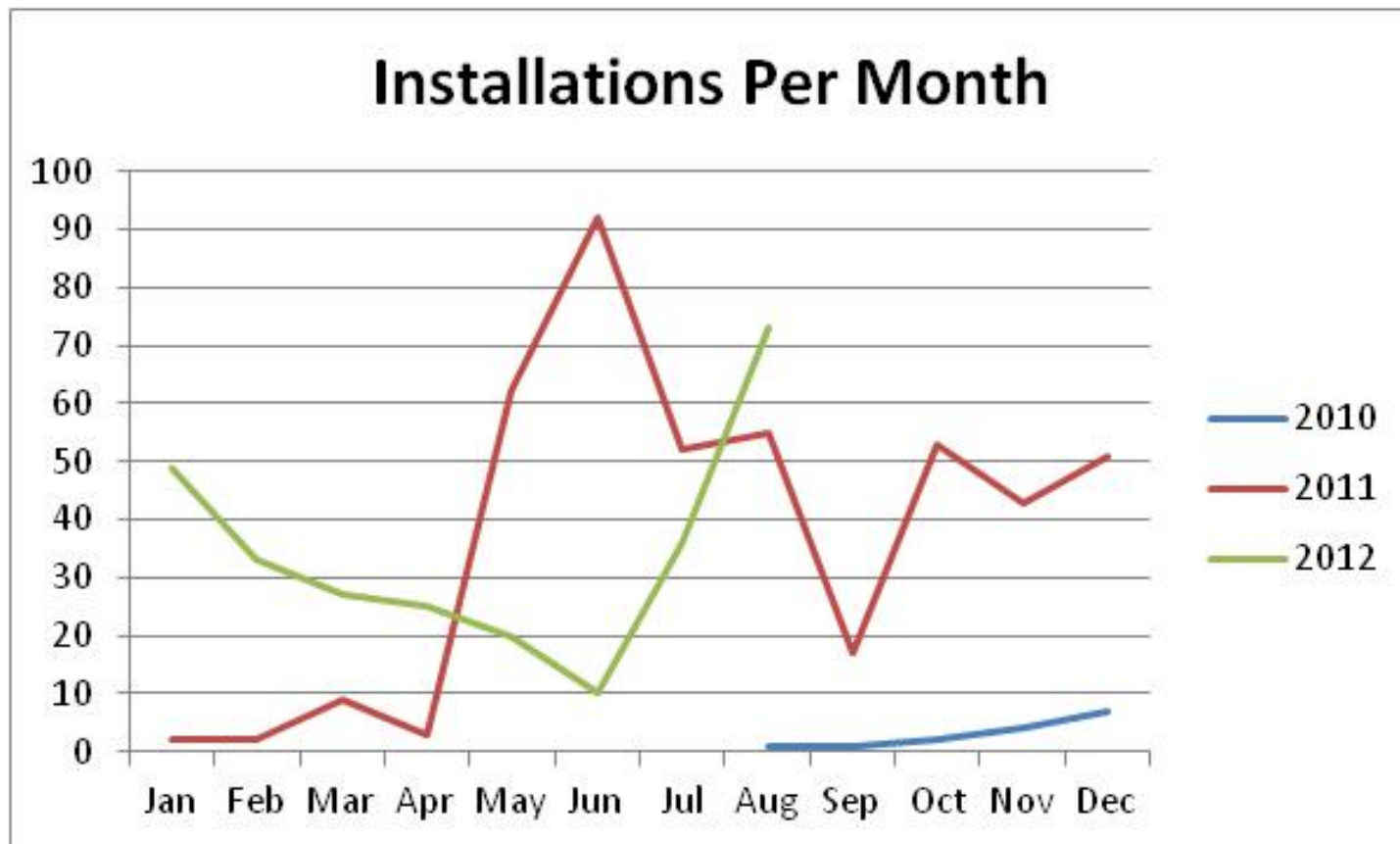


Results

- 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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