



For Businesses



For Homes



Renewable Energy



For Trade Allies



About Us

Energy Trust of Oregon

Market Transformation in Existing Multifamily Housing

Paul Berkowitz and Meredith Rizzari
Symposium on Market Transformation
March 29-31, 2009 – Washington, DC



Presentation Overview

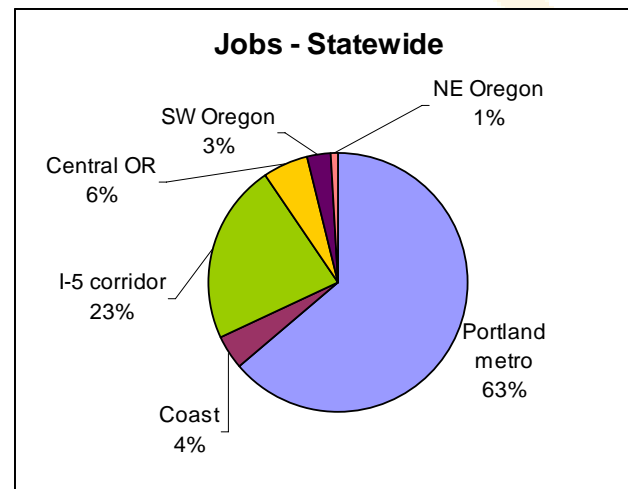
- Energy Trust Multifamily program
- Challenges
- Existing opportunity
- What is working
- Market transformation opportunities
- Building value in Multifamily investments
- GreenStreet Loan

Multifamily Home Energy Solutions

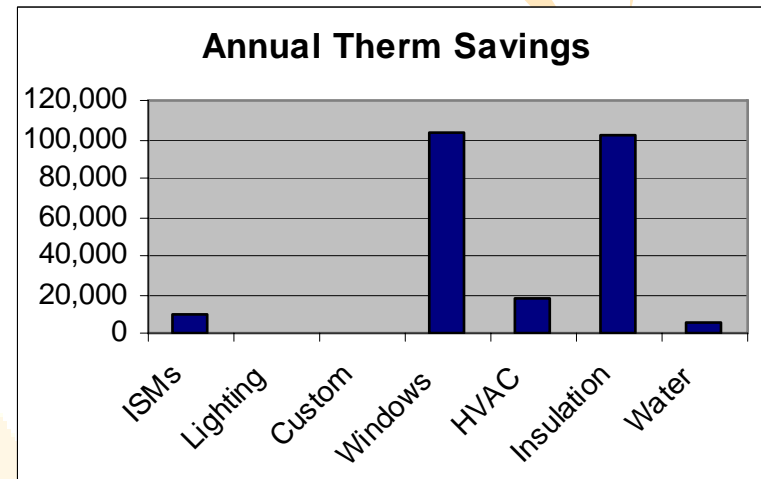
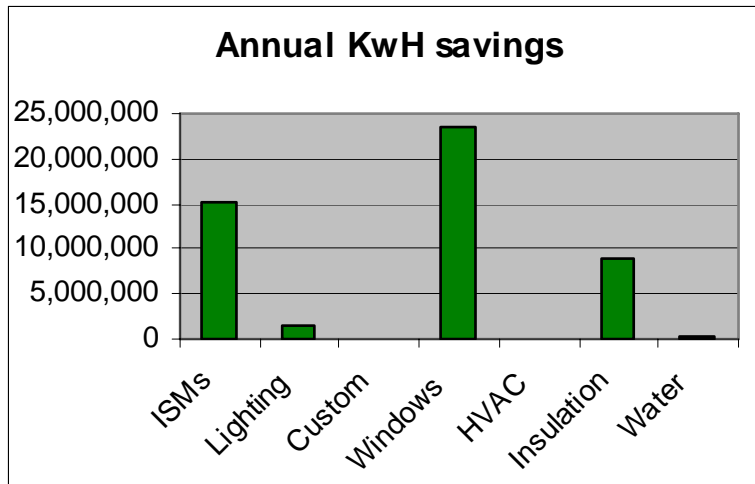
- Incentive based program encourages property owners to install energy efficient building improvements
 - Existing buildings with 5 or more units
 - Includes condominiums
- Savings goals—approximately 10-15 million kWh per year
 - 90% of properties are electrically heated
- Points of entry to the program
 - Property managers, property owners, asset managers, contractors, relationships with utilities
- Market based program

Multifamily Home Energy Solutions

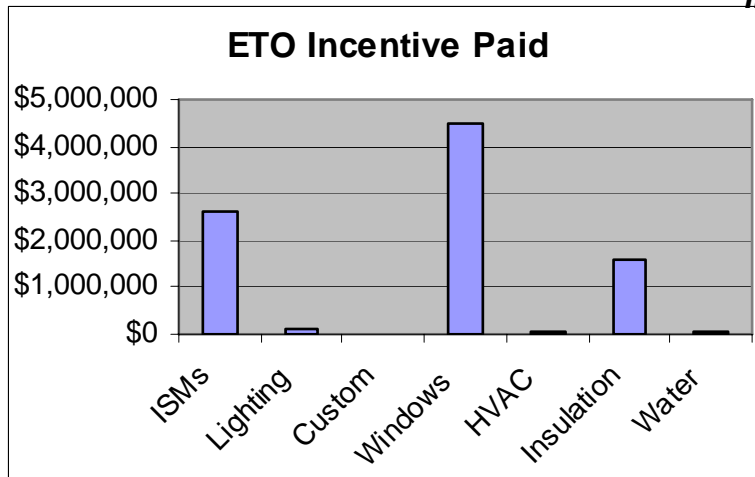
- In operation for 5 years
 - Approximately \$6.2 million in incentives
 - Saved 68 million kWh and 315,000 therms
 - 1,100 properties throughout Oregon



Multifamily Home Energy Solutions

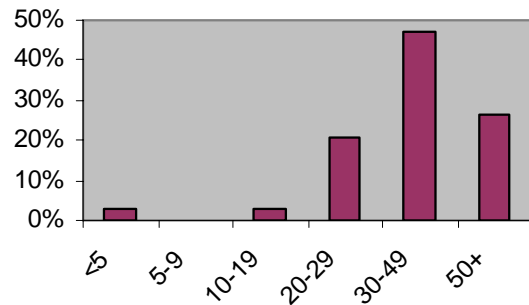


Charts all show savings over program life.

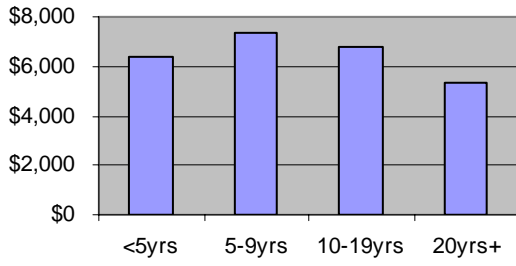


Building Characteristics

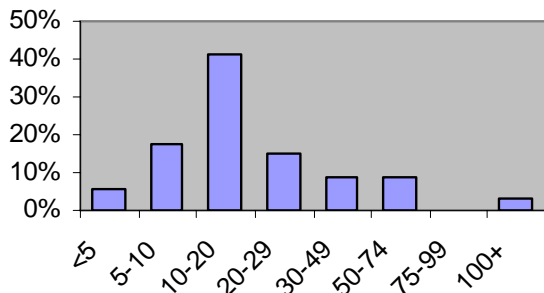
Age of Property (years)



Net Operating Income per Unit by Age



Units in Property



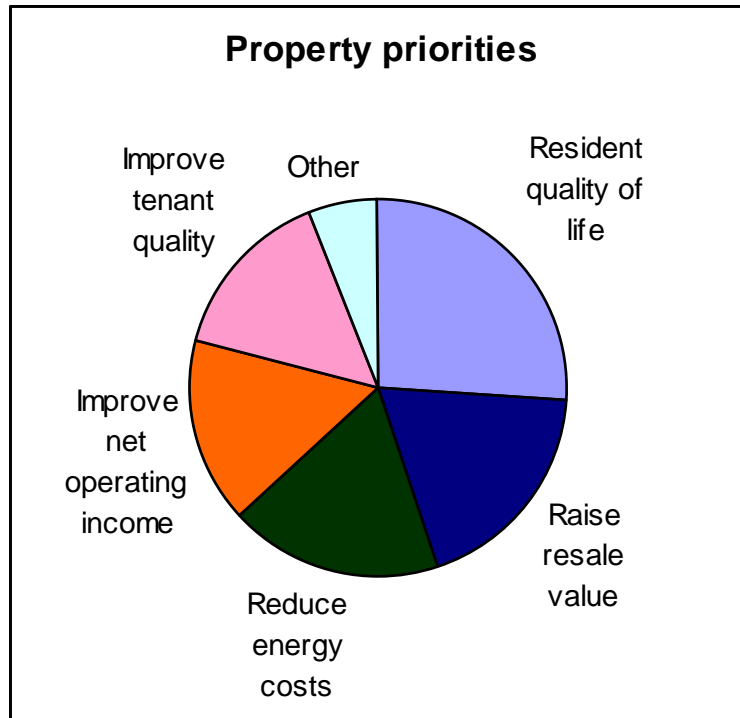
Upgrades performed

Response

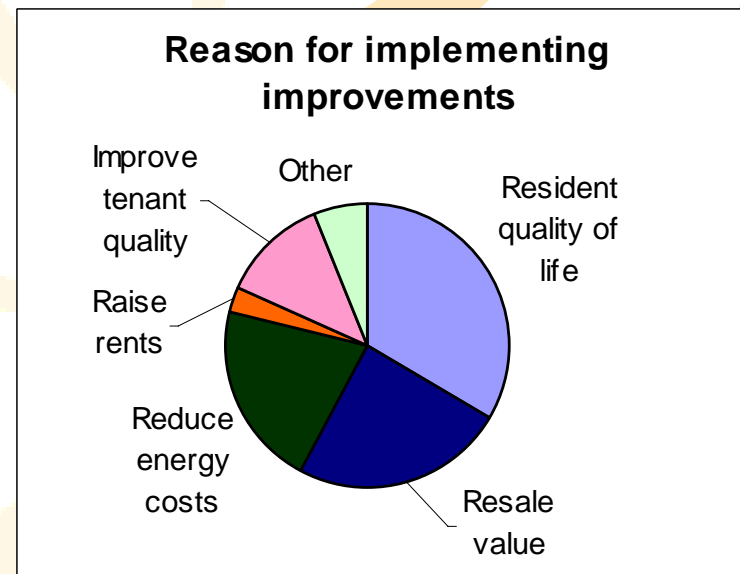
Window upgrades	91%
Ceiling insulation	53%
Wall insulation	18%
Floor insulation	38%
Duct sealing	6%
Exterior door upgrade	29%
High-efficiency water heaters	12%
High-efficiency clothes washers	9%
High-efficiency common area lighting	15%
High-efficiency heat pump	0%
High-efficiency gas furnace	3%
High-efficiency boiler	3%
Solar hot water	0%

Not a statistically significant sample

Reasons for Participation



- Financial concerns
- Investment timeframe
- Quality of life
- Competition
- Tenant retention



Multifamily Home Energy Solutions

- Qualifying measures include clothes washers, tankless water heaters, insulation, windows, lighting and HVAC systems
 - Includes commercial-sized equipment such as boilers and water heaters
- Majority of incentive dollars have been toward window replacement projects
- Lighting has quickest payback and greatest savings

Multifamily Home Energy Solutions

- Building assessments
 - Visual assessment of property
 - Action items identified that qualify for incentives
 - Quantified estimated savings – energy & money
- Assistance with Oregon Department of Energy Business Energy Tax Credit application
- 100% of projects inspected after work is completed

Lighting Tool

Estimated Energy Savings and Energy Trust of Oregon Incentive Package

Based on the lighting retrofit proposal that has been prepared, we have estimated the energy savings, and the incentives that would be available from the Energy Trust of Oregon for this proposed project.

Estimated Annual Energy Savings:	143,250 kWh
Estimated Annual Cost Savings:	\$ 10,441 per year
Estimated Energy Trust of Oregon Incentive:	\$ 17,110
Estimated Installation Cost:	\$ 78,700

Based on your proposed retrofit and estimated installation cost, we show the following financial analysis:

Estimated Installation Cost:	\$ 78,700
<i>minus Energy Trust of Oregon incentive:</i>	\$ (17,110)
<i>minus BETC (tax credit calculated at 35% of project cost)*:</i>	\$ (27,545)
Net Installation Cost:	<u>\$ 34,045</u>
Energy Savings Payback (in years):	3.3
<i>% of installed cost paid for by incentives:</i>	<u>56.7%</u>
Return on Investment (ROI):	30.7%

* The BETC tax credit (up to 35% of installed cost) is available through the Oregon Department of Energy. For eligibility, call 1-800-221-8035 or go to:

<http://egov.oregon.gov/ENERGY/CONS/BUS/BETC.shtml>

Challenges in Existing Multifamily

- Property owners' primary concern – bottom line return on investment
- Who pays the utility bill?
- Aesthetics and “curb appeal”
- Reaching the property owner
- Occupancy Rates

Existing Opportunity

- Large inventory of properties built during 1970s and 1980s
- 113,000 units in Portland metro area
 - 10-15% market penetration
- Plenty of opportunity for energy efficient upgrades
- Dissemination of information

What is Working

- Special promotions
- New products and pilot incentives
 - Whispergreen exhaust fans
 - Ductless heat pumps
- Outreach in the real estate community
- Energy efficiency education and awareness
- Point of purchase incentives

Market Transformation Opportunities

- Tenant and landlord education
- Holistic building approach
 - Beyond windows
- Common area lighting
- Clothes washers/Laundromat outreach
- Ductless heat pumps
- Collaboration between Energy Trust and utilities
- Relationship with property owners, management companies, asset managers, financial institutions and trade allies

Building Value in Multifamily Investments

MORE Program

- Engage market actors/professionals active in the MF sector to generate awareness of energy efficiency, renewable projects, and Energy Trust benefits
 - brokers, appraisers, property managers, property owners, asset managers, trade allies, product vendors and commercial lenders
- 2009 Seminar Series
 - Topics include GreenStreet Lending, property values, building science, and local policy changes

Building Value in Multifamily Investments

- Opportunity to Participate
 - No cost building assessments
 - Measures Incentives, BETC, and Greenstreet Loans
 - Access to exclusive information and events
 - Access to specialized trade allies
- Goals
 - 20% of overall HES savings goal for 2009
 - Move toward account management program design
 - Improved data tracking to gauge performance

GreenStreet Loan Products

- Commercial Real Estate Improvement Loan — borrow from \$5,000 to \$100,000, with a term up to 15 years.
- Business Term Loan — borrow from \$5,000 to \$100,000, with a term up to 7 years.

www.greenstreetloan.com/