

# Energy Efficiency & Renewable Resources are Good (for) Business

September 2009





# Agenda



- Welcome and introduction
- Energy Trust overview
- Program Overviews:
  - New Buildings
  - Existing Buildings
  - Renewables
- Contact information
- Questions and answers



# Our mission

To change how Oregonians produce and use energy by investing in efficient technologies and renewable resources that:

- Develop new sources of clean energy
- Help Oregonians manage energy costs
- Stimulate the economy
- Protect the environment





# Energy Trust provides:

- Energy efficiency and renewable energy services for your home and business
- Information to help you decide what to do
- Cash incentives and rebates to encourage you to take action





# Eligibility

- The project site must be located in Oregon
- Energy Trust serves customers of:
  - *Portland General Electric*
  - *Pacific Power*
  - *NW Natural*
  - *Cascade Natural Gas*
- Customer must pay or plan to pay the Public Purpose charge
- The project must be a commercial, industrial, manufacturing or institutional building

Why Efficiency?



# Fun facts about energy

- From 1977 to 2007, California's energy efficiency policies created nearly 1.5 million jobs while eliminating fewer than 25,000
- Efficiency lowers the cost of acquiring new energy resources; A 5% improvement in U.S. electric efficiency would prevent 90 large coal-fired power plants from having to be built over the next 20 years
- U.S. electrical generators lose more heat energy than Japan uses to run its entire economy
- For every 30 million kilowatt-hours of energy saved, 40 to 100 jobs are created



# How can Energy Trust help you?

- Since 2002, Energy Trust has helped Oregon utility ratepayers save more than \$440 million in energy costs
- In 2008, customers saved \$144 million. How much could you save?
- Investment in energy services supports the local economy
  - Our trade allies are located statewide—your local contractors will benefit from your projects
  - Energy service investments are local investments
- Energy Trust has helped avoid 3 million tons of carbon emissions, helping Oregon make progress toward the climate goals that reinforce our high quality of life



# Saved energy is money in the bank

Cutting a building's energy use by 30 percent =

- 3 percent increase in rental income OR
- 5 percent increase in net operating income

Improving lighting and comfort boosts productivity and sales, reduces absenteeism

Energy management translates to higher reliability for equipment and processes



# Commercial & Industrial Business Energy Solutions

Existing Buildings  
New Buildings



# Existing Buildings



- On-site energy audit
- Energy Studies
- Incentives for energy-efficient improvements
- Contractor referrals
- Post-installation assistance

# Blue Mountain Community College Lighting Project



- 555 fixtures replaced
- Total project costs: \$38,175
- Energy Trust Incentives: \$10,400
- Oregon Business Energy Tax Credits (received as a pass-through): \$11,680

## Annual Savings:

- 154,833 kilowatt hours
- \$8,208 in energy costs



# New Buildings

- Incentives for new construction, major renovation & tenant build-out projects
- Incentives for green building projects, including: LEED<sup>®</sup>, ENERGY STAR<sup>®</sup> & Net Zero projects
- As of July 1, up to \$500,000 per project for energy-efficient equipment & systems
- Up to \$25,000 for technical assistance
- Up to \$40,000 for commissioning





# Walla Walla Memorial Hospital



- High-efficiency chillers used as heat pumps
- R-19 wall and R-30 roof insulation
- High-efficiency lamp fixtures with electronic ballasts
- Compact fluorescent lamps, 9- to 26-watt, hard wired
- Project cost: \$321,253
- Energy Trust incentives: \$77,792
- Oregon Business Energy Tax Credit: \$81,471

## Annual Savings:

- 817,939 kilowatt hours
- \$52,000 in energy costs

# Renewable Energy

Solar Electric  
Solar Water Heating



# Why solar, why now?

Green public awareness:

- Global warming, carbon footprint
- Oregon Legislation, Federal incentives
  - 50% Business Energy Tax Credit
  - 1.5% Set Aside for solar
- Solar industry marketing push
- Third Party Ownership
- Predictable, reduced energy Cost





# Solar electric incentives

## Energy Trust

- \$1.25/watt for fewer than 30,000 watts
- \$1.25-\$1.00/watt for 30,000 to 100,000 watts
- Maximum incentive (100,000 watts): \$100,000



State: 50% BETC (Over 5 years, 10% per year)

- 33.5% pass-through, Maximum Eligible Cost
- 5-year depreciation

Federal: 30% ITC, (10% end of 2008 unless extended)

- 5-year depreciation (MACRS)



# City of Pendleton



- 100 kW system on roof of Water Treatment Plant building
- 200 kW ground-mounted system at second WWTP facility
- Both installed with third-party ownership model
- \$400,000 total incentives from Energy Trust
- 200 kW system received Pacific Power Blue Sky grant



# Typical uses for solar water heating

- Recreation centers
- Housing
- Restaurants/  
Food service





# Solar water heating incentives

## Energy Trust

- Custom, standard, multifamily and existing: \$0.40 per kWh, \$6.00/therm
- LEED-NC Track: \$0.30/kWh, \$5.20/therm
- Incentive based on calculated solar water heating energy savings

State: 50% BETC (Over 5 years, 10% per year)

- 33.5% pass-through, Maximum Eligible Cost
- 5-year depreciation

Federal: 30% ITC, (10% end of 2008 unless extended)

- 5-year depreciation (MACRS)

# Solar pool heating incentives

## Energy Trust

- Custom, standard, multifamily, existing: \$1.50/therm
- LEED-NC Track: \$0.70/therm
- Incentive based on calculated solar pool heating energy savings

State: 50% BETC (Over 5 years, 10% per year)

- 33.5% pass-through, Maximum Eligible Cost
- 6-year depreciation (MACRS)

Federal: **NONE**





# Hood River Aquatics Center

- 2,300 square feet of solar collectors
- System cost: \$60,377 when completed
- Energy Trust incentive: \$5,940
- Therm Savings: 3,960





# Thank you!



1-866-ENTRUST  
[www.energytrust.org](http://www.energytrust.org)

