

851 SW Sixth Avenue, Suite 1200 Portland, Oregon 97204

I-866-ENTRUST (368-7878) www.energytrust.org



# INVESTING

**OREGON'S ENERGY FUTURE** 

2004 Annual Report



# Energy Trust has been working for Oregon families and businesses since we opened our doors in 2002.

Our energy efficiency and renewable power programs have helped 86,000 households and 3,200 businesses invest in improvements to manage energy costs, enhance comfort and boost productivity in more than 200 communities.

These investments deliver immediate and long-term benefits. Besides giving Oregonians a hedge against future power price increases, they also help fuel our state's economy, strengthen businesses, keep Oregonians employed and protect our environment.

Energy efficiency is a wise investment. Saving one kilowatt of electricity or one therm of natural gas through conservation costs less than half as much as generating that same power in a fossil-fuel power plant. A typical home or business can trim at least 20 percent of its energy use with energy-efficient appliances or equipment and energy-saving measures. Energy Trust programs provide financial support for taking these steps.

We're also making it more affordable for utilities, businesses and homeowners to use renewable energy. By helping Oregonians harness power from the sun, wind and other clean resources, we capture many benefits, from lower long-term energy costs to cleaner air.

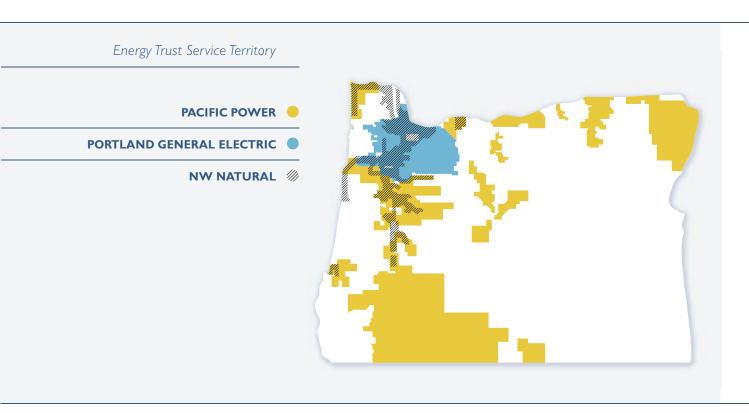
In 2004, we built upon our start-up efforts and continued to make strong inroads into meeting our long-term energy efficiency and renewable energy goals. Thus far, we've helped save and produce enough energy to power nearly 50,000 homes each year. We're proud of what we've accomplished so far.

In 2005, we will remain flexible, innovative and efficient in delivering greater energy savings and more renewable power to the Oregonians we serve. With the help of our trade allies, utility partners and many collaborating organizations, our eyes are on the prize: an environmentally sound and sustainable energy future for Oregon.

Please join us,

Margie Harris
Executive Director





# ENERGY TRUST'S MISSION

To change how Oregonians produce and use energy. Through innovative programs, we invest in efficient technologies and renewable resources that:

Develop new sources of clean energy

Help Oregonians lower their energy bills

Stimulate the economy

Protect the environment

# **Creating Oregon's Energy Future**

The Energy Trust began work in March 2002 as an independent nonprofit organization dedicated to energy efficiency and renewable energy production. We serve and are funded by Oregon customers of Pacific Power, Portland General Electric and NW Natural.

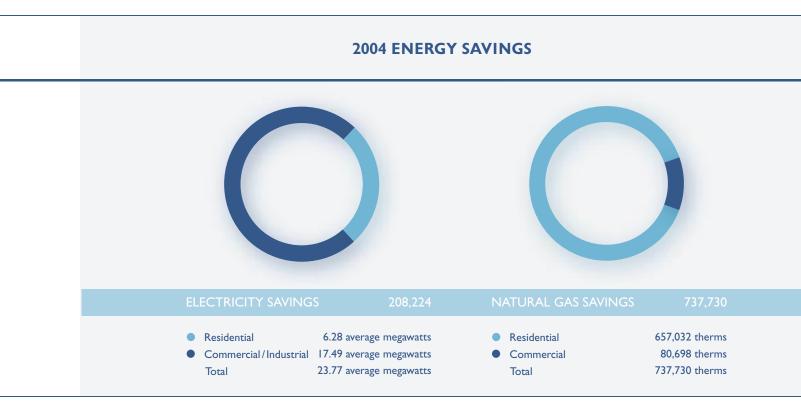
#### **GOALS**

The Energy Trust is working to fulfill the State of Oregon's vision to meet future energy needs through environmentally sound, clean energy sources. We are investing in energy efficiency and renewable energy sources to strive toward the following goals by 2012:

Save 300 average megawatts of electricity (enough to power two cities the size of Bend)

Save 19 million annual therms of natural gas (enough to serve 26,000 homes)

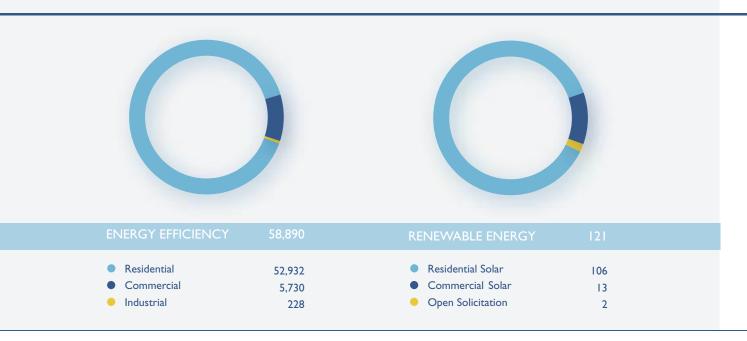
Meet 10 percent of Oregon's energy requirements through renewable energy (450 average megawatts)



# **2004 Accomplishments**

- ✓ Helped nearly 29,000 Oregon homes and businesses save energy and money
- ✓ Saved and generated enough electricity to power 17,000 homes
- ✓ Saved enough natural gas energy to fuel over 1,000 gas-heated homes
- ✓ Leveraged resources by collaborating with our utility partners, organizations with similar missions and utility customer advocates

# **2004 PROJECTS COMPLETED**



- ✓ Powered the growth of nearly 380 Oregon businesses and strengthened the state's economy through our Trade Ally Network
- ✓ Continued progress toward 2012 energy saving and energy generation goals
- ✓ Improved air quality by offsetting 11,000 tons of pollution generated by conventional fuels, the equivalent of 24 million miles not driven



Building Efficiency Investor		
Annual Energy Savings	138,651 kWh	
Energy Trust Incentive	\$14,667	

# Michael Cripe - BOYS & GIRLS CLUB

Today, the four gymnasiums at the Boys and Girls Club of Albany are well-lit when they need to be, but never lit when empty. High-efficiency tubular fluorescent fixtures, which are turned on and off by occupancy sensors, now help conserve the nonprofit youth center's valuable resources.

# **Renewable Energy**

Oregon homeowners, businesses and public agencies invested in the following renewable power projects with help from Energy Trust:

#### 106 home solar electric systems

13 commercial solar electric systems, including demonstration projects at two Portland fire stations and schools in Mosier and Bend

A renewable-based combined heat and power facility at the Douglas County Forest Products stud mill in Winchester, Oregon

In addition, Energy Trust worked with Portland General Electric to secure a 75 megawatt addition to the Klondike wind project near Wasco, Oregon, which will come on line in 2005.



Solar Energy Investor		Nathan Good - ARCHITECT
Annual Energy Generated	3,967 kWh	The owners of a new sustainably designed Cannon Beach home will never pay an energy bill.  Their home is expected to generate more energy than it uses thanks to its energy-efficient
Energy Trust Incentive	\$12,750	design, a solar water heating system and a 5-kilowatt solar electric array. In 2005, the home was named the National Association of Home Builders' Custom Green Project of the Year.

# **Renewable Energy Programs**

## Utility Scale Generation

Multiyear efforts working with electric utilities to develop large-scale renewable energy projects

106 13
households businesses

#### Solar Electric

Cash incentives for installation of solar electric systems and referrals to qualified solar contractors.

2 projects completed

#### **Open Solicitation**

Incentives for innovative applications of renewable technologies; designed for projects not eligible for other incentives.



# **Energy Efficiency**

2004 Savings
23.77 average megawatts
+ 737,730 annual therms

# **RESIDENTIAL**

Oregonians who participated in Energy Trust programs are saving energy at home thanks to:

3,139	home energy reviews
24,936	compact fluorescent light bulbs
3,868	energy-efficient clothes washers
1,153	energy-efficient dishwashers
19,538	home improvement projects, including duct sealing, insulation, high-efficiency heating and energy-efficient windows
27	solar water heating systems



Solar Electric Investor	
Annual Energy Generated	6,000
Energy Trust Incentive	\$45,000

# Mark Cherniak - MOSIER SCHOOL

A 4.3 kilowatt solar array on the grounds of Mosier Community School now generates about 15% of the school's electricity. The solar demonstration project, which consists of two pole-mounted arrays, contributes to the school's science curriculum and gives students a chance to monitor and measure how the system works.

# **COMMERCIAL**

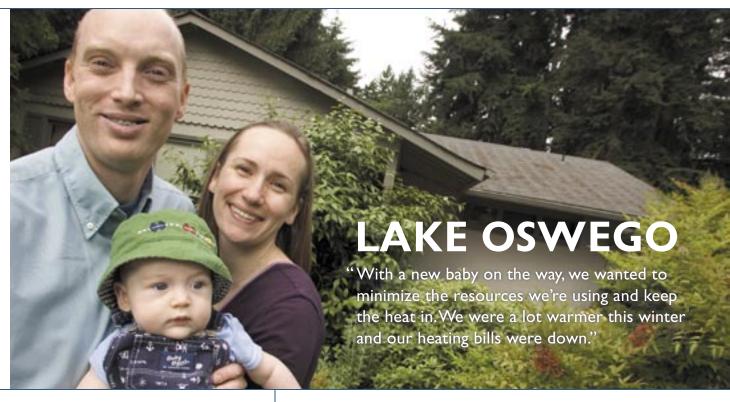
Oregon businesses that participated in Energy Trust programs are operating more efficiently as a result of:

- energy-efficiency projects, including energy-efficient lights, HVAC equipment and controls
  - 12 highly efficient new commercial buildings
  - 4 solar water heating systems

#### **INDUSTRIAL**

Oregon manufacturing firms that participated in Energy Trust programs are more competitive because of:

energy-saving projects, including a major project that will help Blue Heron Paper Company save over 106 million kilowatt hours annually



Home	Fnerov	Savings	Investor
1 101110	LITCIES	Juvilles	1111 63601

Annual Energy Savings 760 kWh 699 therms

Energy Trust Incentive \$638

# Dan and Lea Sturges - HOMEOWNERS

A Home Energy Review convinced these homeowners that an investment in insulating the floor, attic and ducts, offset by Energy Trust incentives, would make a difference in their home's comfort and their energy bills.

# **Energy Efficiency Programs**

22,677
Oregonians served

29,957
Oregonians served

**26**Oregon homes built

#### Home Energy Savings

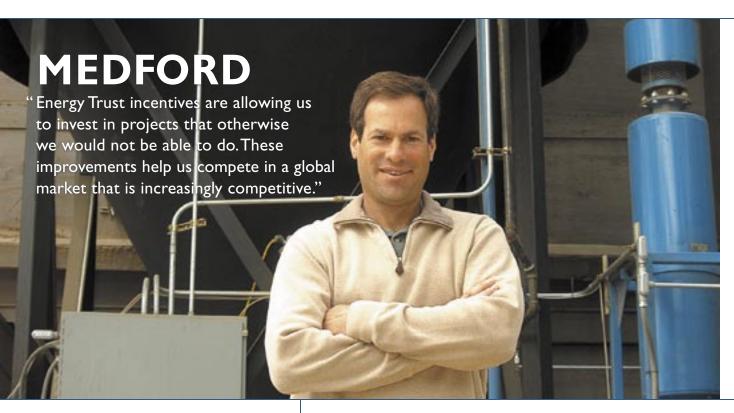
Home Energy Reviews, energy-saving recommendations, cash incentives for improvements and referrals to qualified contractors. Measures covered include insulation, duct sealing, windows and energy-efficient heating systems in single-family and multifamily homes.

#### **Efficient Home Products**

Cash incentives to purchase ENERGY STAR® qualified efficient appliances and lighting. Products covered in 2004 included clothes washers, dishwashers and compact fluorescent light bulbs.

#### Efficient New Homes

Energy-efficient new homes that are ENERGY STAR qualified for new home buyers; certification and marketing assistance for builders.



# **Production Efficiency Investor**

Annual Energy Savings 386,458 kWh

Energy Trust Incentive \$51,950

# Brad Beavers - TIMBER PRODUCTS CO.

Timber Products installed a 100-horsepower energy-efficient baghouse with high-efficiency motors at its Medford particleboard production facility. The system allows the company to reduce long-term operating costs, reduce particulate emissions and capture 296,800 pounds of dust for recycling back into products each year.

# **Energy Efficiency Programs**

642

Oregon businesses served

## **Building Efficiency**

Energy surveys, cash assistance for energy-efficient improvements, contractor referrals, project assistance and post-installation assistance (existing buildings).

12

Oregon businesses served

New Building Efficiency

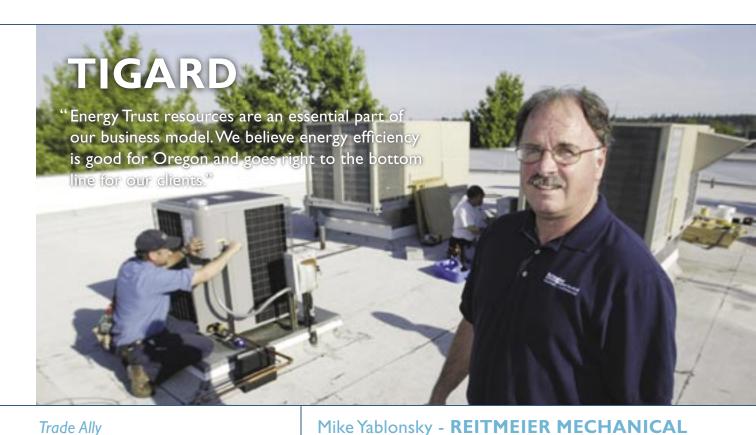
Financial incentives for high-efficiency equipment, technical assistance and other services for new commercial buildings and major renovations.

228

Oregon businesses served

**Production Efficiency** 

Technical assistance and incentives to improve the efficiency of manufacturing processes, water and wastewater treatment and agriculture.



Annual Energy Savings	3,151,755 kWh
(All Customers)	18,704 therms
Energy Trust Incentives	<b>\$</b> 357 973

(All Customers)

Reitmeier Mechanical, a commercial HVAC contractor, has been a member of the Energy Trust Trade Ally Network since it began in 2003. The company sees the benefits of recommending high-efficiency equipment to help their customers reduce energy costs and offering them Energy Trust incentives to make the investment pencil out.

# **Energy Efficiency Programs**

\$357,973

27 households businesses

5,018 traffic signals installed

245 homes businesses Solar Water Heating

Cash incentives, service and support for solar water heating systems.

Light Emitting Diode (LED) Traffic Signals

Cash incentives for communities replacing green incandescent traffic signals with energy-efficient LED bulbs.

**Utility Transition** 

Energy-efficiency assistance programs operated by Portland General Electric and Pacific Power while Energy Trust programs came online; all projects completed in 2004.

# 2004 Financial Highlights

# **FUNDS RECEIVED IN 2004**

Public purpose funds	\$50,642,826
Other income	491,730
Total funding	\$51,134,556

#### **EXPENSES**

Energy efficiency program expenses	\$37,637,076
Renewable energy program expenses	2,767,623
Administrative expenses	2,463,075
Total expenses	\$42,867,774

NET ASSETS AT BEGINNING OF YEAR \$28,381,518
INCREASE IN NET ASSETS IN 2004 8,266,782

NET ASSETS AT END OF 2004 \$36,648,300



Seated left to right: Greg Stiles, Diane Ferington, Margie Harris, Tom Beverly, Thuong Ho, Adam Serchuk, Cheryl Gibson, Maureen Quaid.

Standing, row one: Linda Rudawitz, Jan Schaeffer, Fred Gordon, Kacia Brockman, Tara Crookshank, Elaine Prause, Kathleen Cannon, Denise Fragos, Brooke Nelson, Anna Parry, Peter West, Noemi Hicks, Spencer Moersfelder, Mary Weincke, Andy Saleh. Standing, back row: Sue Meyer Sample, Steve Lacey, Christine Bartley, Nancy Klass, Christian Conkle, Char Rollier, Kevin Whilden, Michael Laney, Karl Whinnery, Alan Cowan, Tony Dennis.

Not pictured: Ben Bronfman, John Kinnune, John Volkman.

# The Staff at Energy Trust of Oregon

We manage our programs with a small staff, deliver the majority of our programs through contracts with service providers, and provide services through a network of several hundred small business trade allies around the state. Our work is shaped by two advisory councils and overseen by a volunteer citizen board of directors.

#### 2004 BOARD AND ADVISORY COUNCILS

#### **Board of Directors**

Steven Schell, President, Black Helterline

Cheryl Perrin, Vice-President, Campaign for America

Rick Applegate, Secretary, City of Portland, Bureau of Environmental Services

 $\textbf{John Klosterman,} \textit{Treasurer,} \; \textit{Rejuvenation,} \; \textit{Inc.}$ 

Jason Eisdorfer, Citizens' Utility Board of Oregon

Tom Foley, Tom Foley Consultants

Julie Hammon, Sage Insurance Center

Debbie Kitchin, InterWorks, LLC

Rick Kroon, Intel Corporation

Vickie Liskey, Liskey Farms

John Reynolds, University of Oregon

John Savage, Ex-officio, Oregon Public Utility Commission

William Nesmith, Special Advisor, Oregon Department of Energy

#### Conservation Advisory Council

Susan Anderson, Portland Office of Sustainable Development

Steve Bicker, NW Natural

Jeff Bissonnette, Fair and Clean Energy Coalition

Julie Brandis, Associated Oregon Industries

Carol Brown, Portland General Electric

Gary Curtis, D&R International

Suzanne Dillard, Oregon Department of Energy

Thomas Eckhart, UCONS LLC

Tom Eckman, Northwest Power Planning Council

Terry Egner, Micro Grid

Jason Eisdorfer, Energy Trust Board of Directors

Margie Gardner, Northwest Energy Efficiency Alliance

Don Jones, Pacific Power

Ken Keating, Bonneville Power Administration

**Rick Kroon,** Energy Trust Board of Directors

Dean Lemman, North Coast Electric Company

Mat Northway, Eugene Water & Electric Board

Paul Olson, Oregon Remodelers Association

Steve Weiss, Northwest Energy Coalition

Stan Price, Northwest Energy Efficiency Council

John Reynolds, Energy Trust Board of Directors

# Renewable Resources Advisory Council

 $\textbf{Rick Applegate,} \ \textbf{Energy Trust Board of Directors}$ 

Doug Boleyn, Consultant

Debra Malin, Bonneville Power Administration

Angus Duncan, Bonneville Environmental Foundation

Janet Fairchild, Oregon Public Utility Commission

Thor Hinkley, Portland General Electric

Jeff King, Northwest Power Planning Council

Jack Breen, Oregon Public Utility Commission

Justin Klure, Oregon Department of Energy

Troy Gagliano, Renewable Northwest Project

Jim Maloney, Eugene Water & Electric Board

David McClain, Geothermal Consultant

John Reynolds, Energy Trust Board of Directors

Virinder Singh, Pacific Power

Lisa Schwartz, Oregon Public Utility Commission

Frank Vignola, University of Oregon