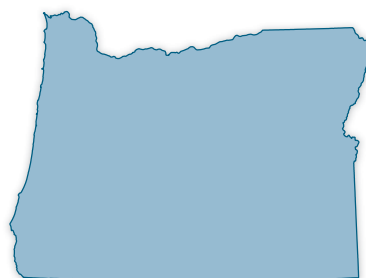




Department of Energy Recovery Act State Memos

Oregon



For questions about DOE's Recovery Act activities, please contact the DOE Recovery Act Clearinghouse:
1-888-DOE-RCVY (888-363-7289), Monday through Friday, 9 a.m. to 7 p.m. Eastern Time
<https://recoveryclearinghouse.energy.gov/contactUs.htm>.

All numbers and projects listed as of June 1, 2010

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American Recovery and Reinvestment Act



U.S. DEPARTMENT OF ENERGY • OREGON RECOVERY ACT SNAPSHOT

Funding for selected DOE projects: \$267.5 million

DOE Recovery Act projects in Oregon: 54

Clean energy tax credits and grants: 40

For total Recovery Act jobs numbers in Oregon go to www.recovery.gov

Oregon has substantial natural resources, including wind, geothermal, biomass, and hydroelectric power. **The American Recovery & Reinvestment Act (ARRA)** is making a meaningful down payment on the nation's energy and environmental future. The Recovery Act investments in Oregon reflect a broad spectrum of opportunities, from energy efficiency and the smart grid to advanced fuels, battery manufacturing, and geothermal and solar power. Through these investments, Oregon's businesses, non-profits, and local governments are creating quality jobs today and positioning Oregon to play an important role in the new energy economy of the future.

EXAMPLES OF OREGON FORMULA GRANTS

Program	State Energy Program	Weatherization Assistance Program	Energy Efficiency Conservation Block Grants	Energy Efficiency Appliance Rebate Program
Award (in millions)	\$42.2	\$38.5	\$34.5	\$3.6
	The Oregon Department of Energy has been granted \$42.2 million in State Energy Program funds to invest in state-level energy efficiency and renewable energy priorities.	The Oregon Department of Housing & Community Services has been granted \$38.5 million in Weatherization Assistance Program funds to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions, and saving money for Oregon's low-income families. Over the course of the Recovery Act, Oregon expects to weatherize more than 4,600 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce.	Thirty-four communities in Oregon were granted a total of \$34.5 million for Energy Efficiency and Conservation Block Grants (EECBG) to develop, promote, implement, and manage local energy efficiency programs.	The Oregon Department of Energy has been granted \$3.6 million for the Energy Efficient Appliance Rebate Program, which offers consumer rebates for purchasing certain ENERGY STAR appliances. These energy efficient appliances reduce energy use and save money for families, while helping the environment and supporting the local economy.

EXAMPLES OF OREGON COMPETITIVE GRANTS, TAX CREDITS AND LOANS

Award	\$ 102.2 million	\$82.2 million	\$246.3 million	\$39.6 million
	U.S. Geothermal, Inc. , was offered a \$102.2 million conditional commitment for a loan guarantee to construct a 22 megawatt geothermal power project in Malheur County, in southeastern Oregon.	SolarWorld Industries America, Inc. , in Hillsboro has been awarded a clean energy manufacturing tax credit of \$82.2 million to expand its existing 100 MW solar photovoltaic manufacturing plant to 500 MW.	Oregon received thirty-seven 1603 payments for renewable energy generation totaling \$246.3 million , which include solar, wind, and biomass projects. For example, FPL Energy Stateline II, Inc. , received \$55.4 million for a wind energy project.	Daimler Trucks North America, LLC , received \$39.6 million to develop and demonstrate various energy efficient vehicle technologies.

Funding Allocation Table (Figure 1)

Total dollar amounts in this document are accurate as of June 1, 2010. Please note that Recovery Act Programs are ongoing and the dollar amounts are subject to change. Recipient locations are based on project sites rather than recipients' headquarters locations.

Recovery Act Pillar	Flagship Program Names & Funding Type ¹	Number of Selections	Selected Amount (in millions) ²
Energy Efficiency	<i>Weatherization Assistance Program (F)</i>	1	\$38.5
	<i>State Energy Program (F)</i>	1	\$42.2
	<i>Energy Efficiency and Conservation Block Grant (F)</i>	34	\$34.5
	<i>Energy Efficient Appliance Rebate (F)</i>	1	\$3.6
	<i>Additional Programs (F)</i>	1	\$0.01
	TOTAL Energy Efficiency	38	\$118.8
Renewable Energy	<i>Solar (CM)</i>	1	\$0.4
	<i>Geothermal (CM)</i>	2	\$5.8
	TOTAL Renewable Energy	3	\$6.2
Electric Grid	<i>Smart Grid Investment and Demonstrations Project (CM)³</i>	2	\$29.5
	<i>State and Local Energy Assurance and Regulatory Assistance (F)</i>	4	\$1.8
	<i>Smart Grid Workforce Training (CM)</i>	1	\$2.5
	TOTAL Electric Grid	7	\$33.8
Transportation	<i>Advanced Battery Manufacturing (CM)</i>	1	\$21.0
	<i>Transportation Electrification (CM)</i>	1	\$22.2
	<i>Advanced Fuels (CM)</i>	1	\$25.0
	<i>Additional Programs (CM)</i>	1	\$39.6
	TOTAL Transportation	4	\$107.8
Science and Innovation	<i>Small Business Research (SBIR/STTR) (CM)</i>	1	\$0.1
	<i>Additional Programs</i>	1	\$0.8
	TOTAL Science and Innovation	2	\$0.9
TOTAL - DOE Programs⁴		54	\$267.5
Tax Credits/ Payments ⁵	<i>Payments for Renewable Energy Generation in Lieu of Tax Credits (1603)</i>	37	\$246.3
	<i>Clean Energy Manufacturing Tax Credits (48C)</i>	3	\$87.2
	TOTAL Tax Incentives	40	\$333.5
TOTAL - DOE/Treasury + DOE		94	\$601.0
¹ F=Formula Grant, CM=Competitive Grant, C=Contract			
² "Selected" indicates DOE has selected a potential funding recipient and is in the process of negotiating an agreement. No final agreement has been reached.			
³ Projects may cross state boundaries, signifies HQ location.			
⁴ Total does not include administrative funds.			
⁵ Jointly administered by DOE and the U.S. Department of Treasury.			

ENERGY EFFICIENCY – 38 projects totaling \$118.8 million

Helping millions of American families cut utility bills by making homes and appliances more energy efficient, expanding the home efficiency industry in sales and manufacturing. For more information, visit <http://www.energy.gov/recovery/energyefficiency.htm>.

Award(s): \$38.5 million, Weatherization Assistance Program (WAP)

Location: Statewide

The Oregon Department of Housing & Community Services received \$38.5 million in Weatherization Assistance Program funds to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions and saving money for Oregon's low-income families. Over the course of the Recovery Act, Oregon expects to weatherize more than 4,600 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce. This project is augmenting the existing weatherization program to achieve the nationwide goal of one million newly weatherized homes per year. To attain this goal, the state is expanding workforce education, increasing maximum per home expenditure, raising eligibility standards and increasing funding for training programs, as needed. This program will eventually expand into all U.S. territories. This project expects to weatherize over 525,000 homes nationally, which requires significant growth within the weatherization network.

Award(s): \$42.2 million, State Energy Program (SEP)

Location: Statewide

The Oregon Department of Energy received \$42.2 million in State Energy Program funds to invest in state-level energy efficiency and renewable energy priorities. Oregon will use its Recovery Act SEP funding to improve energy efficiency in multiple sectors within the state, develop renewable energy resources and ensure environmental protections through the established SEP. To most effectively use its existing expertise and programs, the state is focusing on public buildings. This provides an opportunity for government to take a leadership role in demonstrating innovations in energy efficiency and renewable energy technologies.

Award(s): 34 totaling \$34.5 million, Energy Efficiency and Conservation Block Grant Program (EECBG)

Location: Statewide

Recipients: Beaverton, Bend, Burns Paiute Tribe, Albany, Medford, Salem, Clackamas, Lower Umpqua and Siuslaw Indian Confederated Tribes of Coos, The Lower Umpqua and Siuslaw Indian Confederated Tribes of Grand Ronde Indians, Confederated Tribes Of Siletz Indians, The Confederated Tribes of The Umatilla Indian Reservation, Confederated Tribes of Warm Springs Reservation of Oregon, Coquille Indian Tribe Incorporated, Corvallis, Lane, Washington, Cow Creek Band Of Indians, Deschutes County Board Of Commissioners, Incorporated, Douglas, Eugene, Gresham, Hillsboro, Jackson, Josephine, Keizer, Klamath Tribe, Lake Oswego, Marion, Oregon Department Of Energy, Portland, Springfield, Tigard, Umatilla, Yamhill

Thirty-four communities in Oregon received a total of \$34.5 million for the Energy Efficiency and Conservation Block Grants Program (EECBG) to develop, promote, implement and manage local energy efficiency programs. One of these grants, totaling \$30,000, is shared by Oregon and at least one other state.

This project assists states, U.S. territories, Indian tribes, counties and cities to develop, promote, implement and manage localized energy efficiency programs through individual program grants. The project funds programs which reduce fossil fuel emissions in a manner that is environmentally sustainable and maximizes cost savings, reduces the total energy use of eligible entities and improves energy efficiency in the transportation, building and other appropriate sectors. An example is:

- **Marion County - \$609,000**

These funds are being used to conduct a county-wide audit of public buildings to determine current energy use and recommend efficiency improvements. In addition, lighting upgrades are being completed at the courthouse parking garage. The county is implementing a new web-based utility tracking system to more efficiently manage utilities and budgets, as well as identify facilities and building systems where the greatest potential savings may be realized.

Award(s): \$3.6 million, Energy Efficient Appliance Rebate Programs

Location: Statewide

The Oregon Department of Energy received \$3.6 million for the Energy Efficient Appliance Rebate Program, which offers consumer rebates for purchasing certain ENERGY STAR® appliances. These energy efficient appliances reduce energy use and save money for families, while helping the environment and supporting the local economy.

This funding assists state-level rebate programs by paying up to 50 percent of the administrative costs of establishing and executing these types of programs. Though states and territories determine the appliances which apply, these typically include clothes washers, dishwashers, refrigerators, freezers, room air conditioners and water heaters.

Award(s): \$7,000, Enhance and Accelerate Federal Energy Management Program (FEMP)

Location: Statewide

EMP2, Incorporated received \$7,000 to provide technical assistance for federal agencies..

RENEWABLE ENERGY – 43 projects totaling \$339.7 million

Developing the clean renewable resources in order to double our supply of renewable energy and boost domestic renewable manufacturing capacity. For more information, visit <http://www.energy.gov/recovery/renewableenergy.htm>.

Award(s): 37 payments totaling \$246.3 million from DOE / Treasury, 1603 Payments for Renewable Energy Generation

Location: Statewide

*For current number of 1603 awards, see the weekly update at <http://www.treas.gov/recovery/1603.shtml>

- **FPL Energy Stateline II, Inc, Athena - \$55.4 million**

FPL Energy Stateline II, Inc., in Athena received \$55.4 million for a wind project.

- **Wheat Field Wind Power Project, LLC, Arlington - \$47.7 million**

Wheat Field Wind Power Project, LLC, in Arlington received \$47.7 million for a wind project.

- **Hay Canyon Wind, LLC, Moro - \$47.1 million**
Hay Canyon Wind, LLC, in Moro received \$47.1 million for a wind project.
- **Pebble Springs Wind, LLC, Arlington - \$46.5 million**
Pebble Springs Wind, LLC, in Arlington received \$46.5 million for a wind project.
- **Threemile Canyon Wind I, LLC, Boardman - \$7.3 million**
Threemile Canyon Wind I, LLC, in Boardman received \$7.3 million for a wind project.
- **Four Corners Windfarm, LLC, Echo - \$7.1 million**
Four Corners Windfarm, LLC, in Echo received \$7.1 million for a wind project.
- **Four Mile Canyon Windfarm, LLC, Echo - \$6.8 million**
Four Mile Canyon Windfarm, LLC, in Echo received \$6.8 million for a wind project.
- **Sand Ranch Windfarm, LLC, Echo - \$6.4 million**
Sand Ranch Windfarm, LLC, in Echo received \$6.4 million for a wind project.
- **Oregon Trail Windfarm, LLC, Echo - \$6.4 million**
Oregon Trail Windfarm, LLC, in Echo received \$6.4 million for a wind project.
- **Pacific Canyon Windfarm, LLC, Echo - \$5.3 million**
Pacific Canyon Windfarm, LLC, in Echo received \$5.3 million for a wind project.
- **Ward Butte Windfarm, LLC, Echo - \$4.3 million**
Ward Butte Windfarm, LLC, in Echo received \$4.3 million for a wind project.
- **Wagon Trail, LLC, Echo - \$2.1 million**
Wagon Trail, LLC, in Echo received \$2.1 million for a wind project.
- **SRI Investments, LLC, Portland (9) - \$1.7 million**
SRI Investments, LLC, in Portland received nine awards totaling \$1.7 million for solar electricity projects.
- **Big Top, LLC, Echo - \$1.1 million**
Big Top, LLC, in Echo received \$1.1 million for a wind project.
- **SunE GIL Holdings, LLC, Hillsboro - \$382,000**
SunE GIL Holdings, LLC, in Hillsboro received \$382,000 for a solar electricity project.
- **Ann P. Edlen Family Trust, Hillsboro - \$246,000**
Ann P. Edlen Family Trust in Hillsboro received \$246,000 for a solar electricity project.
- **Bio Energy Enterprises, LLC, Beaver - \$143,000**
Bio Energy Enterprises, LLC, in Beaver received \$143,000 for a biomass project.

- **Northwest Entertainment Concepts, Inc., Portland - \$42,000**
Northwest Entertainment Concepts, Inc., in Portland received \$42,000 for a solar electricity project.
- **Eastern Oregon Light & Power, LLC, Haines - \$34,000**
Eastern Oregon Light & Power, LLC, in Haines received \$34,000 for a solar electricity project.
- **Northwoods Nursery, Molalla - \$28,000**
Northwoods Nursery in Molalla received \$28,000 for a solar electricity project.
- **LeRoy C. Nickerson, Hood River - \$26,000**
LeRoy C. Nickerson in Hood River received \$26,000 for a solar electricity project.
- **Walker Farms, Siletz - \$24,000**
Walker Farms in Siletz received \$24,000 for a solar electricity project.
- **Go Outside Enterprises, Applegate - \$20,000**
Go Outside Enterprises in Applegate received \$20,000 for a solar electricity project.
- **Sakurambo, LC, Hood River - \$17,000**
Sakurambo, LC, in Hood River received \$17,000 for a solar electricity project.
- **Hall Living Trust, Grants Pass - \$16,000**
Hall Living Trust in Grants Pass received \$16,000 for a solar electricity project.
- **Restoration Farm, LLC, Ashland - \$15,000**
Restoration Farm, LLC, in Ashland received \$15,000 for a solar electricity project.
- **Mellonia, LLC, Applegate - \$12,000**
Mellonia, LLC, in Applegate received \$12,000 for a solar electricity project.
- **Yocum & Sun, Ashland - \$6,000**
Yocum & Sun in Ashland received \$6,000 for a small wind project.
- **Alpha Beta Hops, Ashland - \$6,000**
Alpha Beta Hops in Ashland received \$6,000 for a small wind project.

Award(s): 3 totaling \$87.2 million from DOE / Treasury, Clean Energy Manufacturing Tax Credit (48C)

Location: Hillsboro, Gresham, Eugene

- **SolarWorld Industries America, Inc, Hillsboro - \$82.2 million**
SolarWorld Industries America, Inc., in Hillsboro received \$82.2 million to expand its existing 100 MW solar PV manufacturing plant to 500 MW. The facility focuses on crystal growing, wafering, cell and module production. The resulting product will aid the domestic solar power industry.

- **Centrosolar Oregon, LLC, Gresham - \$4.7 million**
Centrosolar Oregon, LLC, in Gresham received \$4.7 million to build a manufacturing plant for PV solar modules based on crystalline silicon cells.
- **Pacific Metal Fab, LLC, Eugene - \$304,000**
Pacific Metal Fab, LLC, in Eugene received \$304,000 to re-equip and expand its manufacturing facility to produce components for passive solar water heaters, specifically tanks, plumbing modules and the frames that hold them. These components promote greater energy efficiency in appliances.

Award(s): \$102.2 million, Loan Guarantee Program

Location: Malheur County

U.S. Geothermal, Inc., was offered a \$102.2 million conditional commitment for a loan guarantee to construct a 22 megawatt geothermal power project in Malheur County, in southeastern Oregon.

Award(s): \$816,000, Geothermal Demonstrations

Location: Klamath Falls

The City of Klamath Falls received \$ 816,000 to facilitate construction of a low temperature power plant combined with a district heating system.

Award(s): \$400,000, High-Penetration Solar Deployment

Location: Portland

The City of Portland received \$400,000 to support a number of initiatives. The Solar Now! Regional Outreach Campaign is delivering the Solar Now! marketing toolkit to ten new communities in the region in order to create a corps of well-informed, well-trained solar volunteers across Oregon. The Neighborhood-Based Volume Solar Purchasing Program facilitates volume purchasing of solar energy systems in four Portland neighborhoods to bring down installed costs and increase the rate of installation. The Residential Solar Power Purchase Agreement Model for Utility-Bill Financing incorporates a residential solar power purchase agreement into Portland's new clean energy financing program, Clean Energy Works Portland. Finally, Neighborhood-Scale Distributed Energy Systems identifies and removes regulatory barriers to neighborhood-scale shared renewable energy utilities, focusing on a pilot project involving combining a PV system with ground source heat pumps to heat and cool water for a 40-block area.

Award(s): \$5 million, Validation of Innovative Exploration Technologies

Location: La Pine

Newberry Geothermal Holdings, LLC, in La Pine received \$5 million to use advanced geological techniques to locate geothermal reservoirs in the Cascade Mountains.

MODERNIZING THE ELECTRIC GRID – 7 projects totaling \$33.8 million

Harnessing clean energy sources and integrating them onto a modernized electric grid, while giving consumers better choices and more control over their energy use. For more information, visit <http://www.energy.gov/recovery/smartgrid.htm>.

Award(s): 3 totaling \$999,000, Enhancing State and Local Governments' Energy Assurance

Location: Salem, Portland

The Oregon Development Authority received \$999,000 to focus on building regional energy assurance capabilities by enhancing inter- and intra-state coordination and cooperation during energy emergencies. This project funds states to update and develop State Energy Assurance Plans that incorporate new energy portfolios such as wind, renewables, biofuels, etc. This program also funds cities updating and developing Energy Assurance Plans within local areas. The two sets of funding are being used to hire or retrain staff, building in-house expertise in the areas of smart grids, critical energy infrastructure interdependencies and cyber-security.

- **Oregon Department of Energy, Salem - \$548,000**

The Oregon Department of Energy in Salem received \$548,000 for State Energy Assurance Planning.

- **City of Portland, Portland - \$276,000**

The City of Portland will received \$276,000 for the Local Energy Assurance Planning (LEAP) Initiative.

- **City of Salem, Salem - \$175,000**

City of Salem received \$175,000 for the Local Energy Assurance Planning (LEAP) Initiative.

Award: 2 totaling \$29.5 million, Smart Grid Investment Grant Program (EISA 1306)

Location: Portland, Newport

- **Pacific Northwest Generating Cooperative, Portland - \$19.6 million**

Pacific Northwest Generating Cooperative in Portland received \$19.6 million for the installation of two-way smart meters, substation equipment and load management devices. It also includes a deployment of computer equipment and software at PNGC Power and its distribution utility members.

- **Central Lincoln People's Utility District, Newport - \$9.9 million**

Central Lincoln People's Utility District in Newport received \$9.9 million to provide AMI to all 38,000 customers, MDMS, In-Home Energy Management Displays for 15,000 customers, AMI-enabled Load Control Devices, DA, Redundant Fiber Optic Communications Network Buildout, Outage Management System and Conservation Voltage Regulation.

Award(s): \$2.5 million, Smart Grid Workforce Training

Location: Klamath Falls

Oregon Institute of Technology in Klamath Falls received \$2.5 million to strengthen the Bachelor of Science of Renewable Energy Engineering program, as well as create a Master's program that build on a strong fundamental engineering foundation. These programs include history, economics and policies related to the power industry as well as hands-on education opportunities such as power system modeling and analysis, distributed power systems, power conditioning and utility-focused energy storage.

Award(s): \$847,000, State Assistance on Electricity Policies

Location: Salem

The Public Utility Commission of Oregon in Salem received \$847,000 to assist in addressing its Recovery Act electricity workload by hiring staff trained to facilitate the review of time-sensitive requests approving electric utility expenditures.

TRANSPORTATION – 4 projects totaling \$107.8 million

Investing in a new generation of advanced fuels and vehicles to reduce our dependence on foreign oil and revitalize domestic manufacturing. For more information, visit <http://www.energy.gov/recovery/vehicles.htm>.

Award(s): \$21.2 million, Advanced Battery Manufacturing

Location: Albany

Energ2, Inc., in Albany received \$21.2 million for the production of synthetic, high-performance carbon electrode material for ultracapacitors with significantly higher power density and much lower cost per kW.

Award(s): \$39.6 million, Commercial Vehicle Integration (SuperTruck) and Advanced Combustion Engine R&D

Location: Portland

Daimler Trucks North America, LLC, in Portland received \$39.6 million to develop and demonstrate technologies including engine downsizing, electrification of auxiliary systems such as oil and water pumps, waste heat recovery, improved aerodynamics and hybridization.

Award(s): \$25 million, Modify Integrated Biorefinery Solicitation Program for Pilot and Demonstration Scale Biorefineries

Location: Boardman

Zechem, Inc., in Boardman received \$25 million to use purpose-grown hybrid poplar trees to produce fuel-grade ethanol using hybrid technology. Additional feedstocks, such as agricultural residues and energy crops, are also being evaluated in the pilot plant.

Award(s): \$22.2 million, Transportation Electrification

Location: Coburg

Cascade Sierra Solutions in Coburg received \$22.2 million to implement transportation electrification infrastructure at fifty sites along major interstate corridors and provide an incentive for battery operated and / or shore power enabled idle reduction equipment on medium and heavy-duty trucks.

SCIENCE AND INNOVATION – 2 projects totaling \$900,000

Renewing our commitment to science and innovation to ensure global competitiveness in the future. For more information, visit <http://www.energy.gov/recovery/innovation.htm>.

Award(s): \$750,000, Energy Sciences Fellowships and Early Career Awards

Location: Corvallis

Oregon State University in Corvallis received \$750,000 to create graduate, post-doctoral and early career fellowship awards to stimulate research careers in energy, environmental and climate change sciences. These awards support research into sustainable, energy-efficient silicon for extreme-scale computing.

Award(s): \$150,000, Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) Round 1

Location: Wilsonville

Peregrine Power, LLC, in Wilsonville received \$150,000 to develop a smart, programmable controller that enables the charging of plug-in electric vehicles when it is advantageous in terms of price and grid stress. The controller and associated charging / storage system adds significant energy storage to the vehicle, which encourages the use of renewables and can be used to provide support for the grid and the customer's onsite loads.

ENERGYEMPOWERS.GOV

Recovery Act Success Stories

Energy Empowers is a U.S. Department of Energy clean energy information service. Our team produces stories featuring the people and businesses that are fueling the energy transformation and economic recovery in America. *For more stories from your state, go to energyempowers.gov/Oregon*

Oregon program aims to create jobs, save energy

Oregon Gov. Ted Kulongoski hailed “a new approach to energy efficiency” after the state was awarded \$20 million in Recovery Act funds for a program aimed at saving families and businesses money, creating green jobs and improving the environment.

Laborers, business owners and government officials joined Kulongoski in Portland to usher in Clean Energy Works Oregon, a large scale residential and commercial retrofit project.

“This is not just an environmental program; this is very much a jobs program,” said Susan Anderson, director of Portland’s Bureau of Planning and Sustainability.

The project will be modeled off Clean Energy Works Portland, a pilot program which provides residents financing for energy efficiency upgrades with no upfront costs. Loans for projects ranging from hot water system improvements to insulation are repaid through utility bills. Energy consultants are assigned to residents to help them through the process.

Laborers, contractors, faith-based groups and community organizations throughout Portland signed an agreement designed to ensure the home retrofits meets standards and includes a diverse workforce.

“This program [Clean Energy Works Oregon] expands the successful work of the City of Portland, which has already been undertaken and started through their local residential efficiency pilot program and takes what they have learned, here, to other communities across our state,” Kulongoski said.

Kulongoski said the program represents a new way of thinking on energy efficiency. “Instead of scattered projects, this approach is centralized; targeting entire communities.”

This approach will “take energy efficiency to scale,” and “help move the whole marketplace,” Anderson said.

The benefit, Kulongoski said, will be “that we drive energy savings at a more accelerated and aggressive rate, increasing the property values in that community and saving individual business owners and homeowners money.” The reduced energy use will also provide “a greater benefit for our environment,” he said.

Gil Sperling, senior adviser to Assistant Secretary of Energy Cathy Zoi, praised the “unprecedented partnership” between local, state and federal government, nonprofits and businesses that helped make Clean Energy Works Oregon a reality. “We have people who hadn’t typically talked to each other who are now working together for months on specific programs and specific plans.”

Kulongoski said the State of Oregon has “a strong relationship with the private sector.”

“They are our partners and they have shown that good environmental policy can be good business practices,” he added.

Officials hope the program’s success will serve as a model for the rest of the country. “Once we retrofit our first community, we can

show on a large scale that upfront investments in energy efficiency upgrades do pay off quickly, helping to inspire other communities to invest in energy efficiency which will grow the market and create a new demand for jobs in this industry,” Kulongoski said.

“This is about putting people back to work,” said Oregon State Rep. Jules Bailey.

Oregon and the City of Portland were among the 25 winners of an Energy Efficiency and Conservation Block Grant (EECBG) by the U.S. Department of Energy designed to ramp up energy retrofits throughout the country

PORTLAND

Clean Energy Works Portland: a model for retrofit projects

A program developed by the city of Portland, Ore., is proving to be a model of public and private collaboration for large-scale home retrofit projects throughout the country.

Clean Energy Works Portland (CEWP) seeks to cut energy costs for residents, create green jobs and slash greenhouse gases by retrofitting 500 homes in the Portland area by this fall.

The program aims to provide homeowners access to low-interest loans for residential energy efficiency improvements at no upfront costs.

Loans for projects ranging from hot-water system improvements to insulation are repaid through utility bills. Energy consultants are assigned to residents to help homeowners through the process.

Since CEWP was implemented last year, about 250 homes have been weatherized or are scheduled for improvements.

The program’s progress is due to partnerships fostered between governments, non-profits, utilities and contractors, says Susan Anderson, director of Portland’s Bureau of Planning and Sustainability. “Public and private partnerships are the foundation for the success of Clean Energy Works Portland.”

Merging forces

The pilot program is helping the city fulfill its pledge to cut carbon emissions by 80 percent over the next 40 years.

“By putting folks back to work, we are meeting our carbon reduction goals,” says Lisa Libby, Planning and Sustainability Director to Portland Mayor Sam Adams.

Libby says the idea for CEWP gained momentum in early 2009 when Adams merged two disparate city departments: the community development-oriented Bureau of Planning and the Office of Sustainable Development, which focused on energy and waste issues. “By bringing those two together, we had the opportunity to run with big, systemic changes,” Libby says.

Libby says officials asked each other how they could make the city greener and generate economic opportunities for all. One solution, she says, was to focus on improving home energy efficiency on a community-wide scale.

At a Glance

Designing and implementing a scalable residential energy efficiency program requires cooperation. For Clean Energy Works Portland, which will retrofit 500 homes, stakeholders brought the following pieces:

U.S. Department of Energy: \$1.1 million grant through the Energy Efficiency and Conservation Block Grant program

Oregon Energy Trust: Program design and management

Shorebank Enterprise Cascadia: Fund management and low interest, residential energy upgrade loans

Pacific Power, NW Natural and Portland General Electric: Loan repayment through power bills

City officials and community and workforce groups: Community Workforce Agreement to ensure equal access to CEWP projects for weatherization businesses

City and Mayor's offices: Leadership and forging partnerships among stakeholders

“What would it take to move this forward...and have it work in a matter of months? Immediately, we accelerated talks with Energy Trust of Oregon and the local utilities,” Libby says.

Energy Trust, an independent non-profit established by the state in 1999, helped Portland develop a framework for the program and provided about \$1,200 to \$1,500 in funding for each participant.

The non-profit, which specializes in developing energy efficiency and renewable energy solutions, assisted the city in “all aspects of service delivery,” says Jan Schaeffer of Energy Trust. Energy Trust assigned and trained Energy Advocates, who walked residents through the CEWP program by helping with loan paperwork, overseeing the contractor bid process and conducting quality assurance.

In addition, Energy Trust helped Portland by providing website and call center support, processing incentive checks, scheduling home performance assessments and finding contractors.

Schaeffer hails the relationship between Portland and Energy Trust. “Our collaboration has been very special, without defining hierarchy or boundaries; we think it’s the Oregon way.”

A \$1.1 million Energy Efficiency and Conservation Block Grant and an additional \$1 million in city funds helped get CEWP up and running. Portland chose Shorebank Enterprise Cascadia, a nonprofit community bank, to manage the program’s funds and to provide low interest energy upgrade loans to residents.

From financing to utilities to community groups

“The financial mechanism was the missing piece,” Libby says. Libby says CEWP “took a leap of faith on the utilities part,” and the city created “really strong partnerships” with Pacific Power, NW Natural and Portland General Electric.

The three utilities simplified the borrowing program for residents by allowing homeowners to repay loans through their power bills. “Utilities have a direct link to their customers, a boon for marketing; and are singularly able to provide on-bill loan repayment,” Schaeffer says.

Faith-based groups, contractors, labor unions, civil rights organizations and city officials joined forces to create the Community

Workforce Agreement, which ensures weatherization businesses owned by minorities and women have equal access to CEWP projects. Libby says the agreement, which was passed by Portland’s City Council, helped “folks who have been impacted the most by the recession.”

Libby praises the work of Green For All, a national organization that helped develop the agreement. “They provided a huge lift for us,” she says.

Jumpstarting business

CEWP has boosted business for several Portland-area contractors such as Imagine Energy. “We’ve tested about 35 [homes] to date, and I think we’ll soon have completed or be in contract with about half of those,” says Jonathan Cohen of Imagine Energy.

Cohen says his team finds ways to save homeowners energy and money including duct sealing and replacement, adding insulation and installing heat pumps and furnaces. Imagine Energy also makes “infrastructure improvements like electrical and plumbing systems,” Cohen says.

The increase in business from CEWP has enabled Imagine Energy to hire more workers. “We’ve added several weatherization labor jobs, one home performance technician and one project management job,” Cohen says.

Imagine Energy has become more organized due to the increased workload, improving employee performance and customer satisfaction, Cohen says. “We’ve needed to streamline our processes to be more efficient, which has benefitted our team as well as the customer’s experience.” He says CEWP is good for contractors like Imagine Energy because it “gives enough consistent leads and work to scale their small businesses, creating jobs.”

CEWP has established “a brand that homeowners can trust to come to for solutions-based energy and comfort improvements for their homes,” Cohen says.

He says Portland residents are more willing to make their homes more energy efficiency as a result of the program. “The no-up-front cost and on-bill financing mechanisms make it easy for homeowners to say yes to improvements that they have been putting off.”

Template for success

The success of CEWP is serving as a model for the statewide Clean Energy Works Oregon (CEWO), which is being funded through a \$20 million EECBG award. “This program [CEWO] expands the successful work of the City of Portland, which has already been undertaken and started through their local residential efficiency pilot program and takes what they have learned, here, to other communities across our state,” Oregon Gov. Ted Kulongoski said at a press conference.

Kulongoski signed the Energy Efficiency and Sustainable Technology Bill (EEAST) into law last year, which outlines the framework for the commercial and residential weatherization program. Energy Trust and Portland will partner with the state in developing CEWO.

“The City of Portland will be in the lead pulling collaborators together to serve homes under CEWO,” Schaeffer says. “The Oregon Department of Energy will lead commercial efforts,” she adds.

Schaeffer says Energy Trust work closely

“As cities plan similar efforts, they can look to this model for lessons on a scalable design for energy-efficiency programs.”
-Susan Anderson, director of Portland’s Bureau of Planning and Sustainability

with Oregon as CEWO retrofit projects launch. “We expect to provide residential service delivery for CEWO and are in ongoing discussions about lessons learned from the CEWP pilot that can be applied to design of CEWO.”

CEWP and the partnerships that helped make it successful will provide a template for other communities, says Anderson of Portland’s Bureau of Planning and Sustainability.

“As cities plan similar efforts, they can look to this model for lessons on a scalable design for energy-efficiency programs and a community workforce agreement that addresses equal access to green jobs,” Anderson says.

Libby says the program’s success is due to partnerships between government, utilities, businesses and communities. “No single entity could have achieved this on their own.”

PORTLAND

Portland company weatherizes, preserves historic home

On most days, visitors traipsing up the doorsteps of Roy and Kim Fox’s home in the historic Portland, Ore., neighborhood of Piedmont, revel in its stunning Victorian architecture. But on one rainy Saturday afternoon in May, 100 visitors came for a valuable lesson: How to achieve energy improvements in older homes without damaging their vintage character.

“Lots of people come to see our house but these people were here to see weatherization,” Roy says.

The crowd of Portland homeowners and business people toured the Foxes’ residence for the Holistic Weatherization Meets Historic Preservation project hosted by Portland’s Architectural Heritage Center, highlighting the work residential contractor EcoTech.

Old home – huge inefficiencies

“We had a blower door test in the mid 1980s and we knew we had a hole you could drive a truck through,” Roy says of the home that he has lived in for 30 years.

The Foxes were aware of inefficiencies at their 1884 home for a long time. “We have done things like the floors and we have put in minimal attic insulation but I have always known that the walls and leakage were a problem,” Roy says.

As the years passed and home energy efficiency technology improved, the Foxes revisited the idea of making upgrades, says Roy. “It was clear it was probably safe to insulate the walls and now is the time to think about doing it.”

Protecting vintage homes

The Foxes turned to EcoTech and team leader Marshall Runkel, who Roy says were “confidence inspiring” and used innovative approaches to weatherization. EcoTech avoided methods such as window removal that would sacrifice the home’s Queen Anne-style exterior. “We figured out a way to insulate the walls without drilling,” Runkel says.

EcoTech developed a unique tool to spray insulation into hard-to-reach areas. “We modified our insulation blowing equipment,” says Runkel. “On the nozzle we attached a really long tube that we could fit down from that attic to the basement.” Workers utilized the home’s unique shape while insulating it. “We took advantage of the balloon framing of the house. In some sections we were able to literally insulate the wall system from the basement through the second floor to the attic,” Runkel says.



Insulation is blown into the home of Roy and Kim Fox in Portland, Ore. EcoTech modified its equipment to avoid damaging the home, which was built in 1884. | Photo courtesy of Roy Fox

Roy says the contractors were thorough and installed a hot roof, which involves filling the empty space between rafters with insulation. Runkel’s team used rigid foam insulation for the roof. The product formed a complete air barrier and provided “excellent insulating qualities,” Runkel says.

In addition to insulation, a smaller, more energy efficient furnace was installed. “They were able to resize the furnace based on the rest of the weatherization that was going on,” Roy says. The Foxes’ previous furnace was 15 years old and 90 to 91 percent efficient. “They put in a 96 percent efficient furnace,” says Roy.

Roy estimates the improvements could cut his power bill by at least 30 percent. He says the upgrades will make the home more comfortable in the winter. “We have these big pocket doors and you can feel air moving through them before they did this. The fix to that was insulating the walls, that provided the air seal.”

Simplifying energy improvements

When the city rolled out Clean Energy Works Portland (CEWP), a loan program that provides residents financing for energy efficiency upgrades at no upfront costs, the Foxes seized the opportunity. Roy says he was intrigued by the prospect of getting the “whole house evaluation done and really do everything that we should do at one time.”

He says the program made the process of obtaining funds for energy upgrades easy. “The financing package and loan application were incredibly simple.” Roy says the application was only two or three pages long and spelled out what the loan amount was and how the incentive payments were used in clear language.

One of the highlights of the CEWP program, Roy says, was the comprehensive energy review of the house conducted EcoTech. The company did “a blower door test, walked through the whole house with us, talked about all the options that we have and made specific recommendations as to what we should do.”

The review made it easier to decide what steps to take, according to Roy.

Educational event

Runkel says the Weatherization Meets Historic Preservation event was a “great educational tool.” He says the majority of Portland’s homes were built before World War II and residents are worried about destroying the “historic character” of the homes if they make improvements.

The event provided a way to introduce a discussion about home energy upgrades, Runkel says. “It gave them some handholds and footholds of understanding the concepts of energy efficiency.”

“And it was a lot less intimidating to consider what could be done,” he adds.

Runkel praises the homeowners for the success of Weatherization Meets Historic Preservation. “This is one of those cases where it really was the initiative of the Foxes.”

The project was important, Roy says, because it proved energy efficiency upgrades could be done in a way that doesn’t harm historic homes. “If people are willing to do a little creative thinking, you really can leave the old fabric of the house intact.”

PORTLAND

Sierra Club’s chairman leading by example

Sierra Club was founded almost 120 years ago with the mission of protecting wildlife and habitats by advocating clean energy use and encouraging Americans to live eco-friendly lifestyles. Sierra Club Oregon Chairman Wes Kempfer is doing his part to further those goals by trying to make his home energy-efficient and wants to spread the word to his fellow members and all Oregonians.

Clean Energy Works Portland provides the city’s residents with energy assessments that will help them identify what changes in their homes could make the biggest impact toward saving energy and money. Through the program, people like Wes receive financing for energy-efficiency upgrades with no upfront costs. Loans for projects

are repaid through utility bills, and energy consultants are assigned to residents to help them through the process. The pilot program has been so successful that Oregon Gov. Ted Kulongoski recently announced a larger scale Clean Energy Works Oregon program that will use Recovery Act funding to take the program statewide.

Wes already had an energy audit done on his home a couple of years ago, but he didn’t have the upfront cash to implement the improvements. Because of Portland’s program, he was able to have \$13,000 of retrofits done to his home through a low-interest loan, which Wes pays back through his gas bill each month.

“My home is a lot warmer in the winter now as a result of the retrofits,” he says. “I used to just not run my furnace and I would freeze, but now I can be much more comfortable at a lower cost.”

Work done to Wes’ home included installing insulation, sealing up leaks in air ducts and around doors and installing a high-efficiency water heater. He has seen his energy bills cut in half since the updates, meaning his usual \$80 gas bill is now just \$40. This puts spending money back in his pocket and saves him almost \$500 a year.

Wes plans to tell more Sierra Club members about his experience with home energy-efficiency upgrades and says programs such as Clean Energy Works Portland are necessary to enable Americans to weatherize their homes.

“There are a lot of people out there in my situation who might know of some upgrades they could make but don’t have the capital right now,” he says. “These projects can put a lot of people to work in green jobs too, and through Sierra Club supporting this we can strengthen our relationships with labor groups on working toward climate change legislation.” Wes says there is potential to save a lot of energy through being more efficient.

“A great deal of our energy use could be reduced just through efficiency,” he says. “We don’t always need fancy solar and wind to start the conversation — now retrofits, these are our first steps.”