# **WSU Energy Efficiency Summit:** An Integrated Look at Program Delivery

May 22, 2012 • 8:00 a.m. to 6:30 p.m. Sheraton Seattle Hotel • Seattle, Washington

WASHINGTON STATE UNIVERSITY EXTENSION ENERGY PROGRAM

# The Washington State University Energy Program is pleased to convene this summit – An Integrated Look at Program Delivery.



Thank you for joining us for this important and timely event. As leaders in energy efficiency from across the State of Washington, you have valuable insights that we want to hear. Your ideas and accomplishments will guide our discussion of next steps as community energy efficiency programs evolve.

I trust that you will benefit from your experience in today's event, and I hope that you enjoy it.

Sincerely,

and Crey

Jacob C. Fey, Director WSU Energy Program



#### **Our Mission**

To advance environmental and economic well-being by providing unmatched energy services, products, education and information based on world-class research.

#### Overview

Our staff of over 100 people (energy engineers, energy specialists, technical experts, software developers, energy research librarians and more) works out of our Olympia, Spokane and satellite offices. Operating similar to a consulting firm, the WSU Energy Program is a self-supported department within the University.

Our customers include large and small businesses, public and private utilities, local and state governments, tribes, federal agencies and facilities, manufacturing plants, professional and trade associations, schools, universities, national laboratories and consumers. For more information, visit our website at *www.energy.wsu.edu*.

# Agenda

Time	Торіс
8:00 - 9:00	Continental Breakfast – Jefferson Room
9:00 - 9:30	Welcome Jake Fey, Director, WSU Energy Program
9:30 - 10:15	<b>Report on Current Activities</b> William Ranes, Program Manager, WSU Energy Program Todd Currier, Assistant Director, WSU Energy Program
10:15 - 10:30	Break
10:30 - Noon	<ul> <li>Break-Out Sessions</li> <li>Residential Outreach, Service Delivery and Financing – Columbia Room</li> <li>Residential Energy Auditing – University Room</li> <li>Quality Assurance and Training – Seneca Room</li> <li>Utility Partnerships – Boren Room</li> </ul>
Noon - 1:00	<b>Lunch and Plenary Session</b> Diana Lin, Program Manager National Association of State Energy Officials
1:00 - 2:30	<ul> <li>Break-Out Sessions</li> <li>Residential Outreach, Service Delivery and Financing – Columbia Room</li> <li>Residential Energy Auditing – University Room</li> <li>Quality Assurance and Training – Seneca Room</li> <li>Utility Partnerships – Boren Room</li> </ul>
2:30 - 2:45	Break
2:45 - 4:15	<ul> <li>Break-Out Sessions</li> <li>Small Commercial Outreach and Service Delivery – Seneca Room</li> <li>Residential Outreach, Service Delivery and Financing – Columbia Room</li> <li>Residential Energy Auditing – University Room</li> <li>Utility Partnerships – Boren Room</li> </ul>
4:15 - 4:30	Break
4:30 - 5:00	Where Do We Go From Here? Break-Out Session Leaders Report William Ranes, Program Manager, WSU Energy Program
5:00 - 6:30	Reception – Sponsored by EnergySavvy and Earth Advantage Institute

# **Clark County PUD – Project Energy Savings**



- Clark Public Utility District
- Grant amount: \$1 million
- Insulation/air-sealing upgrade
- No cost to customer
- Single contractor, competitive selection service delivery
- Neighborhood marketing outreach methods
- Free screening assessment and free audit for scope of work
- Incentive strategy: cover full cost with utility and program incentives



#### Project

Clark County PUD has a long history of delivering energy efficiency services to customers in Clark County, Washington. They used funding from the Community Energy Efficiency Pilot (CEEP) to develop a program to serve two lower- to moderate-income neighborhoods that were not reached by Clark PUD's other energy efficiency programs. Many customers in these neighborhoods were not eligible for low-income programs yet did not have the resources to take advantage of existing PUD efficiency programs. CEEP allowed the PUD to focus on neighborhoods and to pay 100 percent of the project cost.

#### Players

The **Clark PUD** collaborated with the **City of Vancouver, Clark County** and the **Americans Building Community** (ABC, a community development organization) to develop and deliver their CEEP project. All four organizations were part of a planning and implementation group that met regularly. The city and county made project decisions with the PUD, provided some **Energy Efficiency Community Block Grant Funds** (for outreach and repairs) and were actively involved in outreach. ABC played the primary outreach role in one of the neighborhoods.

#### Approach

**Outreach and Marketing:** The project conducted an energy fair in each neighborhood and attended neighborhood association and business group meetings to raise awareness and educate people about energy efficiency. The PUD used direct mail and door-to-door canvassing to reach customers. They targeted their marketing to houses that were most likely to participate and they avoided homes with gas heat, which were not eligible for retrofits through the program. The PUD distributed energy -savings kits at energy fairs and when canvassing.

**Assessments and Audits:** The project referred customers with natural gas heat to the local natural gas utility programs, and they referred low-income households to the local low-income weatherization program. Each residential customer who expressed interest in a retrofit received an energy-savings kit and additional information about the program. If the customer wanted to continue, the PUD conducted an assessment at the home to identify and recommend measures. This information was passed on to the contractor, who completed a comprehensive audit to create the job-card for the retrofit. The contractor began the upgrade once the work plan was approved. The PUD conducted an in-progress inspection and approved the work.

The small business portion of the program was for lighting only. Once a small business expressed interest, the PUD explained the process and confirmed the business had T12 lighting. Then the PUD conducted a lighting assessment with a lighting consultant and discussed lighting needs with the business owner. The lighting consultant prepared a worksheet that presented energy use and cost details about the existing and proposed lighting. The PUD obtained bids from a pool of lighting contractors, and the lowest bidder was selected. The work was reviewed with the business owner, scheduled and completed. During this process, the PUD conducted an in-progress inspection.

**Incentives:** The PUD paid 100 percent of the project cost using a combination of CEEP funding and utility funding (through the Bonneville Power Administration).

#### **Service Delivery**

Team Member	Administration and Management	Outreach and Marketing	Assessments/ Audits	Incentives/ Financing	Installations	Workforce Development	Advisors
PUD	<b>v</b>	<b>~</b>	<ul> <li>Image: A start of the start of</li></ul>	<b>v</b>		<ul> <li>✓</li> </ul>	
Government		<b>~</b>		<b>v</b>			~
Contractors			<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	
Groups		<ul> <li>Image: A set of the set of the</li></ul>				<ul> <li>✓</li> </ul>	~

#### What They Did

	Residential	Small Business
Outreach and Marketing	Energy fair, neighborhood association meetings, direct mail and door-to-door canvassing	Energy fair, neighborhood association meetings, direct mail and door-to-door canvassing
Community Education	Part of the energy fair and meetings, delivery of energy-savings kits, and integrated into assessments and imple- mentation	Part of the assessment process
Assessments and Audits	PUD provided an initial assessment to identify recommendations and the PUD contractor conducted an audit to develop the job-card	The PUD and a lighting consultant conducted a lighting assessment and prepared a worksheet with the existing and proposed lighting
Customer Service Strategy	PUD managed the entire process and used one contractor to complete all project work	PUD managed the entire process and used a pool of contractors to do the work
Incentives/ Financing Strategy	100 percent of the cost of the audit and eligible measures. Financing was available for other measures but was not used.	100 percent of the cost of the light- ing assessment and eligible lighting measures
Measure Package	Insulation, duct sealing and air sealing	Lighting
Contracting Approach	One contractor selected through an RFP to do all work	Contractor pooled bids on each project and the lowest bid was selected
Quality Assurance	PUD conducted in-progress inspections of all projects	PUD conducted in-progress inspection on all projects
Workforce Development	PUD staff person received training, volunteers received training and contractors obtained training for staff	PUD staff person received on-the-job training

### **Preliminary Results**

- Performed over 300 residential assessments and over 200 retrofits.
- Saved each homeowner \$260 on average per year.
- Performed seven retrofits for small businesses and nine commercial lighting retrofits.
- Energy savings: approximately \$60,000 per year for residential customers, over \$8,000 per year for small business customers, for a combined savings of approximately \$70,000 per year.

# **Community Energy Challenge**



- Community action agency and non-profit organization
- Grant amount: \$2.8 million
- Whole-house residential upgrade
- 60 to 80 percent customer financial contribution
- General contractor service delivery
- Multiple marketing outreach methods
- Subsidized audit, in-person follow up
- Incentive strategy: supplement utility incentives, progressive package
- Subsidized integrated financing



#### Project

The Community Energy Challenge (CEC) was created to provide energy efficiency improvements to working-class households and small businesses in Whatcom County, Washington.

#### **Players**

The **Opportunity Council**, a Community Action Agency, used expertise gained through administering a low-income weatherization program to implement a moderate-income residential energy efficiency program. At the same time, **Sustainable Connections**, a non-profit business membership organization, focused on the small business aspects of the program. **Local electric and natural gas utilities** provided marketing, outreach and rebates. The **cities of Bellingham and Ferndale**, and **Whatcom County**, contributed funding. **Local contractors** made efficiency improvements to homes and businesses. The **Energy Efficiency Finance Corporation** developed a loan product and **Banner Bank** supplied loans.

### Approach

**Outreach and Marketing:** Residential outreach and marketing leveraged neighborhood associations and networks, while small business marketing and outreach emphasized business relationships and events.

**Assessments and Audits:** Homeowners received a subsidized \$195 home energy assessment and Home Energy Performance Score. Small businesses received a free energy assessment and action plan.

**Incentives:** The CEC offered homeowners tiered incentives to implement specific energy efficiency measures, which reduced the out-of-pocket cost of projects to homeowners. Small businesses were also offered several incentives to improve their energy efficiency. Homeowners and small businesses were offered low-interest loans with preferential terms:

- Homeowners were offered first-tier incentives to implement attic insulation, air sealing, duct sealing, and water pipe and heater insulation. A second tier consisted of wall insulation, floor insulation and ventilation. Additional incentives were offered for upgrading to high-efficiency water heaters and high-efficiency furnaces. Homeowners were paid up to 30 percent of the project cost to cover deeper retrofits.
- Small businesses were offered matching utility rebates and incentives for heat pumps, solar photovoltaic systems and high-efficiency lighting.
   Sustainable Connections visited businesses and provided recommendations in a report that consisted of contractor referrals, financing, facility action plans and technical support.

#### **Local Economy**

The Community Energy Challenge was a positive economic endeavor. The program leveraged investments from homeowners, businesses, local government and the community. Over 20 contractors delivered residential services and became more skilled in delivering weatherization services. Businesses and homeowners learned how to better manage their energy use. Customer surveys indicated high satisfaction with the program.

Team Member	Administration and Management	Outreach and Marketing	Assessments/ Audits	Incentives/ Financing	Installations	Workforce Development	Advisors
Opportunity Council	~	~	~	~	~	Direct installation	~
Sustainable Connections	Program management; no admin.	~	<b>v</b>	~	<b>v</b>		
Government		<b>v</b>		<b>v</b>			~
Contractors			<ul> <li>✓</li> </ul>		<b>~</b>	<b>v</b>	
Banner Bank				<ul> <li>✓</li> </ul>			

# What They Did

	Residential	Small Business
Outreach and Marketing	General marketing and outreach (news- paper, website, social media). Focused on neighborhood associations and neighbor- hood networks.	General marketing and outreach (newspaper, website, social media). Focused on business relationships, business events and promoting participants.
Community Education	Part of neighborhood outreach, assessments and implementation.	Part of business outreach, assessments and support.
Assessments and Audits	CEC provided subsidized energy audits.	CEC provided free energy assessments as well as more detailed benchmarking and energy action plans as appropriate.
Customer Service Strategy	CEC was the facilitator of the one-stop shop and managed all aspects of a project.	CEC offered a menu of services that business owners could choose from.
Incentives/ Financing Strategy	CEC offered tiered incentives that required implementation of the most cost-effective measures first; incentives covered about 30 percent of the cost. Low-interest loans with preferential terms were also available.	CEC offered incentives that doubled utility rebates. Special incentives were available for heat pumps and solar photovoltaic systems.
Measure Package	Comprehensive: air and duct sealing, insulation, heating and water system upgrades, CFLs, windows and solar.	Measures eligible for utility rebates, heat pumps, solar PV.
Contracting Approach	CEC acted as a facilitator and trainer. They used a pool of weatherization contractors selected through an RFQ and approved HVAC contractors.	Provided contractor referrals; businesses could use contractors they had a relationship with.
Quality Assurance	CEC conducted in-progress and final inspections with test-out of all projects.	None
Workforce Development	Classroom and on-the-job training was provided for all contractors; staff training.	None

- Preliminary ResultsPerformed over 700 residential energy audits and over 100 small business energy audits.
- conversion rate of 53 percent for residential customers.
- Facilitated over 450 residential energy efficiency projects and over 40 small business retrofits, with a
- Saved Whatcom County homeowners over \$210,000 in utility costs.

# **Community Power Works for Home**



- Municipal government
- Grant amount: \$20 million total, \$12 million for CPW for Home
- Whole-house residential upgrade
- 60 to 70 percent customer financial contribution
- Managed exclusive contractor pool
- Multiple marketing and outreach methods
- Subsidized EPS audit: intensive project management using a custom web portal and in-person contractor follow-up
- Incentives based on carbon and energy saved; additional incentives for heating system upgrades
- Subsidized integrated financing with reduced rates for low-income households
- Energy Performance Score



#### Project

Community Power Works (CPW) is a comprehensive effort to provide energy efficiency improvements in residential, low-income multi-family, small business, hospital, large commercial and municipal sectors in Seattle, Washington. This program was created to develop innovative approaches to drive demand and achieve whole-house energy upgrades.

#### **Players**

The Seattle Office of Sustainability and Environment (OSE) contracted with Cascadia Consulting to market efficiency upgrades and facilitate the upgrade process using a custom web-based IT platform developed by EnergySavvy. Cascadia and OSE selected and managed a pool of 15 local contractors who completed upgrades in compliance with the High Roads Agreement, a set of employment and contracting standards developed through a collaborative process involving community organizations, labor organizations, contractors, and training providers. Seattle City Light provided subsidized Energy Performance Score (EPS) audits, marketing assistance and additional rebates for electrically heated homes, while Puget Sound Energy (PSE) maintained existing rebate programs. Craft3 and Puget Sound Cooperative Credit Union developed loan products, originated loans and served as fund managers. Services to low-income households were coordinated with the Seattle Office of Housing (Homewise). South Seattle Community College, Got Green and LiUNA were designated as qualified training providers (QTPs).

#### Approach

**Outreach and Marketing:** Comprehensive multi-channel marketing, strong brand development and extensive use of social and on-line media.

**Assessments and Audits:** A subsidized EPS audit was required for all participants and was used to establish eligible measures and incentive levels based on estimated energy savings.

**Incentives:** CPW offered homeowners incentives for up to 50 percent of total project costs based on the percentage of energy saved as established by the test-in audit:

- \$1,250 for projects saving 15 to 20 percent,
- \$2,000 for projects saving 21 to 30 percent, and
- \$2,500 for projects saving more than 30 percent.

Additional incentives included:

- \$1,200 for upgrading from oil heat to high-efficiency natural gas or ductless heat pump.
- \$500 toward the cost of decommissioning an oil tank.
- Seasonally timed incentives for homeowners.
- \$250 incentives to auditors or contractors who delivered leads that completed an upgrade.

#### Local Economy

Over 20 contractors and 100 workers delivered residential services and became more skilled in delivering weatherization services. Across all six sectors, Community Power Works has generated: 58,000 hours of work performed by over 500 people, including 330 contractors and auditors (as of April 30, 2012). The contractor pool and number of workers is expected to grow.

Team Member	Administration and Management	Outreach and Marketing	Assessments/ Audits	Incentives/ Financing	Installations	Workforce Development	Advisors
Seattle Office of Sustainability and Environment	Grant and contract manager, reporting	V	>	Funding		>	~
Cascadia Consulting (and subs)	Upgrade project manager	~	Test-out	Management			~
Seattle City Light		~	Financing	Incentives, on-bill repay			~
PSE				Incentives			
Contractors and audit firms		~	Test-in		✓	>	
High Road Agree- ment Partnership						>	~
Craft3	Loan program			Loans			
Puget Sound Co-op Credit Union	Payment processing			Loans			
Seattle Office of Housing (Homewise)	Low income		Low-income single and multi-family	Funding			~

# What They Did

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Outreach and Marketing	Extensive and comprehensive multi-channel marketing (traditional media, trade allies, and neighborhood and professional networks). Extensive use of social media. Strong emphasis on building the CPW brand.
Community Education	Broad-based community education was not a primary focus but was included as part of neighborhood outreach, website postings, and one on one through assessments and implementation.
Assessments and Audits	A subsidized EPS audit was required for all participants and was used to establish eligible measures and incentive levels based on estimated energy savings.
Customer Service Strategy	Projects were managed using a project management web service developed by EnergySavvy in partnership with Clean Energy Works Oregon. Project management included regular email and phone contact. Homeowners had the option of managing their project online with the support of the energy consultant or relying on the contractor for service.
Incentives/ Financing Strategy	Incentives were based on the percentage of energy saved as estimated by EPS, up to 50 percent of total project costs. In addition, CPW matched electric and gas utility incentives for converting oil-heated homes to high-efficiency gas and electric. Rebates were also available for oil tank decommissioning. Craft3 offered below market rate standard (4.49 percent) and low-income loans (3.49 percent) and more flexible qualifications with on-bill payment through Seattle City Light.
Measure Package	Very comprehensive whole-house energy packages: air and duct sealing, insulation, windows and mechanical system upgrades.
Contracting Approach	Managed contractor pool required to meet a set of minimum standards, including experience, training and certification, wages and benefits.
Quality Assurance	100 percent test-out EPS audits performed by independent auditors. A sample of homes received in-depth quality assurance and monitoring visits.
Workforce Development	Participating contractors were monitored for compliance with High Roads Agreement, which covered wages, benefits, hiring from Qualified Training Programs, wage progression and provision of training to new entry-level hires, and certification of existing staff.

# **Preliminary Results** At the half-way point in the grant, CPW has:

- Provided an average of \$2,000 in energy efficiency incentives to individual homeowners.
- Performed over 1,000 EPS energy audits and completed 135 upgrades, with over 90 more under construction.
- Completed comprehensive upgrades achieving average energy savings of over 26

- percent and energy cost savings of over \$500 per year.
- Customer surveys indicate that over 90 • percent of customers would recommend this program to others.

# **City of Ellensburg**



- Municipal utility
- Grant amount: \$63,000
- Heating system/ insulation upgrade
- 70 to 80 percent customer financial contribution
- Utility/contractor referral service delivery
- Utility outreach methods
- Subsidized audit, optional follow up
- Incentive strategy: program incentives only



#### **Project**

The City of Ellensburg, along with the Bonneville Power Administration (BPA), has been running energy efficiency programs for electrically heated homes and businesses since 1980. No program for natural gas-heated homes was available until the city used CEEP funding to develop a natural gas energy efficiency program. This program targeted homes in Ellensburg's older residential neighborhoods and small businesses in the Downtown Historical District.

#### **Players**

The **City Council of Ellensburg** approved and supported the natural gas efficiency program. The City delivered services for this program through their **Energy Services Department**. Contractors conducted the weatherization work. The City had an agreement with **HopeSource**, a local agency responsible for low-income weatherization, to do mutual referrals; the City and HopeSource did a few projects together to build experience and relationships. To reach small businesses, the City developed a relationship with the **Ellensburg Downtown Association**.

#### Approach

**Outreach and Marketing:** The City sent utility bill inserts by mail to get the word out to targeted neighborhoods, made presentations, and prepared flyers and handouts. After this initial outreach, they discovered that word of mouth was sufficient to generate demand for the program.

**Assessments and Audits:** For residential natural gas customers who signed up for the program, City staff provided:

- A free energy assessment,
- A one-page document with energy efficiency improvement recommendations,
- A detailed bid document to be used by the contractor to provide a proposal,
- Support for selecting a contractor,
- In-progress and final inspections, and
- Rebates for heating and water system energy efficiency upgrades (including duct sealing and insulation) and ceiling and floor insulation.

Small business customers also received a free energy assessment from the City, which emphasized educating business owners about their energy systems and how to optimize performance for energy and cost reduction.

**Incentives:** Rebates were provided for energy efficiency upgrades to mechanical systems and insulation. The City also provided rebates to businesses for lighting system improvements through their BPA-funded programs. CEEP dollars funded rebates for natural gas efficiency measures. The City funded the assessments and all other program support. Homeowners and small business owners paid the majority of the costs for energy efficiency improvements (typically more than 80 percent).

#### **Local Economy**

Prior to the CEEP Pilot Program, no contractors in Ellensburg offered insulation and weatherization services. The program brought two insulation contractors into the community and helped them get up-to-speed delivering quality work that met the program requirements. In addition, five heating contractors were involved with the program.

# **Service Delivery**

Team Member	Administration and Management	Outreach and Marketing	Assessments/ Audits	Incentives/ Financing	Installations	Workforce Development	Advisors
City of Ellensburg	<b>v</b>	>	>	>		~	
Contractors					>	<ul> <li>✓</li> </ul>	
Downtown Association		>					
HopeSource							~

#### **What They Did**

Outreach and Marketing	Limited utility bill inserts, presentations, flyers and handouts. After initial outreach, word of mouth produced sufficient demand.
Community Education	Used existing resources (handouts, booklets, CDs) for participants and those who expressed interest. Education focused on participants.
Assessments and Audits	Free energy assessment, a one-page document with recommended energy efficiency improvements and a detailed bid document (residential only). For small business customers, emphasis was placed on education and working with contractors to develop bids.
Customer Service Strategy	Provided assessment and recommendations, assisted customer with evaluating bids and selecting the contractor, conducted quality assurance and paid incentives.
Incentives/Financing Strategy	Rebates for natural gas energy efficiency measures funded with CEEP dollars (typically less than 20 percent of costs).
Measure Package	Heating system (including duct sealing and duct insulation), hot water system, and ceiling and floor insulation. Business customers were eligible for lighting rebates through a BPA-funded program.
Contracting Approach	Contractor referral list. Customer selected and dealt with contractor.
Quality Assurance	In-progress and post inspection.
Workforce Development	On-the-job training to improve the quality of contractor work.

### **Preliminary Results**

- Performed over 140 residential energy assessments and 10 small business energy assessments.
- Facilitated over 60 residential retrofits and five small business retrofits.
- Provided City of Ellensburg participants with approximately \$20,000 in energy savings.

# **Puget Sound Energy – UCONS**



- Investor-Owned Utility
- Grant amount: \$1.8 million
- Duct sealing upgrade, with CFLs and low flow shower heads provided to customer
- No cost to customer
- Single contractorcompetitive selection service delivery
- Neighborhood marketing outreach methods
- Prescriptive direct installation
- Incentive strategy: cover full cost with utility and program incentives



#### Project

Puget Sound Energy (PSE) has a long history of offering energy efficiency programs to customers. They have provided a manufactured home duct-sealing program since 2006 and are always looking for new opportunities to reach customers who are not served by their other programs. The Community Energy Efficiency Pilot (CEEP) grant allowed PSE and their contractor, UCONS, to expand the number of homes served by their manufactured home duct-sealing program, add low-cost direct install measures and enhance workforce development.

#### **Players**

**PSE** chose **UCONS** to implement their manufactured home duct-sealing program through a competitive request for proposals. UCONS and a partner offered PSE the opportunity to incorporate the CEEP grant into the program. PSE moved forward as the prime contractor for the CEEP grant; developed the statement of work with UCONS; provided management oversight, tracking and support; and paid for the duct sealing. UCONS delivered the program services. They worked with manufactured home park managers on marketing outreach and used a sub-contractor to help with worker training and quality assurance. The **Department of Commerce RISE Program** also assisted with outreach and education to establish relationships with some manufactured home parks.

#### Approach

**Outreach and Marketing:** UCONS's marketing team was responsible for outreach and customer sign-up. Once UCONS selected a manufactured home park, they met with the park manager for approval and support, attended community meetings, contributed program write-ups to the community newsletter, and raised awareness through direct mailings. This was followed by door-to-door canvassing, where UCONS provided information and scheduled customers for service. They left flyers for residents who were not home and then provided follow-up.

**Assessments and Audits:** UCONS used a data management system to schedule work to match the work-flow needs of their installation teams. Jobs were scheduled in three-hour windows to allow UCONS to efficiently do a group of jobs in a day. There was not a separate assessment or audit. On complex homes, UCONS performed duct testing, but in most cases prescriptive duct sealing was provided. They also installed CFLs in highuse fixtures, insulated hot water pipes, and left a low-flow showerhead (or an energy savings kit with a showerhead, aerators and thermometer) to be installed by the customer. UCONS employed a staff inspector who checked most jobs. At the completion of each job, UCONS installers explained to the customer what was done and the customer signed off on the work. UCONS left energy information with the customer as part of the ongoing education process. UCONS hired a third-party contractor (Energy Services Group) to do monthly quality assurance inspections, usually done the same day a job was completed or a day later. PSE had the right to perform site verification and inspections.

**Incentives:** 100 percent of the cost was covered through a combination of PSE rebates and ARRA funding.

Team Member	Administration and Management	Outreach and Marketing	Assessments/ Audits	Incentives/ Financing	Installations	Workforce Development	Advisors
PSE	<ul> <li>✓</li> </ul>	>		<b>&gt;</b>			
Contractor - UCONS	<b>~</b>	>	<b>~</b>		>	~	
Subcontractor						<ul> <li>✓</li> </ul>	<b>~</b>
Manufactured Home Park Managers		~					~

### **What They Did**

Outreach and Marketing	Worked with the manufactured home park manager, attended community meetings, used the community newsletter and did direct mailing to get the word out. Walked the park, provided information about the program, provided educational information and scheduled customers on the spot for services. Left flyers for residents who were not home and then followed-up. Leveraged the PSE website, Energy Advisors, press releases and community engagement efforts to expand marketing reach.
Community Education	Part of outreach and installation processes.
Assessments and Audits	No separate assessment was conducted. As part of implementation, needed work was identified and completed.
Customer Service Strategy	Comprehensive project management and implementation. Once a customer agreed to have work done, UCONS managed all aspects of a job.
Incentives/Financing Strategy	100 percent of the cost was covered through a combination of PSE rebates and ARRA funding.
Measure Package	Prescriptive duct sealing, water pipe insulation, CFLs in high-use fixtures, low-flow showerheads and water savings kits.
Contracting Approach	PSE hired UCONS to provide implementation services.
Quality Assurance	UCONS project lead inspected most jobs. A third-party consultant conducted random monthly inspections. PSE conducted site verification and some inspections.
Workforce Development	UCONS staff received training on duct testing and sealing, and some were certified. A consultant provided periodic on-site training and UCONS project leads mentored staff and worked with new employees.

- Preliminary ResultsPSE and UCONS expanded the number of customers served by the manufactured home duct-sealing program by almost 2,500 customers.
- Performed over 7,200 upgrades.
- Saved homeowners over \$550,000 annually.

# **RePower Bainbridge Island / RePower Bremerton**



- City of Bainbridge, City of Bremerton and Conservation Services Group Partnership
- Grant amount: \$4.8 million
- Residential upgrades with limited commercial upgrade target in Bainbridge Island
- 80 to 90 percent customer financial contribution
- Referral to contractor/ trade ally list, customer manages upgrade process
- Call center/web-based marketing and social media tactics
- Optional subsidized EPS audit with telephone follow-up or no-cost CSG walk-through assessment
- Utility incentives plus additional RePower rebates for insulation and whole-house air sealing
- Fuel match incentives for oil and propane customers
- Referral to a subsidized energy efficiency loan product



#### Project

RePower Bainbridge Island and RePower Bremerton is a county-wide program aimed to drive demand for energy efficiency upgrades by providing subsidized audits, information about utility rebates, supplemental incentives, financing and access to a local skilled workforce for homeowners in the cities of Bainbridge Island and Bremerton, Washington.

#### **Players**

The **City of Bainbridge Island** co-wrote a grant with **Conservation** Services Group (CSG) and invited the City of Bremerton to join the effort to coordinate outreach and stakeholders. Positive Energy worked with Puget Sound Energy (PSE) to obtain island energy use data and live data feed to develop community energy dashboards. **CSG** is the direct grant recipient and delivers energy audits (Home Energy Check-Ups). CSG also provides program design services and call center and program support services, and manages the trade ally network consisting of 18 local contractors and auditors. Earth Advantage provides the Energy Performance Score (EPS) audit tool and training for auditors and contractors. PSE and Cascade Natural Gas maintain the existing rebate programs and provide performance data. PSE is implementing the commercial upgrade program. Kitsap County Credit Union and the City of Bainbridge Island developed and offered an island-specific energy efficiency loan product. The marketing and service delivery model are closely coordinated with RePower Kitsap and provided by CSG. Sierra Club provides canvassing assistance. Kitsap Community College offers trainings and job placement services.

#### Approach

**Outreach and Marketing:** Focused on community outreach and tabling events as well as social media tools (Facebook, Twitter). Traditional free media (newspaper, radio, mailings) plus web page and call center. Incentive guide clarifies what is available to customers from utilities and RePower. The Trade Ally Network was established and requires Building Performance Institute (BPI) certification for all participating contractors, including upgrade contractors and energy auditors.

**Assessments and Audits:** Participants get a free Home Energy Check Up. Island and Bremerton residents are also eligible for RePower-subsidized EPS audits.

**Incentives:** Existing utility incentives were supplemented by RePower Rewards, a \$400 bonus for installing two or more qualifying improvements. Utility incentives are matched for oil and propane customers. There is a \$400 whole-house air sealing incentive, a \$100 organizational challenge incentive, property owner incentive, and a friends and family referral incentive.

#### **Local Economy**

Almost 20 contractors became more skilled in delivering residential energy efficiency upgrade services including whole-house weatherization. The contractor pool and number of workers is expected to grow. Contractors have reported that 28 new jobs were created since program start.

# **Service Delivery**

Team Member	Administration and Management	Outreach and Marketing	Assessments/ Audits	Incentives/ Financing	Installations	Workforce Development	Advisors
Cities of Bainbridge and Bremerton	Local coordination						•
Conservation Services Group	Outreach, incentives and referrals	~	>	>	Referrals		~
Earth Advantage			Tool and training			~	<b>~</b>
WSU Energy Program, Commerce	Data assis- tance, Energy Performance Consultants	~				~	1
PSE, Cascade Natural Gas		~		Incentives			
Contractors and audit firms		~			<ul> <li></li> </ul>		~
Kitsap County Credit Union		~		Loans			

#### **What They Did**

Outreach and Marketing	Community energy dashboards. Traditional media plus web portal and call center. Use of Trade Ally Network including contractors and realtors.
Community Education	Broad-based community education campaign at program start to raise awareness about capacity issue. Trainings in the house as a system were delivered by CSG to residents during the first summer of the program. Summer 2012 will focus on real estate agent outreach and training.
Assessments and Audits	Participants receive no-cost home energy check-ups (Bainbridge) or PSE HomePrint Assessment (Bremerton, provided by CSG Energy Advisors). EPS follow-up is encouraged by auditors and provided by RePower Kitsap Energy Advisors.
Customer Service Strategy	CSG coordinated referrals for audits and contractors through a call center and also implemented a Technical Help Desk staffed by Lead Energy Advisor.
Incentives/ Financing Strategy	Supplemented utility incentives by providing RePower Rewards and additional whole-house air sealing incentives and a variety of community-oriented incentives such as organizational challenge and friends and family bonus. Low-interest loans made available by Kitsap Credit Union and collateral to promote this were developed in partnership with CSG.
Measure Package	Mixed customer choice, market driven.
Contracting Approach	Referral to a Trade Alley Network. Customers manage bids and upgrade process. CSG provides QA services to 10 percent of all upgrade jobs and on all DIY jobs applying for RePower rebates.
Quality Assurance	In-depth quality assurance and quality control visits provided for in-process upgrades and post-construction.
Workforce Development	Sales skills training and EPS tool training provided to auditors and contractors. Targeted training provided to realtors and appraisers. Additional BPI training made available to Trade Ally Network by CSG and other providers.

# **Preliminary Results**

At the half-way point in the grant, RePower Bainbridge/Bremerton has:

- Performed 1,836 free home energy check-ups in Bainbridge Island.
- Performed 234 HomePrint Assessments in Bremerton.
- Performed 239 EPS assessments in Bainbridge and Bremerton.
- Completed 425 upgrades in

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Bainbridge Island.

- Completed 41 upgrades in Bremerton
- Current conversion rate of 21 percent.

# **RePower Kitsap**



- County government
- Grant amount: \$1.1 million
- Mixed customer-driven residential upgrade
- 80 to 90 percent customer financial contribution
- Referral to contractor/ trade ally list; customer manages upgrade process
- Call center/web-based marketing
- Optional subsidized EPS audit with telephone follow-up or no-cost utility walk-through assessment
- Utility incentives plus additional RePower rebates for insulation and whole-house air sealing
- Referral to a subsidized energy efficiency loan product

#### Project

RePower Kitsap is a county-wide program aimed to drive demand for energy efficiency upgrades by providing subsidized audits, information about utility rebates, supplemental incentives, financing and access to a local skilled workforce for homeowners in Kitsap County, Washington.

#### **Players**

Kitsap County coordinated outreach and stakeholders. The **Washington State University Energy Program** provided reporting and stakeholder coordination, and contracted with the **Conservation Services Group (CSG)** to manage rebates, provide call center and program support services, and manage the trade ally network consisting of 18 local **contractors and auditors. Earth Advantage** provided the Energy Performance Score (EPS) audit tool and training for auditors and contractors. **Puget Sound Energy** (PSE) and **Cascade Natural Gas** maintained existing rebate programs. The **Kitsap County Credit Union** developed and offered an energy efficiency loan product. The marketing and service delivery model were closely coordinated with RePower Bainbridge and RePower Bremerton, operated by the cities of Bainbridge Island and Bremerton, with program implementation provided by CSG.

#### Approach

**Outreach and Marketing:** Traditional free media (newspaper, radio, mailings) plus web page and call center. Strong program presence was provided at local events, trade shows and markets. The Trade Ally Network, including upgrade contractors and energy auditors, was established.

**Assessments and Audits:** Participants had the option of getting a subsidized EPS audit. PSE also provided a no-cost utility walk-through HomePrint assessment.

**Incentives:** Existing utility incentives were supplemented by Repower Rewards, a \$400 bonus for installing two or more qualifying improvements and a whole-house air sealing incentive.

#### **Local Economy**

Almost 20 contractors became more skilled in delivering residential energy efficiency upgrade services including whole-house weatherization. The contractor pool and number of workers is expected to grow.



Team Member	Administration and Management	Outreach and Marketing	Assessments/ Audits	Incentives/ Financing	Installations	Workforce Development	Advisors
Kitsap County	Local coordination	~					~
Conservation Services Group	Outreach, incentives and referrals	~		Management	Referrals		~
Earth Advantage			Tool and training			~	~
WSU Energy Program	Grant and contract manager						~
PSE, Cascade Natural Gas		~		Incentives			
Contractors and audit firms		~	~		~		
Kitsap County Credit Union		~		Loans			
Washington State Department of Commerce	Grant and contract manager						~

### What They Did

Outreach and Marketing	Traditional media plus web portal and call center. Use of Trade Ally Network, including contractors and realtors.
Community Education	Broad-based community education was not a primary focus but was included as part of website postings and one-on-one through assessments and implementation.
Assessments and Audits	Participants had the option of getting a subsidized EPS audit or a no-cost utility walk-through assessment. Telephone follow-up for EPS audits
Customer Service Strategy	CSG coordinated referrals for audits and contractors through a call center and also processed RePower Rewards referrals.
Incentives/ Financing Strategy	Supplemented utility incentives by providing Repower Rewards and additional air sealing incentives for whole-house air sealing meeting minimum targets. Low-interest loans made available by Kitsap Credit Union.
Measure Package	Mixed customer choice, market driven.
Contracting Approach	Referral to a Trade Alley Network. Customers manage bids and upgrade process.
Quality Assurance	In-depth quality assurance and quality control visits provided for both in-process upgrades and post-construction.
Workforce Development	Sales skills training and EPS tool training provided to auditors and contractors. Targeted training provided to realtors and appraisers. Additional Building Performance Institute training made available to Trade Ally Network.

**Preliminary Results** At the half-way point in the grant, RePower Kitsap has:

- Performed over 280 EPS assessments.
- Completed over 250 upgrades.
- Provided almost \$200,000 in energy efficiency loans to homeowners.

# **Sustainable Living Center**



- Community/sustainability based non-profit organization
- Grant amount: \$750,000
- Insulation/air sealing upgrades
- 30 percent customer financial contribution
- Facilitated process with referral to screened contractors for service delivery
- Multiple marketing outreach methods
- Free screening assessment, subsidized audit and in-person followup for scope of work
- Incentive strategy that supplements utility incentives

#### **Project**

The Sustainable Living Center (SLC) was created to provide energy efficiency improvements to homeowners in Walla Walla, Washington. No whole-house weatherization services were available to households that did not qualify as low income in Walla Walla prior to CEEP. As a result, a large portion of the population, particularly those living in older homes, benefited from SLC energy efficiency services.

#### **Players**

The **Sustainable Living Center** led the CEEP pilot in Walla Walla, collaborated closely with local utilities to develop their program, and made utility rebates accessible for clients. **Blue Mountain Action Council**, a local lowincome weatherization provider, offered technical assistance and referrals to the SLC. The SLC used a variety of community groups to reach potential clients and spread the word about their program. They worked with contractors to deliver quality weatherization services to program clients.

### Approach

**Outreach and Marketing:** The SLC did door-to-door canvassing, direct mailing, community events and civic presentations to build name recognition and awareness of the program. They worked with volunteer groups to go door to door to provide CFLs and information on low-cost and no-cost energy efficiency opportunities. While these approaches were not particularly successful in bringing clients into the program for assessments, they were an important starting point for developing trust and brand awareness. Most referrals to the program were from contractors or word-of-mouth referrals.

**Assessments and Audits:** A unique aspect of the SLC program was that it provided free initial energy assessments to potential customers, which identified energy efficiency opportunities and encouraged participation in the program. Homeowners learned how they could save energy and were often given low-flow showerheads and aerators and CFLs.

For clients who wanted to pursue energy efficiency improvements, an SLC-certified auditor performed comprehensive home energy performance review audits. For contractor bids, SLC prepared a participation offer that showed the job cost, energy savings, savings-to-investment ratio, and utility and SLC rebate estimates. Participating clients coordinated with the contractor to install the energy efficiency improvements.

**Incentives:** The SLC program limited its rebates to floor, wall and ceiling insulation measures. This simplified the program and provided the greatest opportunity for impact and education with limited funding. The SLC incentive covered about a third of the cost, on average, with the balance split between utility rebates and the homeowner.

SustainableLivingCenter

Team Member	Administration and Management	Outreach and Marketing	Assessments/ Audits	Incentives/ Financing	Installations	Workforce Development	Advisors
SLC	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<b>v</b>		<ul> <li>✓</li> </ul>	
Contractors					¥	<ul> <li>✓</li> </ul>	
Utilities		<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>			~
Volunteers		<ul> <li>✓</li> </ul>					
Blue Mountain Action Council							~

# What They Did

Outreach and Marketing	Community events (such as farmers markets and fairs), civic organization presentations, direct mail and door-to-door canvassing. Most referrals of clients to the program came through word-of-mouth and contractors.
Community Education	Most of the community education occurred via information delivered as part of the free homeowner energy assessments. Education was also incorporated into outreach at community events and in door-to-door canvassing.
Assessments and Audits	This was a two-step process. First, a free one-hour energy assessment identi- fied opportunities, provided education and informed the homeowner about the program. Second, an energy performance review audit was offered for \$150 for homeowners who chose to move forward.
Customer Service Strategy	SLC provided assessments and audits, assisted with getting contractor bids and prepared a participation offer that shows the job cost, energy savings, savings-to-investment ratio, estimated utility rebates and SLC rebates. SLC also provided quality assurance.
Incentives/Financing Strategy	SLC incentives covered 30 percent of the project cost. On average, utility rebates covered another third of the cost and the homeowner paid about a third.
Measure Package	SLC incentives for floor, wall and ceiling insulation measures (and air sealing associated with those measures).
Contracting Approach	Contractor referral list. Customers select and deal with contractors directly.
Quality Assurance	All projects received a final inspection.
Workforce Development	Initial contractor training about the program. Contractor training on air sealing, contractor oversight and quality assurance. Auditor mentorship led to BPI-certification of one auditor.

- Preliminary ResultsConducted over 600 residential assessments and over 200 home energy performance review audits.
- Completed over 200 energy efficiency upgrades for residential customers.
- Saved Walla Walla residents over \$100,000 per year.

# **Snohomish PUD - Community Power!**



- Public Utility District
- Grant amount: \$2.1 million
- Windows/lighting/ thermostat multi-family upgrade
- Customer financial contribution: residential 25 to 80 percent; multifamily 0 percent; direct install 70 percent
- Single contractorcompetitive selection, contractor service delivery
- Neighborhood marketing outreach methods
- Free assessment to prepare scope of work
- Incentive strategy: cover full cost of audits and utility and program incentives (for direct install)



#### Project

Snohomish County PUD has delivered energy efficiency programs for over 25 years. CEEP provided the PUD with the opportunity to test new ideas. The PUD had three goals for the Community Power! program:

- Develop sustainable and replicable energy efficiency service delivery models,
- Obtain energy savings in what may be hard-to-reach market segments, and
- Mobilize effective community-driven energy efficiency efforts.

#### **Players**

The PUD created a small team to develop and deliver the Community Power! program. The **City of Everett** and **Snohomish County** were the primary collaborators, assisting with outreach, providing consulting on program design and administration, and contributing some funding through Energy Efficiency Community Block Grants. Other community partners who helped with outreach included a couple of smaller cities, neighborhood groups, churches and crime prevention groups.

#### Approach

**Outreach and Marketing:** Community Power! consists of three distinct elements: multi-family building direct install, small business direct install and community-based residential. Outreach to multi-family buildings and small businesses was mainly direct face-to-face marketing. Community Power! also provided presentations to associations. Contractors did much of the marketing for small businesses. Marketing and participation targeted two neighborhoods in South Everett, chosen because these areas were underserved and had many potential participants. Initial residential outreach was focused on discrete community groups and networks, primarily through community meetings, events and networking. When the number of participants was lower than desired, Community Power! expanded outreach to include the entire county. Community Power! advertised the program through an e-newsletter, website and utility bill inserts, and invited homeowners to team up with their neighbors and sign up for an energy assessment.

#### **Assessments and Audits:**

**Multi-Family Building Direct Install:** The building owner signed a participation agreement. The PUD contractor conducted a building assessment and prepared a statement of work, which was approved by the PUD.

**Small Business Direct Install:** The small business element was a lighting-only program. It followed the processes of the existing PUD lighting rebate program, but increased the incentive to 90 percent of the project cost to encourage participation. An approved lighting contractor engaged the customer and submitted a project bid, signed by the customer, to the PUD. The PUD inspected the existing building, made necessary revisions to the bid and authorized the work.

**Community Based-Residential Install:** A PUD contractor conducted a full energy audit on homes built before 1992 using Energy Performance Score and a blower door test. All other homes underwent a simpler assessment that placed more emphasis on behavioral changes.

**Incentives:** Direct install measures were provided at no cost; enhanced incentives were provided for other measures. Incentives covered 90 percent of lighting costs. Enhanced incentives for residential refrigerators and insulation covered up to 75 percent of costs.

Team Member	Administration and Management	Outreach and Marketing	Assessments/ Audits	Incentives/ Financing	Installations	Workforce Development	Advisors
PUD	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>		<b>v</b>			
Government		<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>			~
Contractors		>	<ul> <li>✓</li> </ul>		✓	<ul> <li>✓</li> </ul>	
Community Groups		>					

### **What They Did**

	Multi-Family	Small Business	Residential
Outreach and Marketing	Direct face-to-face marketing with presentations to community associations	Direct face-to-face marketing relying largely on contractors	Initially focused on discrete community groups through community meetings, events and networking. Advertised through an e-newsletter, web- site, bill inserts and peer-to-peer marketing.
Community Education	Integrated into assessments and implementation	None	Part of community events and audits/ assessments
Assessments and Audits	Provided for free by the PUD contractor	Contractor assesses lighting and prepares a bid	Provided for free by the PUD contractor for homeowners who signed up in groups of five. Organized into two tiers; homes built after 1992 receive a tier 1 assessment.
Customer Service Strategy	Direct installation of low-cost measures using one contractor. Deeper measures follow PUD program requirements.	Typical utility lighting program using approved contractors	Typical utility weatherization program after the initial sign up (Team Up and Save) and the free audit/assessment
Incentives/ Financing Strategy	Direct install measures are no cost; enhanced incentives for other measures	Incentives cover 90 percent of lighting costs	Enhanced incentives for refrig- erators and insulation, up to 75 percent of cost.
Measure Package	Direct install: EE lighting, CFLs, thermostats, low-flow show- erhead, faucet aerators, smart power strips. Other measures: common area lighting, attic insulation, windows, doors	Lighting	Typical weatherization mea- sures; leave-behind measures (CFLs, showerheads, aerators) at no cost
Contracting Approach	Direct: RFP, one contractor Other: approved contractor pool	Approved contractor pool	Assessments: RFP, one contractor Weatherization: approved contractor pool
Quality Assurance	Inspect all projects	Inspect all projects	Inspect all projects

### **Preliminary Results**

- Performed over 4,200 residential and multi-family energy assessments and over 140 small business energy assessments.
- Facilitated over 4,000 residential and multi-family retrofits and over 140 small business retrofits.
- Energy savings: approximately \$220,000 per year for residential customers, approximately \$200,000 per year for commercial customers, for a combined savings of over \$400,000 per year.

# **SustainableWorks**



- Non-profit organization
- Grant amount: \$4 million
- Whole-house residential upgrade
- 60 to 70 percent customer financial contribution
- General contractor service delivery
- Neighborhood marketing outreach methods
- Subsidized audit, in-person follow up
- Incentive strategy: supplement utility incentives
- Subsidized integrated financing
- Energy Performance Score



#### Project

SustainableWorks was created to address triple bottom-line social, economic and environmental concerns at a time when communities were facing great economic distress, high unemployment and increased concern for the environment. SustainableWorks founders saw an opportunity to organize communities around energy efficiency to drive demand to address these conditions.

#### **Players**

SustainableWorks developed a network of relationships among local governments, community groups and leaders and volunteers in the neighborhoods where they worked. SustainableWorks worked with utilities through their existing programs, collaborated with two credit unions to offer financing and developed a network of contractors to deliver services. SustainableWorks collaborated with trade unions to provide weatherization training and apprenticeship opportunities, and developed a comprehensive building performance auditor training course using matching funds from a Department of Labor Sound Energy Efficiency Development (SEED) grant.

#### Approach

**Outreach and Marketing:** SustainableWorks used a community-based outreach (community organizing) approach. In each community, they started with a community steering committee composed of leaders from local government and community organizations to get input and local buy-in. Then they launched a media blitz with a big community event. This was followed by a neighbor-to-neighbor approach using peoples' existing networks and door-to-door canvassing.

**Assessments and Audits:** SustainableWorks offered a comprehensive service delivery model to manage the entire process from audit to final inspection and payment. They scheduled and conducted the audit with customers who signed up, produced an audit report and had an energy consultation with the homeowner, ideally on the same day as the audit. One unique aspect of SustainableWorks' approach was to bundle services. They tried to schedule groups of audits and projects in neighborhoods to make service delivery more efficient. They also grouped project bids into bundles.

**Incentives:** SustainableWorks handled all of the utility rebates and grant incentives so the homeowner paid just the net project cost. Utility rebates typically covered less than 10 percent of project cost, CEEP incentives covered 15-20 percent, and Federal Way area homeowners were also eligible for Energy Efficiency Community Block Grant funds. The energy audit costs were subsidized by utilities so homeowners paid only \$95. SustainableWorks assisted homeowners with securing financing and offered low-interest loans (0 percent interest for eligible homeowners) with favorable terms through the Energy Efficiency Credit Enhancement Program and their partner credit union.

Team Member	Administration and Management	Outreach and Marketing	Assessments/ Audits	Incentives/ Financing	Installations	Workforce Development	Advisors
SW	<ul> <li>✓</li> </ul>	¥	<ul> <li>✓</li> </ul>	<b>&gt;</b>	>	<ul> <li>✓</li> </ul>	~
Municipalities		<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>			~
Contractors			<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>		
Utilities		<ul> <li>✓</li> </ul>		<b>v</b>			
Labor unions						<b>v</b>	
Credit unions				<b>v</b>			

# What They Did

Outreach and Marketing	Community-based outreach, beginning with a community steering committee to get input and local buy-in, then a local media blitz with a big community event, followed by a neighbor-to-neighbor approach using existing social networks, including door-to-door canvassing.
Community Education	Public education was provided as part of the community organizing process. Homeowner education was provided at the audit and consultation process.
Assessments and Audits	Provided audits for \$95 (subsidized by utilities) followed by an energy consultation.
Customer Service Strategy	Comprehensive project management. Managed all aspects of the project including bids, incentives, financing, scheduling and follow up.
Incentives/Financing Strategy	Provided direct incentives that typically covered 15 to 20 percent of project costs and obtained utility incentives. Discounted and administered utility rebates. Provided financing in partnership with credit union. This included a revolving loan loss reserve, interest rate buy-down and favorable loan terms through an Energy Efficiency Credit Enhancement Grant Program.
Measure Package	Comprehensive weatherization measures: air sealing, insulation, heating systems, duct sealing, water heaters, window replacement, direct install of CFLs, appliance replacement and ventilation. Also health and safety measures: asbestos abatement and mold remediation.
Contracting Approach	Acted as the general contractor using a pool of contractors and direct staff to execute services.
Quality Assurance	Staff project manager performed a QA assessment of the work upon completion. Conducted follow-up survey with the customer. Performed spot project inspec- tions. Coordinated with government and utility inspectors.
Workforce Development	Offered building performance auditor training courses, mechanical systems training, infrared technology training and energy modeling. Paid short call opportunities for graduates to work in the field as assistants to auditors. Trade unions provided mechanical trades cross training, weatherization training and apprenticeship opportunities.

- Preliminary Results
  Performed over 1,200 residential energy audits and approximately 400 retrofits.
  Energy savings: approximately \$170,000 per year for residential customers.

# **Thurston Energy**



- Economic Development Council Agency
- Grant amount: \$1 million
- Customer choice of selected upgrades
- 80 to 85 percent customer financial contribution
- Optional referral to screened contractors for service delivery
- Multiple marketing outreach methods
- Subsidized audit with telephone follow up
- Incentive strategy: utility incentives
- Referrals for available financing
- Energy Performance Score



#### Project

Thurston Energy was created by the Thurston County Economic Development Council and the Thurston County Climate Action Team. The intent of Thurston Energy was to act as "a trusted energy advisor" to encourage and support homeowners and businesses in Thurston County, Washington, to save energy and money through energy efficiency and help create a sustainable energy retrofit industry and workforce. Most commercial projects consisted of lighting upgrades.

#### **Players**

Thurston Energy is a program of the **Thurston County Economic Development Council (EDC)**. **Thurston County Climate Action Team (TCAT)** provided oversight and volunteer support. **City and county governments** were involved in developing Thurston Energy. Thurston Energy worked closely with the **City of Lacey** and utilized some city funding to deliver services to Lacey residences, collaborated with **Puget Sound Energy (PSE)** to develop an energy efficiency walk-through audit and services for commercial businesses and partnered with several **local credit unions** to offer loans to homeowners and businesses for energy efficiency upgrades.

#### **Approach**

**Outreach and Marketing:** Thurston Energy worked to raise awareness of the "Thurston Energy" brand and to publicize the opportunity to save energy and money. To do so, they used door-to-door canvassing, direct mailing/utility bill inserts, neighborhood and business group presentations and community events, as well as website and media (newspapers, radio ads, email, social media). Thurston Energy also relied on their business network, contractors and word of mouth.

**Assessments and Audits:** Thurston Energy scheduled subsidized audits for homeowners and was available to advise and follow up with home-owners to help them understand their audit report and recommendations, provide referrals to contractors and help secure contractor bids.

Thurston Energy offered free walk-through assessments for businesses, usually in collaboration with PSE. As part of the walk-through, CFLs and faucet aerators were installed for PSE customers. PSE then presented a walk-through report to customers. Thurston Energy followed up with customers to determine their interest in implementing any recommendations and provided a list of contractors for those customers interested in managing their own projects; for a fee, Thurston Energy managed the process for the customer.

Once the project was complete, the Thurston Energy advisor followed up with the customer on how the job went. If customers were interested in loans to help finance their energy efficiency upgrades, Thurston Energy referred them to several credit unions that offered loan products for this purpose. Thurston Energy did not directly offer incentives for energy efficiency measures, but provided information about PSE rebates.

Incentives: Utility incentives were available directly from the utility for some measures.

#### Local Economy

Thurston Energy worked to raise the energy consciousness in the community and build awareness of the Thurston Energy brand. They made connections and built bridges between the business and environmental communities. Thurston Energy helped some businesses expand, develop energy efficiency services and create jobs.

### **Service Delivery**

Team Member	Administration and Management	Outreach and Marketing	Assessments/ Audits	Incentives/ Financing	Installations	Workforce Development	Advisors
Thurston Energy	~	~	Commercial		Direct installs during assessments	V	•
Municipalities		<b>v</b>		<b>v</b>			
Contractors		~	Residential	Offered discounts	~	~	~
Utilities		~	✔ Commercial	<b>&gt;</b>			~
Volunteers		<b>v</b>					~
Credit unions		<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>			

#### **What They Did**

Outreach and Marketing	Methods included door-to-door canvassing, direct mailing/utility bill inserts, neighbor- hood and business group presentations, community events, website and various media (newspapers, radio ads, email, social media). They also relied on contractors, their busi- ness network and word of mouth.
Community Education	Education was integrated into their outreach and audit processes.
Assessments and Audits	Residential audits were subsidized and provided by contractors initially for \$95 and then for \$195. Commercial walk-through assessments were conducted by Thurston Energy and PSE for no cost (in most cases). Thurston Energy also provided audit scheduling services on behalf of the local energy auditors.
Customer Service Strategy	Acted as an energy advisor to the customer. The customer was responsible for working with the contractor and moving a project forward, with advisory support from Thurston Energy. For a fee, Thurston Energy helped manage commercial projects.
Incentives/Financing Strategy	Financing was available from partner credit unions. Utility incentives were available directly from the utility for some measures. Municipalities (such as the City of Lacey) provided rebates to customers for audits and upgrade measures.
Measure Package	None. Customers were free to choose the measures they wanted to implement (and pay for).
Contracting Approach	Thurston Energy vetted the contractor/vendor network. Customer selected and dealt with contractor.
Quality Assurance	Followed up with the customer. No project inspection.
Workforce Development	Supported contractors to increase their professionalism and customer service skills and to take advantage of existing training programs. Partnered with EDC's Business Resource Center to help local people create new businesses and/or spin-offs of existing businesses.

#### **Preliminary Results**

- Facilitated over 250 residential retrofits and 40 small business retrofits.
- Performed over 600 residential energy audits and over 100 small business energy assessments.
- Saved homeowners and businesses approximately \$90,000 per year.

#### **Organization Attendee List**

- Tara Anderson, SustainableWorks tara.anderson@sustainableworks.com (206) 575-2252
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- Glenn Blackmon, Washington State Department of Commerce, glenn.blackmon@commerce.wa.gov (360) 725-3115
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- Jonathan Dickenson, Lockheed Martin/Cascade Natural Gas, jonathan.e.dickenson@lmco.com (425) 877-2328
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