

Final Technical Report for Green Shares

Overview

The goal of the Green Shares project was to increase energy efficiency in Corvallis via interaction with contractors. Prompting particular behaviors at the point of action is one effective means of increasing desired behaviors.¹ Contractors have a unique opportunity to encourage installation of maximally efficient equipment at the point of sale. At launch, our strategy was to achieve a culture shift amongst contractors whereby promoting efficiency would become the norm. We aimed to increase the number of contractors focused on energy efficiency and improve the ability of all such contractors to sell energy efficiency measures. By the end of the project, we primarily focused on the latter component of the strategy – increasing energy efficiency sales amongst the self-selected contractors who were interested in seizing the opportunity. TRIG worked towards these goals through a combination of educational opportunities for contractors, connection with leads, resources to support sales, and co-op marketing opportunities.

Activity Under the Grant

Because this was a brand new project, the first year was spent developing the project itself, fostering networks, creating a means for contractors to enroll, and holding our first contractor workshops. In the second year, we continued trainings for contractors, conducted informal market research on likely customers in Corvallis, provided co-op marketing opportunities, and developed resources for contractors to share with customers. In the third year, we worked towards connecting contractors with warm leads for installation of efficiency measures while continuing our other offerings. Specifically, we focused on two initiatives: tapping into the rental market and increasing sales of ductless heat pumps. Details follow.

Project Development and Ongoing Planning

The program structure grew out of conversations with more than 50 people in relevant sectors; from talking with Corvallis residents interested in implementing energy efficiency measures in their homes; and from the sparse documentation of similar programs. Formal annual check-ins with participating contractors and the advisory committee shaped the project over time.

Enrolling Contractors

To enroll in Green Shares, contractors needed to be licensed, bonded and insured and needed to commit to providing their customers with bids and information about energy efficient options. Contractors enrolled online by filling out a survey describing their business and what trainings, etc. would be most useful to them. When directly promoting Green Shares contractors, we provided disclaimers to potential customers. While our trainings were available to all contractors, enrolled contractors received the following benefits.

- *Free direct advertising* to participants of other Energize Corvallis programs.
- *Free marketing* through traditional and social media outlets.
- *Informal market research* on residents' energy efficiency interests and purchasing criteria
- *Free training opportunities*

¹ McKenzie-Mohr, D. and W. Smith. 1999. *Fostering Sustainable Behavior: Community-Based Social Marketing Gabriola Island* (Canada): New Society Publishers.

- *Materials to share with customers* such as return on investment calculations for efficiency upgrades.
- *Use of the Green Shares logo* for their promotional materials.

Marketing and Lead Generation

Our most effective effort in terms of efficiency measures installed was likely our ductless heat pump campaign, followed by our outreach to rental property owners and managers. We also engaged in more traditional marketing activities like listing Green Shares participants on our website and offering space on an Energize Corvallis bus ad. We drove traffic to the contractor list on the website primarily via direct links from the Communities Take Charge project.

We focused on the rental market because it makes up more than half of Corvallis housing and is a challenging market for efficiency upgrades. TRIG held a workshop for property managers and property owners where we presented benefits of efficiency upgrades and available financial incentives. Self-selected, participating Green Shares contractors provided a special offer and were present at the workshop, allowing property managers and owners to meet those contractors in a lower pressure situation than when receiving a bid. Several participants participated in utility programs offering direct installation of instant savings measures like light bulbs and low-flow showerheads as a result of the workshop. In addition, one of the largest property managers in the area decided to upgrade bath fans for more efficient and effective fans (which is important for mold, and therefore health) as they come up for replacement in approximately 800 units. When we follow-up with participants several months after the workshop, many told us that they had not yet made any efficiency upgrades but plan to do so in the future and found the workshop useful.

Our subsequent lead generation effort focused on increasing sales of ductless heat pumps. Again, we applied community outreach and education strategies combined with a limited time offer to dramatically increase installations. In this case, we brought together the stakeholders NW Ductless Project (Project) of the Northwest Energy Efficiency Alliance, the local consumer owned utility and the Energy Trust of Oregon, which provides energy efficiency services for Oregon's investor owned utilities. Together, we planned the "Going Ductless!" campaign whereby broad community outreach was paired with a limited time installer/manufacture's rebate. This offer was paired with a general outreach campaign promoting ductless heat pumps and was publicized by mailers to 12,200 households, distribution of hundreds of flyers at events and of 2,500 door hangs, as well as through outreach via local email list servs, newsletters, social media and a community workshop. We mobilized the many volunteers engaged in various Energize Corvallis projects to promote the campaign and garner participation. The Project and the participating contractor paid for the mailers and doorhangs. The outcome was the installation of 51 ductless heat pumps for deemed annual savings of 198,390kWh and 305,521 lbs CO₂e reduced.

Contractor Trainings

Workshops for contractors focused on annual changes to incentives at the utility and government level; marketing; and specific technologies. The intention behind the incentives workshop was to equip participants with knowledge of what programs exist for their customers and how to access those programs and share the information. The marketing workshop was very well received and focused on array of marketing techniques for general marketing and targeting energy conscious

residents. The technologies covered in workshops were ductless heat pumps and heat pump water heaters – two key technologies for energy efficiency in the Pacific Northwest that are not yet widely installed. The workshops attracted 15-35 participants each, many of whom were Green Shares contractors.

Results

Over the three-year project, the Green Shares portion of Energize Corvallis trained 138 individuals, enrolled 26 businesses with 336 Full Time Equivalent employees and reached more than 18,000 households. Savings were at 198,390 kWh and 305,521 lbs CO₂e annually. This exceeded our goal of 3,000 households reached. See below for a summary of the results and how those results were calculated.

Outputs:

Our outputs for the project are summarized in the following table. Although the door hangs and tabling mentioned above are related to the Going Ductless! campaign, we are not counting them here because they are captured in other partners’ reports.

Outreach and Education Measures

Activity	Unit	
Contacts made (see below)*	Number of households	17,000+
*Please describe outreach/education activities here:		
- Rental properties owned/managed by participants in our energy efficiency in rental properties workshop		3,000
- 12,200 Direct mailers sent for Going Ductless! campaign		
- 2,500 Door hangs distributed by Corvallis Environmental Center interns and contacts made at events by Energize Corvallis volunteers and interns		14,700

Outcomes:

Through efforts from Energize Corvallis, Consumers Power Inc., The Heat Pump Store (THPS), THPS has reported a total of **84 leads and 51 installs – a 61% conversion rate**. Although the promotion ended on August 31, leads and installations will continue to increase from ductless system purchases made on or before August 31, 2013. CPI has seen a large increase in ductless system installations since the promotion launched; their 2013 ductless system installations surpassed the total number of 2012.

Through the installation of 51 ductless heat pumps resulting from our Going Ductless! campaign, we estimate savings of 178,500 kWh and 274,890 lbs CO₂ equivalent annually. This is based on the Regional Technical Forum’s (RTF) provisionally deemed energy savings, which estimate that a ductless heating and cooling system in a single-family home with zonal electric heat saves 3,500 kWh annually.² According to the Northwest Energy Efficiency Alliance’s PNW

² Northwest Energy Efficiency Alliance, PNW Ductless Heat Pump Project. Viewed July 9, 2013. <http://goingductless.com/consumer/about-ductless-heating-and-cooling/costs>

Ductless Heat Pump Project website, the systems can be expected to last for upwards of 20 years.³

Through the installation of instant savings measures (high-efficiency showerheads, faucet aerators, and compact florescent lighting) in rental properties resulting from our rental workshop, we estimate savings of 19,890 kWh and 30,631 lbs CO₂ equivalent annually. We assume all-electric units and the maximum number of measures installed per unit provided through the Energy Trust of Oregon’s Direct Installation program (1 low flow showerhead, 2 faucet aerators, and 8 CFL bulbs). We are using the same kWh savings calculated by the Communities Take Charge and Direct Installation program administered by the Corvallis Environmental Center. The other upgrades we know of are the installation of 4-5 energy efficient bath fans, with plans for 800 more in the works. However, we do not have an estimate of the savings from their installation.

Many other participants had plans to take future actions, as described below:

- Floor and attic insulation for multi-family unit in Salem.
- Potential ductless heat pumps for 1-2 units in Corvallis.
- Hundreds of bulbs and lighting fixtures to change
- Replacing baseboard heaters.
- Water savings.
- Windows.
- Appliances as needed.
- 800 bath fan replacements.

Results from documented and reported installations are summarized below.

Energy saving measure	Total energy savings measures installed	Energy savings per year per measure	Total energy saved	Total lbs CO ₂ equivalent saved (1.54 lbs CO ₂ e/kWh)
		kWh	kWh	
Low-flow showerheads (1/unit)	9	1,210	10,890	16,771
Low-flow aerators (2/unit)	18	100	1,800	2,772
CFL bulbs (8/unit)	72	100	7,200	11,088
Ductless heat pump	51	3,500	178,500	274,890

³ Northwest Energy Efficiency Alliance, PNW Ductless Heat Pump Project. Viewed July 9, 2013. <http://goingductless.com/consumer/about-ductless-heating-and-cooling/FAQ#Last>

Total Savings	198,390	305,521
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Summary Results

Outputs included:

- 138 individuals attending trainings138 individuals attending trainings, including 22 employees representing more than 3,000 rental units.
- 18,000+ households reached (3000 from rental workshop, an unknown number by contractors, 15,000-21,000 from ductless heat pump campaign with some of those households outside City limits and some duplication likely between the 15,000 receiving mailers and the 6,000 whose homes were canvassed).
- 26 businesses enrolled with 336 Full Time Equivalent employees.
- Cost saving worksheets developed for contractors to share with customers.
- Market research on likely energy efficiency customers.
- King size, exterior bus ad promoting Green Shares and interested Green Shares contractors.

Outcomes included:

- At least 9 rental properties upgrades with 3 different measures and more measures planned
- 51 ductless heat pumps installed as a result of our Going Ductless! campaign
- An estimated annual 178,500 kWh saved from DHP installations.
- Increases in building a greener energy infrastructure in Corvallis, including creating new work for energy conservation businesses.
- Increased usage of energy saving programs within the Corvallis community.
- 274,890 lbs CO₂e avoided over grant period from DHP installations with ongoing reductions expected over the systems' 20-year lifespan.
- Totals of 198,390 kWh and 305,521 lbs CO₂e saved annually through all program activities for which we were able to document outcomes.

Challenges and Lessons Learned

Overall, it was difficult to gain high levels of enrollment in the program, perhaps because of existing programs like Energy Trust of Oregon's Trade Ally program, participation in which is required in order to provide their incentives for some measures. However, even with contractors enrolled in the program, we were able to publicize our workshops broadly beyond that group, while offering specialized opportunities to that more select group of participating contractors. In all, our trainings attracted 138 participants, while we'd aimed for 200 in our initial proposal. However, the 26 businesses enrolled in Green Shares had 336 Full Time Equivalent employees, and we assume that some information was passed to staff that did not personally attend trainings.

The shift in program structure over time was based primarily on interactions with participating and non-participating contractors, from talking with Corvallis residents interested in implementing energy efficiency measures in their homes, and from the success of an unrelated TRIG program, "[Solarize Eugene](#)." TRIG found that many contractors do not see the value of efficiency equipment themselves and are concerned about losing sales if they are seen as pushing options on customers that are more expensive in the short run. This group would not be interested in training on how to sell efficiency to their customers, because they would not even spend the money to make their own homes more efficient. As such, we decided not to focus our

efforts on these contractors and rather to increase interested contractors' ability to make efficiency sales via offering trainings for the contractors, co-marketing, market research, and sales materials and by connecting contractors with warm efficiency leads.

The keys to the success of Solarize Eugene that we applied to our lead generation efforts were:

1. Provide a limited time offer;
2. Hold workshops (or events) where potential customers can learn in a group, thereby clarifying what can be a complicated process and creating a social norm for participants, and reducing customer acquisition time for contractors;
3. Conduct a large outreach effort around the program; and
4. Simplify the process by reducing the need to collect multiple bids and providing education around incentives, technologies, and other details.

Additional lessons learned were:

- Phone calls were the most effective means of attracting participation to workshops.
- Workshops on heating and cooling should be timed to avoid the heating/cooling season, rather than to coincide with the general construction season.
- It was difficult to track impact of workshops on sales of energy efficiency installations through participating contractors or rental property managers/owners.

Sustainability and Replication

The Green Shares project increased capacity within Corvallis for: 1) landlords and property managers to increase the efficiency of their properties, 2) building contractors to more effectively sell efficiency measures, and 3) ductless heat pumps to be installed on a more widespread basis. Landlords, property managers, and contractors told us in evaluations of our trainings that they felt they had increased capacities as mentioned above. Ductless heat pumps now have a stronger foothold in the community and are closer to being seen as the norm, in part thanks to the ductless heat pump campaign we initiated.

We will be disseminating the results of the project in a webinar in 2014 hosted by the EPA.

Financial Information

All funds were expended with no significant discrepancies.

Deliverables and Products

Resources developed exclusively for Green Shares contractors including Return on Investment handouts and our report on Corvallis homeowner preferences, "What's Driving the Energy Efficiency Home Upgrade?" are available here: <http://energizecorvallis.org/green-shares/green-shares-contractors/resources/>.

Other workshops materials can be seen at <http://energizecorvallis.org/green-shares/green-shares-contractors/greenshares-workshop/>

TRIG created a regular newsletter for the program with quarterly installments providing updates on Green Shares programming and highlights of other local training opportunities and relevant

information for contractors. A sample newsletter can be viewed here: [http://us2.campaign-archive2.com/?u=c80bd9d09b4964914e22f1792&id=7fa469156d&e=\[UNIQID\]](http://us2.campaign-archive2.com/?u=c80bd9d09b4964914e22f1792&id=7fa469156d&e=[UNIQID])