Solarize Eugene: Results and Lessons Learned

The Resource Innovation Group

October 19, 2012

Overview

The Solarize Eugene (Solarize) project was developed and administered by The Resource Innovation Group (TRIG) with funding provided by a Eugene Water & Electric Board Greenpower grant. Through active marketing, education and reduced costs through savings on customer acquisition, Solarize Eugene was designed to tap pent up demand for solar by offering customers a simplified process to move forward with installations.

Our goal was to substantially increase residential solar electricity and hot water generation by overcoming barriers of cost, complexity and customer inertia. Specifically, TRIG aimed to double 2010 solar installations with 60 photovoltaic (PV) and 20 solar thermal systems or 150 kW and 40,000 kWh annual estimated savings of solar thermal and to set a model in place for current and future bulk purchase programs.

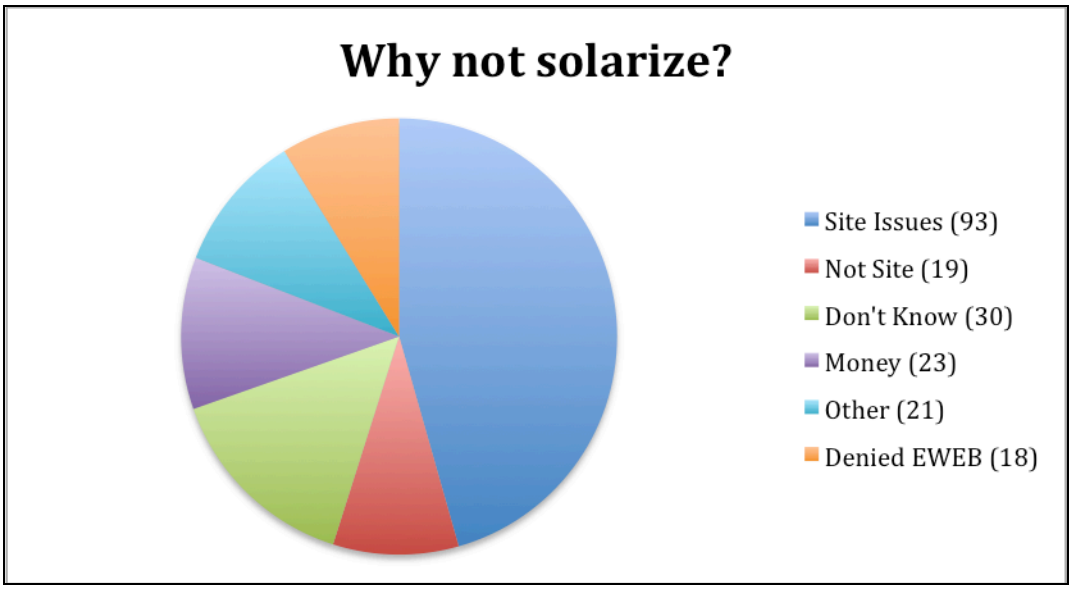
Despite the uncertainty customers faced in terms of whether or not they would receive a PV incentive, TRIG met the goal for PV, although not for solar thermal. We generated great enthusiasm for solar through Solarize Eugene and effectively reduced the barriers of cost, complexity and customer inertia, as described in this report. Indeed, TRIG set in place a model that ran smoothly and could be replicated for solar or potentially other efficiency measures.

About 55 to 60 Solarize Eugene participants are expected to install solar electric systems (PV) by the end of 2012 for at least 159 kW installed, with EWEB's total expected installations at about 90 systems.[1] Approximately 45 additional residents (about 30 of them being Solarize participants) applied for and were denied the EWEB PV rebate and most are not expected to install this year. Ideally, these interested parties will move forward with their projects next year as more incentive money becomes available. Compare this to the 54 residential PV installations in 2011 or the 29 residential PV installations in 2010 to see the significant increase in residential PV installations.

We achieved a 20 to 30 percent conversion rate for installations, much like other Solarize programs statewide and as was expected for this project. During the three-month registration period, 262 households signed up to participate in Solarize Eugene and received solar site assessments, while more than 325 people attended solar workshops. As such, the 55-60 households installing solar this year represent an approximately 20 percent conversion rate. If the approximately 30 Solarize households that did not receive incentives and are not expected to install in 2012 decide to move forward with installations in 2013 upon receipt of a PV incentive from EWEB, the conversion rate could be 34 percent. At least half of the participants and potentially three quarters of those who did not install did not have appropriate sites due to

[1] These numbers are as of September, 2012. There could be more by the end of 2012 if customers decide to install without the incentive. We are only counting registered households in our final numbers, although EWEB's Colleen Wedin reports that all of the installations by the Coalition contractors during the Solarize Eugene time period are at the same price, and some contractors noted that customers came to them through hearing about the Solarize Eugene program even though these customers did not officially register.

shading or, occasionally, structural issues, as shown in the chart below.[2] At least 10 percent of those who did not install described money as the reason, with many of those households not having sufficient tax liability to monetize the available tax credits.



With only one solar thermal installation expected through Solarize Eugene, we did not meet our goals for solar thermal. TRIG addressed solar thermal in each workshop and the four participating contractors that install solar thermal reported attempting to sell solar thermal systems. With a higher net cost and longer payback for solar thermal versus PV, and many participating households having fewer than three members and therefore insufficient hot water load, solar thermal was a much harder sell than PV.

With Solarize Eugene, TRIG laid a foundation for future bulk-purchase projects in EWEB territory and in the surrounding areas, both for solar and potentially for other technologies. We also believe that we have improved awareness and understanding of solar throughout the community, thanks to the educational workshops and the publicity for the project. Even though we were explicit that the program was only for EWEB electric customers, we also communicated with at least ten non-EWEB electric customers who were interested in solar. Finally, the project helped emphasize EWEB's overarching emphasis on efficiency.

Process

Solarize Eugene was designed as a solar volume-purchasing project based on similar successful programs throughout Oregon and the country. TRIG engaged community members as active

[2] This information came from the database used for registration and then updated by TRIG and the contractors. We believe that approximately 29 households did not receive the EWEB incentive, but as that was not reflected in the database it is not reflected in this chart.

participants in the project: choosing the contractors, marketing a limited time offer, and providing the contractors with likely customers in a constricted geographic area. The latter was expected to bring down costs, as the contractors save on customer acquisition and purchasing of equipment.

According to market research conducted for the Energy Trust of Oregon in 2007 and 2009, the major market barriers to residential solar are cost, customer indecision, and the complexity of the process. Solarize Eugene effectively addressed these obstacles, as described below.

1. **Reducing Complexity with Pre-Selected Contractors and Outside Support**

   Led by TRIG, volunteers on a contractor selection committee painstakingly developed a request for proposals (RFP) and selected a single proposal for installations at a fixed base rate for all equipment and labor associated with Solarize Eugene installations. Participants in the program were then automatically assigned to a selected contractor. This pre-selection saved customers from soliciting individual bids, thereby reducing customer complexity. A transparent process allowed interested participants to see why their contractor was chosen.

   In order to support and avoid harm to the local solar industry, the selection committee developed a RFP that assigned extra points to collaborations and required that at least one solar installer participating in each proposal have a Eugene business address. This criteria was developed based on input from partners like the City of Eugene and EWEB; community members attending one of two information sessions prior to program initiation; and a solar installer in Portland who had publicly opposed the Solarize programs in Portland due to his perception of a negative impact on local installers that were not selected.

   The selection committee received two proposals, one of which came from a collaboration between Eugene's five primary local solar installers, dubbed the Eugene Solar Coalition (Coalition). The committee interviewed the Coalition and TRIG checked CCB licenses, OSHA, claims with the Department of Justice, references, and the Better Business Bureau. The committee selected the Coalition unanimously due to their certifications and training, experience, price offered by the Coalition, and the positive results of TRIG's due diligence checks. The Coalition consists of Advanced Energy Systems, Energy Design, Green Store, Pacific Solar and Rain, and Solar Assist.

   Participants in the project signed up online and were automatically assigned to one of the contractors in the Coalition. We overrode the automatic assignments to honor customer requests and contractors' past relationships with customers. TRIG was available for additional support for participants beyond the workshops, but found that those who attended a workshop did not tend to contact us for further assistance.

   One participant, Marc Schlossberg, Associate Professor of Planning, Public Policy, and Management at the University of Oregon, said of the program, "I've been interested in solar for years, both for the energy savings and for helping show our kids the connection between energy use and energy production. We now have a 2.82 kW solar electric system and Solarize Eugene made the whole process from idea to installation really easy and straightforward."

2. **Reducing Cost through Education and Outreach**

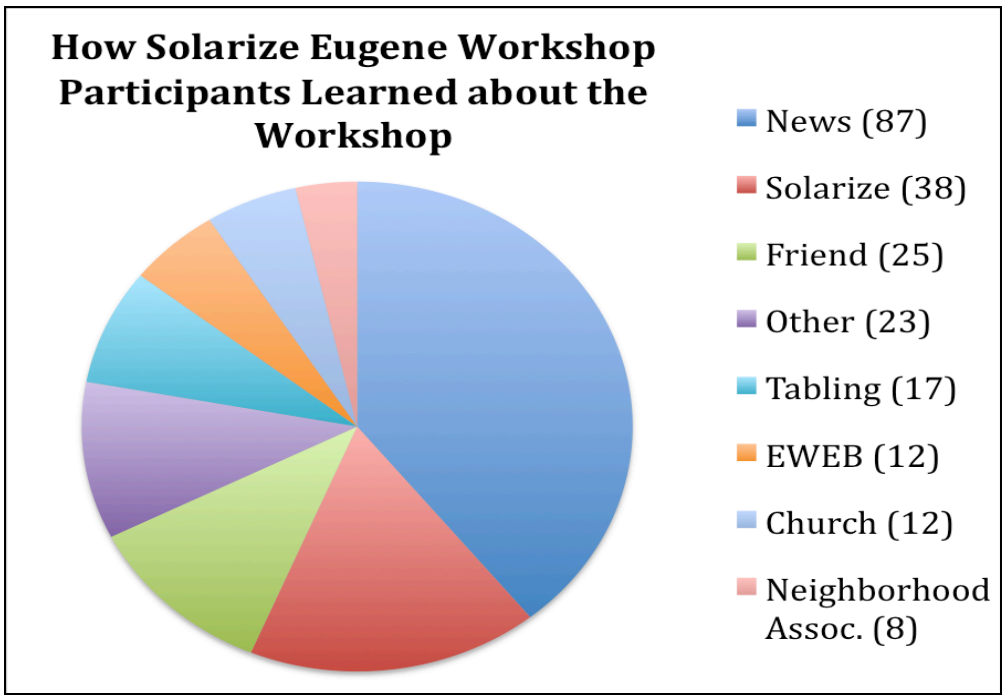
The contractors were able to save on customer acquisition costs because of the education and marketing that TRIG provided. It is unclear whether or not they saved through bulk purchasing, as they decided to purchase their equipment separately.

TRIG held seven solar and one efficiency workshop during the three-month enrollment period, as well as two information sessions prior to the enrollment period. Our workshops were well attended, with 100 participants at the kick-off and 30 to 60 participants at subsequent workshops (except for the poorly attended efficiency workshop) for a total of 325. We held them in different parts of town throughout the three months to make them easily accessible to many EWEB customers.

The workshops covered the technologies offered through the program, the price and incentives available, as well as the basics of net metering and relationship with EWEB. Sarah Mazze, who managed Solarize Eugene for TRIG, led the workshops with some portions conducted by the contractors and others by EWEB's Colleen Wedin. The workshops served several purposes:

- Educate customers en masse to increase awareness and understanding of solar and to allow contractors to spend less time with each potential customer individually at their homes, and therefore provide a reduced price. One contractor told us that thanks to Solarize Eugene and electronic communication, he only needed to spend a total of 20 minutes of conversation with a customer over a several month period from first contact through to system activation.
- Calm customers' instinct to shop around by providing the base price in public with a third party (TRIG) assuring participants that they were receiving a good deal.
- Provide attendees with an opportunity to meet the contractors and have their specific questions answered before or after the workshop. Attendees could also select a contractor based on their interactions at the workshop.
- Create a social norm amongst attendees that installing solar is not an unusual thing to do.

TRIG put significant time and effort into marketing and outreach, but did not do any paid advertising. We focused on earned media; announcements in the daily and weekly papers; Solarize emails to our email list; email announcements shared with other groups like congregations; Neighborhood Association and EWEB newsletters; flyers; tabling at several events; and word of mouth, including a special promotion for referrals at the end of the project. The responses from our workshop sign-in sheet are below, indicating that the earned media (with more than three-fourths of those in the news category noting the Register Guard as their source) and word of mouth/Solarize emails were the most effective forms of outreach for promoting the workshops. Altogether, there were eight local earned media stories including radio (KLCC), TV news (KEZI & KVAL), and print (the Eugene Weekly and the Register Guard). There was also one national media story on the Clean Energy Authority website, and listing on local event calendars in the Eugene Weekly and the Register Guard.



Two of the four contractors interviewed afterwards reported reducing their own marketing costs, with one reporting no change and another reporting increased, but fruitful, expenditures of about $200 more on staff time updating their website and social media around Solarize Eugene.

3. **Cutting through customer indecision with a limited time offer**
   A three-month limited enrollment period encouraged customers to take advantage of a good deal while it lasts. The contractors provided an additional $.10 per watt discount as an "early bird special" for those who registered during the first month, while the City of Eugene offered $100 discounts on permits for the first 20 applications. Both of these provided extra impetus for individuals to make quick decisions to register and install. A final, and perhaps the most important, pressure for participants to move forward with contracts in a timely manner were the deadlines for applications for PV incentives from EWEB. One of these deadlines came three weeks after enrollment opened for the Solarize program, while the second, and last deadline for the year, came a month after enrollment closed. More than half of the Solarize participants registered in the first three weeks before the first EWEB deadline.

Additional process elements

In addition to the key components described above, TRIG staff met regularly with EWEB staff and occasionally with City of Eugene staff to ensure that all components of the process would run smoothly. TRIG also met bi-weekly, tapering down to monthly, with the Coalition in order to create and refine a process for dividing leads fairly, maintaining high quality customer service, generating the maximum amount of leads, and addressing issues around the EWEB incentive. Contractors agreed to drop out for a period of time if they felt overwhelmed with leads or if they

were not keeping up with the agreed upon timelines for customer service. One contractor forwent leads for a week over the project period.

TRIG staffed the project with a portion of program manager, Sarah Mazze's time, and a part-time intern, Liz Veazey. Several volunteers were highly committed to the project, with one LCC student, Adam Psenski, supporting nearly every workshop and tabling at events. TRIG contracted with Solar Oregon to modify their registration form and online database for Solarize projects statewide for use in EWEB territory. The database was accessible by all participating contractors and by TRIG and was generally easy to use to track enrollment. Enrollment was available at the website we created for the project: http://solarizeeugene.info/. (Or see this page on the TRIG site that will continue to provide information about the project here: http://www.theresourceinnovationgroup.org/solarize-eugene-home/ since the Solarize Eugene site will soon be deactivated.)

Several months before enrollment in Solarize Eugene opened, TRIG created and staffed the volunteer outreach and contractor selection committee. The volunteer outreach committee met twice to develop the outreach strategy. Several members of the committee, as well as other volunteers, conducted outreach activities like distributing flyers, sending out emails to their contacts, tabling at events, and staffing workshops. Customers are more responsive to the appeals of someone they know than they are to marketing from their utility or a contractor, while the scale and scope of outreach can be much broader.

Finally, TRIG included a focus on efficiency in order to encourage households to invest in efficiency before or alongside renewables if they had an inefficient home. We offered a workshop on efficiency, pointed people towards efficiency resources at every workshop, and allowed people the option to get more information on efficiency when they registered for the program. There are several notes in the database that customers were advised by their contractor to invest in efficiency or a new roof before solar. While EWEB has already acquired a significant portion of the achievable efficiency in their territory, several households did install efficiency measures as a result of their involvement with Solarize Eugene.

Results and Conclusion

We consider the Solarize Eugene program a success and would recommend repeating the program for solar and/or for select efficiency measures. As described above, the program achieved the stated goals around solar electric installations, although it did not achieve the solar thermal goals. The project also served to increase awareness about solar, created and maintained jobs in solar installation, and set a model in place for future bulk-purchase projects in EWEB territory. In addition, EWEB's involvement in the project was made clear in all outreach and educational activities, so the project could have improved EWEB customer satisfaction.

In total, 262 households signed up to participate in Solarize Eugene, more than 325 people attended solar workshops and nearly 500 individuals signed up for the Solarize Eugene email list. At least 55 are expected to install PV systems for at least 159 kW installed by the end of 2012, while 1 household will install solar thermal. Approximately 60 people attended a final celebration at the local Ninkasi Brewery tasting room, with remarks from Eugene Mayor Kitty Piercy and Representative Phil Barnhart, and Solarize Eugene participant.

TRIG reached four of the five contractors for phone interviews after the project and received very positive feedback. All were satisfied or very satisfied with the project, with the only reported source of dissatisfaction being the limited EWEB incentive, rather than anything related to the Solarize program. One commented that it was nice to see the contractors working together. (In fact, the Coalition decided to continue working together and went on to win another Solarize project in Cottage Grove.) Another said he thought Solarize Eugene got people interested in solar PV. One company added a half-time position while another was able to avoid placing employees on a full-time, on-call status. Newt Loken of Solar Assist, whose company added a position, said, "There is a lot of talk about the need for creation of local green jobs, but Solarize Eugene is actually creating these jobs, including at least one new position at my solar installation business." The latter called Solarize Eugene a great experience for them, as it allowed them to participate in educating the public and avoid laying off qualified employees. He said that while typically one lead in ten goes through with an installation, the rate during Solarize Eugene was closer to three-quarters of leads going through with installations.

Solar Oregon will be conducting a survey of all participants enrolled in the project with the goals of determining what aspects of the program were important to participants; recommended improvements to the program; how they heard about the program; and why they did or did not install. Anecdotally, TRIG has received positive feedback from many program participants.

Were we repeating the program, we would retain the majority of the programs features that appear to have led to its success, as listed below:

- Limited time offer
- Mass education at workshops
- Streamlined permitting process
- Multiple contractors
- Online registration
- Volunteer support
- Partnerships with EWEB and the City of Eugene
- Outreach from neutral third party
- Media coverage
- Incentives for referrals

One aspect of the program that was less successful was the inclusion of Umpqua Bank as a featured lending partner, as to our knowledge, very few people seized the opportunity for a lower interest loan through their Green Street Lending program. However, their participation did not seem to hinder the program in any way, so if they or another bank wished to participate again we would not discourage it.

In sum, TRIG considers Solarize Eugene a success based on the high rates of installation, our adaptation and implementation of a bulk purchase and community education model, and our perception of increased awareness and interest in solar fostered by the Solarize Eugene program.