



Working Together for

VITAL COMMUNITIES



Neighbors Helping Neighbors Go Solar



SOLARIZE
UPPER VALLEY

Round One Report
September 2014

With special thanks to our community volunteers and partner solar installers for making Round One a success, and for providing photos included in this report.

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SOLARIZE UPPER VALLEY PROGRAM PARTNERS

Vital Communities

Vital Communities is a nonprofit organization working in the Upper Valley region of Vermont and New Hampshire to bring citizens, organizations, and municipalities together to take on issues where an independent voice and regional approach are essential. Vital Communities' Energy Program works to move the Upper Valley toward energy independence by catalyzing local efforts in energy efficiency and renewable energy. Solarize Upper Valley is a project of the Vital Communities Energy Program. Vital Communities provided program coordination and outreach/marketing support throughout Round One. More information at vitalcommunities.org.

SmartPower

SmartPower is the nation's leading nonprofit marketing firm dedicated to promoting clean, renewable energy and energy efficiency. SmartPower has been a leading partner in Solarize Connecticut since that program's launch in 2012 (solarizect.com). Founded in 2002, SmartPower has run campaigns to encourage citizens to adopt clean energy and energy efficiency across the nation. During Round One of Solarize Upper Valley, SmartPower provided templates and lessons learned from Solarize Connecticut and Solarize Massachusetts, as well as branding support and input on marketing/outreach strategies. More information at smartpower.org.

Sustainable Energy Resource Group (SERG)

SERG is an Upper Valley organization dedicated to helping Vermont and New Hampshire homeowners and towns use less energy, save money, and protect the environment through education, outreach, and community organizing. SERG provided support for Solarize Upper Valley in many capacities, including the development of resources to help Solarize volunteers connect residents with energy-related opportunities beyond solar. More information at serg-info.org.

The John Merck Fund

Based in Boston, Massachusetts, the John Merck Fund was established in 1970 by the late Serena Merck and is now in its third generation of family leadership. Starting in 2012, the John Merck Fund will spend all of its assets over the next 10 years to spur progress in clean energy, environmental health, development of a New England regional food system, and treatment of developmental disabilities. Solarize Upper Valley is made possible in part by generous funding from the John Merck Fund. More information at jmfund.org.

EXECUTIVE SUMMARY

In March 2014, five Upper Valley towns launched Solarize campaigns. **By the program's June 30 deadline, 120 residents had signed contracts to go solar**, more than doubling the existing number of solar installations across the communities. Through volunteer-led outreach, 432 residents requested a site visit from participating installers, representing 11 percent of households. Of residents who received a site visit but did not go solar, more than half said they are very likely to go solar in the future.

Solarize Upper Valley, a program of Vital Communities, is based on successful Solarize models from across the country, and adapted to suit our region's rural setting. The concept is simple: team up community volunteers with competitively selected solar installers to help a lot of residents go solar in a short amount of time and in a very public way. Each community selected a single installer partner for 15 weeks of intensive outreach encouraging residents to get a site visit and consider going solar. As more residents signed contracts to go solar with the partner installer, the cost dropped for everyone.

The Solarize model is effective because it addresses several common barriers to going solar: consumer confidence, complexity of the process, cost, and inertia.

- **Consumer Confidence** – Solarize is highly visible and community supported.
- **Complexity** – Solarize makes the first step easy and helps residents know what to expect.
- **Cost** – Solarize delivers competitive pricing, and discounts as more residents sign up.
- **Inertia** – Deadlines motivate people to take action, and Solarize is no exception.

Most residents who signed contracts during Round One of Solarize Upper Valley were not early adopters: 40 percent of would-be Solarize customers thought they would go solar “eventually,” and 33 percent thought solar was “not a realistic possibility.” According to these solar converts, the top three features of the Solarize program that influenced their decision to go solar were confidence in the pre-selected installer, the tiered pricing offered by the pre-selected installer, and Solarize events.

Vital Communities is committed to sharing our learning from Solarize Upper Valley with organizations and communities throughout our region and beyond. Everything we develop for the Solarize Upper Valley program is open source and available either online or by request. Interested groups should contact Energy Program Manager Sarah Simonds to learn more.

This report outlines the strategies, results, and lessons learned from Round One of Solarize Upper Valley. Our work was made possible by generous support from the John Merck Fund, the Canaday Family Charitable Trust, and Vital Communities' individual donors.



BACKGROUND

Solarize Upper Valley is a program of Vital Communities that teams up local communities with solar photovoltaic (PV) installers for 15 weeks of outreach aimed at making solar energy more accessible for residents. The program builds on a model first created in Portland, Oregon, in 2007. The Portland model has been adapted in recent years, leading to successful ongoing Solarize programs in other states, including Massachusetts and Connecticut. In 2013, Vital Communities joined forces with the John Merck Fund and SmartPower, a leading partner in Solarize Connecticut, to bring the Solarize model to the Upper Valley. Our goals were to prove Solarize can be effective even in a rural setting, and to double the amount of residential solar energy in each of our partner communities.

Vital Communities believes the Solarize program will significantly ramp up the rate of solar adoption across the Upper Valley region of Vermont and New Hampshire, even beyond the borders of our participating communities and beyond the timeframe of each 15-week campaign. We are also committed to developing Solarize Upper Valley as an open-source model to be shared across New England and beyond.

Within each participating community, Solarize Upper Valley is designed to address key barriers to going solar:

Consumer Confidence

- Solarize is a highly visible program championed by local volunteers and coordinated by a trusted local nonprofit, Vital Communities.
- Each community competitively selects a partner installer who provides transparent pricing and services and an on-the-ground presence throughout the campaign.
- Residents have many opportunities to identify and interact with neighbors who are also thinking of going solar.

Complexity

- Solarize is designed to make the first step easy: sign up for a free site visit and find out if solar could work for you.
- Solarize outreach and education helps residents understand what to expect. In some cases, the partner installers simplified their own customer process and documents in order to reduce complexity for Solarize customers.

Cost

- Solarize partner installers save on marketing costs because volunteer outreach is so effective in generating leads. Installers transfer those savings to customers using a tiered pricing structure, through which greater participation across the community leads to greater savings for everyone. Solarize prices are not necessarily the lowest in the market, but they tend to be highly competitive.

Feedback from Solarize Customers:

"I thought about it over the years but it never made it to the top of the list."

"The idea that Vital Communities is behind this project made all the difference to me."

"It was such an easy, turnkey operation. I don't know that I ever would have totally pursued this on my own."

"It was easy to jump on the Lyme Solar Bandwagon!"

- Vital Communities worked with local lenders to compile information about options for financing solar. One local bank offered a special rate discount to Solarize customers. Solarize volunteers and installers help ensure all potential customers have access to information about financing.

Inertia

- Residents must sign a contract with their partner installer by the program deadline in order to be eligible for the special tiered pricing offer.

Solarize Upper Valley Round One Timeline

RFPs released for communities and installers	Oct/Nov 2013
Information sessions for communities and installers	Nov/Dec 2013
Participating communities chosen	January 2014
Partner installers chosen	February 2014
Launch events in each community	March 2014
Program deadline (signed contracts must be in by this date)	June 30, 2014

PROGRAM OVERVIEW

Solarize Upper Valley relies on significant support from Vital Communities staff, who are responsible for establishing program timelines, coordinating among program partners, developing resources and templates, managing the Solarize Upper Valley website, and tracking data throughout the program.

Solarize Upper Valley can be broken down into three program components: 1) selection of the Solarize communities, 2) selection of a Solarize partner installer for each community, and 3) community education and outreach.

1. Selection of Communities

Any municipality within Vital Communities’ 69-town service region was welcome to submit an application in response to a Request for Proposals (RFP) for Solarize Round One. Vital Communities held an information session on the program prior to the application deadline. The RFP asked municipalities to submit a letter signed by a high-ranking local official (in most cases a selectboard member) indicating support for the program and identifying local capacity to take on Solarize outreach. Municipalities were encouraged but not required to provide additional information, including a list of Solarize outreach ideas and letters of support from local partners. We also encouraged municipalities to partner and apply jointly as a single Solarize community.

Five towns in Vermont and New Hampshire responded to the Round One RFP, including two sets of partnering communities. Applications were evaluated by committee based on several criteria, including commitment to clean energy and sustainability, experience with community outreach, capacity of the proposed Solarize volunteer team, and demonstration of creative thinking. All applicants were accepted into Round One.

2. Selection of Installers

Vital Communities issued an RFP by email to solar PV installers known to be operating in the Upper Valley. The RFP was also discussed at a workshop for installers, posted on Vital Communities' website, and promoted through local media and other partner organizations. A detailed profile of each Solarize community, including population statistics, permitting requirements, and special requests, supplemented the RFP. Installers were invited to submit proposals for any or all of the Solarize communities. Multiple installers were permitted to join together and bid as a consortium.

Each proposal included three sections: 1) core proposal providing general information about the bidding company's experience and program implementation plan, 2) customized proposal addressing issues specific to the Solarize community, and 3) equipment and pricing proposal, including a tiered pricing package and a list of all other possible cost adders.

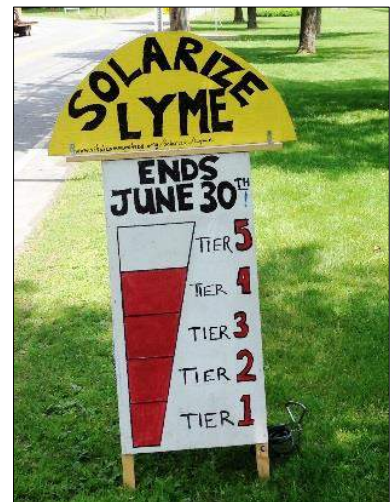
Each Solarize community provided an installer selection team of three volunteers who evaluated bids and selected their community's partner installer, with support from Vital Communities and an independent technical consultant. In addition to reviewing bids, the selection committees conducted in-person interviews with their top two installer candidates and followed up with customer references. Eight installers responded to the Round One RFP, with each Solarize community receiving four to six bids. Bids were evaluated on overall quality and value, experience, implementation plan, price structure, demonstration of innovative concepts, marketing plan, and overall fit with the community.

Our three Solarize Round One communities and partner installers included:

- Thetford and Strafford, Vermont – Catamount Solar/Integrity Energy (a consortium)
- Cornish and Plainfield, New Hampshire – Solar Source
- Lyme, New Hampshire – RGS Energy

3. Outreach and Education

The success of a Solarize campaign hinges on effective community outreach. Vital Communities worked with each Solarize community to identify opportunities to raise the visibility of the program, engage local organizations, and attract residents to attend Solarize events and sign up for a free site visit with a partner installer. Key components of outreach included Solarize community launch events, open houses hosted at existing solar homes, regular communication through community email discussion lists and newsletters, tabling at community events, and direct outreach to community members who signed up for Solarize updates. Volunteers also hung posters in their communities, coordinated a school competition to design Solarize yard signs, sent targeted mailings to residents with promising solar sites, and built "progress meters" to publicly display progress as more residents signed up to go solar.





Media outreach conducted by Vital Communities included press releases to local and regional newspapers, magazines, websites, and radio and television stations. Round One saw 21 pieces of media coverage from 15 sources, including stories on both New Hampshire and Vermont Public Radio, as well as local and regional newspapers. Prepared articles and letters to the editor were also submitted by volunteers and Vital Communities.

To support local outreach activities, Vital Communities worked with SmartPower to create a Solarize Upper Valley logo and branded templates for posters and flyers. Vital Communities also created a Solarize Upper Valley website (vitalcommunities.org/solarize), with customized pages for each community. The website provided general information about going solar, financing for solar, and home energy efficiency, a calendar of Solarize events, details about each Solarize community's tiered pricing structure, and a site visit request form. The Solarize program was also promoted on town and installer websites, the Vital Communities e-newsletter and blog, and through social media.

Vital Communities used both email and Google tools extensively, primarily Google Calendars and Google Drive, to coordinate and share information, including contact lists and outreach templates, with the Solarize volunteer teams.



Tracking Progress during Round One

Throughout the 15 weeks of outreach described above, Vital Communities received reports at least every other week from all Solarize partner installers detailing the status of all program leads (residents who had requested a site visit). This information was passed on to community volunteers to inform their outreach efforts. Vital Communities also hosted check-in calls between volunteers and their installer partners every other week throughout the program.

After the program deadline, Vital Communities conducted debrief sessions with each installer partner and with volunteers from each community. Vital Communities also sent a survey electronically to Solarize customers (residents who signed a contract to go solar with a Solarize partner installer by the June 30 deadline) and Solarize leads (residents who requested a site visit but did not sign a contract to go solar with the Solarize partner installer).

Feedback from Solarize Volunteers:

"I stopped in at the open house yesterday and by all accounts it was a smashing success. I think people are enjoying these get-togethers and are learning a lot."

"Thank you for your good guidance, inspiration and spirit!"

RESULTS

The results from Round One of Solarize Upper Valley surpassed all expectations:

- **120 homeowners** signed contracts by the program deadline to go solar through their partner installers, adding **638 new kilowatts (kW)** of renewable energy capacity, and at least doubling the number of existing residential installations across the communities.
- **550 metric tons of CO2** will be avoided annually for years to come (equivalent to taking 116 cars off the road).
- **11 percent** of households across the participating communities requested site visits from the Solarize partner installers.
- **28 percent** of those inquiries resulted in signed contracts to go solar.

We asked Round One customers and leads (residents who requested a site visit) to tell us what aspects of the Solarize program were most important and most influenced their decision to participate. Table 1 below shows the top five program features ranked as “very important” by respondents in each group.

Solarize Customers		Solarize Leads	
70%	Confidence in pre-selected installer	53%	Involvement of town energy group
61%	Tiered pricing	52%	Solarize Events
51%	Solarize events	50%	Confidence in pre-selected installer
46%	Deadline	41%	Tiered pricing
38%	Accessible/helpful volunteers	38%	Accessible/helpful volunteers

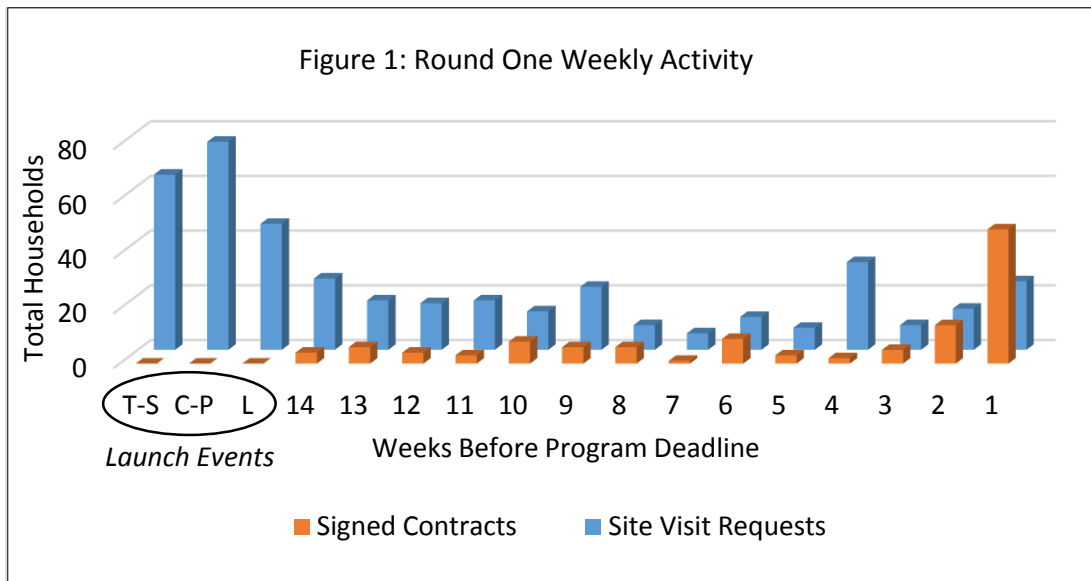
All of the Round One communities had enough participation to secure the lowest-tier pricing from their partner installer. By reaching the lowest-tier price, residents realized savings of 25 to 35 cents per watt below the base price at the start of the program. The average base price for Solarize customers in Round One, after the lowest tier was reached in each community, was \$3.43 per watt. The average actual cost (including cost adders¹) was \$3.78 per watt. According to the Vermont Clean Energy Development Fund, the average cost of solar in Vermont was \$4.22 per watt in 2013, while the New Hampshire Public Utilities Commission reports an average cost of \$3.74 per watt. In addition to the cost of going solar, 37 percent of Solarize customers had to address roofing issues or have trees removed before going solar.

Solar installations can be financed through home equity loans, consumer loans, and at least seven energy-specific loan options available to Upper Valley homeowners. Among customers who responded to the survey, 33 percent financed their systems, most using home equity lines of credit.

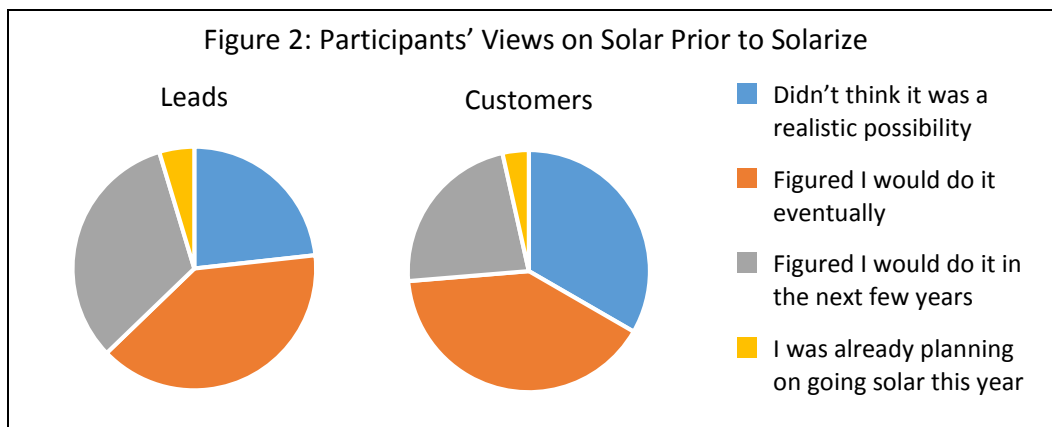
Nearly half of Solarize Round One site visit requests were received at or shortly after the launch event in each community. Partner installers received an average of five site visit requests per week throughout the remainder of the program. The spikes in site visit requests shown in Figure 1 reflect

¹ Partner installers were required to list all equipment and services included in their base price package, as well as a list of prices for any additional features and services that might be required/requested on a case-by-case basis.

various volunteer outreach efforts. Figure 1 also demonstrates the significance of the program deadline in moving residents to action. Of the 120 contracts signed during the program, 41 percent were received by installers during the last week prior to the deadline.

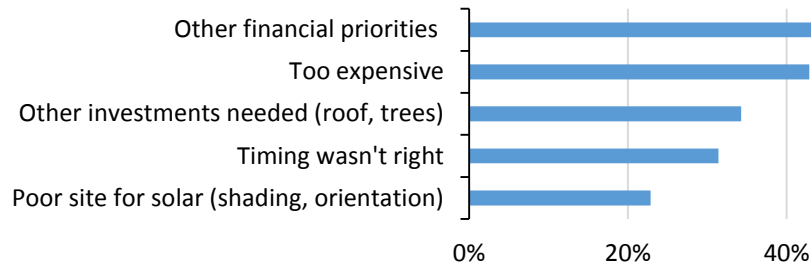


Most residents who signed contracts during Round One were not early adopters: 40 percent thought they would go solar eventually, and 33 percent thought going solar was not a realistic possibility, as shown in Figure 2. When we asked Solarize customers why they hadn't gone solar already, 64 percent were waiting for the cost to go down, 42 percent had other financial priorities, and others were unfamiliar with the technology, didn't know where to find an installer, or didn't think their house was in a good location for solar.



As demonstrated in Figure 3, cost was a deciding factor among survey respondents who requested a site visit during the program but did not ultimately go solar during Round One. However, 56 percent of respondents who didn't go solar through Solarize reported a "very good chance" that they will install solar panels in the future.

Figure 3: Top Five Reasons Participants Didn't Go Solar through Solarize



During the Solarize campaigns, residents were free to go solar outside of the Solarize program by working with a different installer. According to our survey, 23 percent of Solarize customers sought bids from other installers before going solar with their Solarize partner installer. At least 20 residents across the three communities went solar with a non-Solarize installer during the timeframe of Round One. Reasons given for choosing a non-Solarize installer included competitive pricing, different technology (e.g. ground-mounted tracking panels, battery backup options, offerings beyond PV), better fit personally/professionally, and the desire to work with a more local installer.

LESSONS LEARNED

Outreach Can Be Simple. Most Round One Solarize participants found out about the program through various free local email discussion lists and newsletters or by word of mouth. Of Solarize participants, both customers and leads, 57 percent encouraged a friend to get a site visit and 74 percent talked with other community members about their decision to participate in Solarize.

Get Beyond the Choir. Solarize is designed to help people who might not otherwise go solar. Many Round One volunteers were surprised by the number of residents who turned out for Solarize events having never attended a community energy event previously. Solarize tends to generate curiosity among a broad mix of residents, but only if they learn about the program in time. Getting the word out through a range of channels and social networks is critical. This is easier to do in smaller communities where social networks tend to be more closely knit than in larger communities.

Get People to the Launch Event. The launch event is your best opportunity to build momentum, educate a large group of residents about solar energy, and set expectations for the process of going solar. Better yet, attendees will realize they know many people who are also curious about solar, talk with each other after the presentation, and go home to talk about solar with their family and friends who didn't attend the event. In Round One, 48 percent of Solarize customers and 58 percent of Solarize leads attended a launch event.

Be Highly Visible. One consistent reflection from Round One volunteers: they wish they had made better use of posters, signs, and banners around town to increase the visibility of Solarize.

Partner with a Neighboring Town. When it comes to having real impact in rural communities, combining the resources of multiple towns is almost always worthwhile. Our two-town teams from Round One continue to collaborate on projects even now that their Solarize campaign has ended.

Leverage the Deadline. As shown in Figure 1, 41 percent of Round One contracts came in the week of the deadline. Make sure residents are aware of the deadline, and make sure they understand it is a deadline for signed solar contracts rather than a deadline for site visit requests.

Take the Installer Selection Process Seriously. Selecting a partner installer is perhaps the most challenging task for Solarize volunteers, and the stakes are high. As shown in Table 1 on page 9, 70 percent of Solarize customers said confidence in the pre-selected installer was a very important factor in their decision to go solar through Solarize.

Have a Plan for Post-Solarize. Solarize generates a lot of community attention and conversation, which can last long after the program ends if community volunteers are prepared to keep up the momentum by shifting into other energy-related projects (e.g. community or municipal solar, energy efficiency). Solarize volunteers also leave the Solarize program with a large contact list of residents who should be kept in the loop about other energy-related opportunities. After all, more than 70 percent of Solarize contacts in Round One didn't end up going solar.

Program Coordination is Important. A lot goes on behind the scenes to make a Solarize campaign successful. Community volunteer teams and partner installers relied on Vital Communities to facilitate the installer selection process, provide program structure (including timelines, consistent messaging, and a program website), facilitate communication among partners, and track progress across the participating communities.

FOR MORE INFORMATION

More information about Solarize Upper Valley can be found online: VitalCommunities.org/Solarize

Solarize Upper Valley is proud to be an open-source program. Anything developed by Vital Communities for Solarize Upper Valley, including RFPs, event and outreach checklists, tracking templates, outreach materials, and more, is available either online or by request.

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