SOLARIZE U

Tools and guidance to help Washington communities launch solar group purchase campaigns

Spark Northwest
1402 3rd Ave, Suite 901
Seattle, WA 98101

Acknowledgements

This Solarize U training was made possible with funds from the Washington Department of Commerce State Energy Office. The information, data, or work presented herein was funded in part by the U.S. Department of Energy, Energy Efficiency and Renewable Energy Program, under Award Number DE-EE0006307.

Spark Northwest is a 501(c)(3) nonprofit organization with a mission to establish a clean, diverse, and affordable Northwest energy system based on the efficient use of renewable resources, with maximum local control and community ownership of energy assets.

For more information on Spark Northwest's Solarize Washington program and training, please visit www.solarizenw.org.

Table of Contents

Training Contacts

NAME	COMMUNITY	EMAIL	PHONE

Personal Role and Motivations

1. What are my personal reasons for participating in a Solarize U training? What do I hope to gain or learn?

2. Do I represent an organization? How might this training help to achieve the mission of my organization?

3. What skills and strengths do I bring to this effort?

4. What are the three most important results I hope to accomplish with a Solarize campaign in my community? By when?

5. What assets, resources, and time am I able to bring to this effort?

Tackling Solar Market Barriers

From the launch of the Solarize model in Portland, Oregon through its spread around the country, the program has resulted in spectacular market growth. The Solarize model tackles three major market barriers: **cost, complexity**, and **customer inertia.**

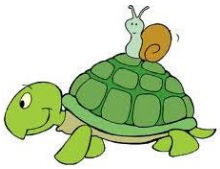
High Upfront Cost

Residential solar installations have high upfront costs—currently ranging between $15,000 and $30,000 for the average sized residential system. By combining the Solarize discount with existing federal, state, and utility incentives, the Solarize model can drive final costs much lower than the initial sticker price. Contractor savings on marketing and lead generation typically drive upfront costs down by 5-15%. When paired with a 30% federal tax credit and utility energy savings, the cost of a solar system starts to look much more palatable.

Complexity

For many, a solar purchase seems a dauntingly complex decision, involving choices about technical issues such as inverter efficiency, PV modules, and optimal array tilt. Even choosing between contractors can be an overwhelming task for those not technically inclined. Every aspect of the Solarize program is designed to provide actionable information while reducing complexity. A committee of neighbors pre-selects the contractor through a competitive bidding process and negotiates the cost. Workshops and Q&A sessions focus on the practical steps to making a purchase. The program reduces a dizzying array of technical choices to one simple question for participants: yes or no?

Customer Inertia

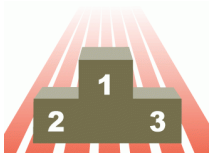


The sales cycle for solar is usually more than two years from first inquiry to installation. There are many tasks to complete and people to talk to, and no easy “how-to” manual to guide aspiring solar owners through the process. The Solarize project uses education, competitive pricing, and a limited time offering to overcome customer inertia and achieve installations in three to five months. The combination of these factors motivates customers to act. In addition, the spirit of group endeavor affords safety in numbers, so that participants don’t feel that they are making a decision on their own.

Essential Elements of the Solarize Model

While each Solarize campaign looks slightly different—reflecting the different priorities and goals of each neighborhood—there are some common elements that consistently lead to success: **competitive contractor selection**, **community-led outreach**, and a **limited time offering.**

Competitive Contractor Selection



Selecting the contractor(s) through a competitive process led by community volunteers is essential on several fronts. First, it affords homeowners the simplicity of a pre-selected contractor while building confidence that the contractor was selected from a range of options. Second, it provides a transparent process that builds customer and contractor trust. The selection criteria should reflect the unique values of the community, whether they are creating local jobs or driving prices down, or a combination of several factors. By having a competitive process with specific criteria, the project organizers can justify their choice, while sending a clear market message about customer and community values.

Community-Led Outreach and Education

Another element of a successful campaign is community-led outreach supported by a trusted local organization. Community members distribute flyers, and speak at local meetings and events, and support workshops, delivering a direct appeal from one neighbor to another to join the campaign. Harnessing community power in this way has many benefits: the community becomes invested in the success of the project, the scope and scale of the outreach is amplified, and neighbors are more responsive to the appeals. Community-led outreach also allows the contractor to save on marketing costs because they do not need to spend as much time generating leads. With neighborhood volunteers generating hot leads, the contractor can focus on site assessments and installations.

Limited Time Offer

Nothing motivates people like a deadline. A Solarize campaign is a limited time offer, creating a sense of urgency among residents who don't want to miss a good deal. The limited time offer also keeps the program true to its market transformation goals: to jump-start the solar market and then step aside. Some contractors may object to the perceived "monopoly" awarded to those contractors selected for the project. The limited-time offer may help mitigate that contractor concern. In fact, a successful Solarize campaign can increase business for non-Solarize installers as well by increasing customer education, awareness, and demand.

Value Proposition

AUDIENCE	ROLE	VALUE PROPOSITION
Community Groups	organize / act as community liaison / serve as trusted resource / perform community outreach / select campaign contractor / support workshops	energy education / framework for community organizing + sustainability work / increase credibility / increase media attention / catalyst for group cohesion and membership
Contractors	respond to RFP / provide price discount / meet capacity and time demands / support outreach efforts / present at workshops / perform site assessments / install solar systems / report progress to organizers	increase business / educate the market / efficient business development / hot leads / free marketing / increase credibility / boost brand
Homeowners	register online / attend workshop / sign up for site assessment / purchase solar / promote program to neighbors + friends / share solar photos	simple process / discounted price / connection to tax credits + incentives / information from a credible + trusted source / community organization around solar / solar bragging rights / hedge against energy cost increases
Businesses	register online / attend workshop / sign up for site assessment / purchase solar / promote program to clients	simple process / discounted price / connection to tax credits + incentives / solar bragging rights / hedge against energy cost increases / boost green brand
Media	provide news coverage / interview participants / keep apprised of progress	extend reach / progressive content / strong story + narrative / community connections
Funders	fund campaign / connect with other funding sources / provide credibility / promote and advertise program	tangible results / high impact campaign / raise visibility + prestige
Utilities	provide net metering and interconnection services / fund campaign / provide credibility / support workshops / provide resources + information / advertise campaign to customers	promote distributed generation + incentives / support + strengthen electric grid / help achieve renewable energy goals / provide customer interface

Role Mapping

	PROJECT MANAGER	COMMUNITY PARTNER	INSTALLER
Prep: Month 1, 2, & 3	Identify membership-based group willing to act as community partner; support contractor selection process	Draft & circulate RFP to solar contractors; review proposals; interview firms; select installation partner	Respond to RFP; propose group discount
Launch: Month 3 & 4	Develop & sign MOU; establish campaign timeline & workshop dates; set up participant database & registration processes; open registration	Sign MOU; establish campaign timeline & workshop dates; develop & finalize outreach materials & outreach plan	Sign MOU; prepare internal systems for efficient lead contact & management
Saturation: Month 5 & 6	Administer registration & participant database; deliver monthly educational workshops; maintain communication with campaign participants; monitor progress	Drive local outreach; support monthly educational workshops; engage media	Support monthly educational workshops; manage ongoing site assessments & installations; report progress
Wrap: Month 7 & 8	Close registration; deliver final workshop; finalize contracting deadline	Lead final outreach push; support final workshop	Complete site assessments; finalize contracting deadline; continue installations; report progress
Tail: Month 8 & 9	Message campaign successes; plan & host campaign celebration	Plan & host campaign celebration	Complete installations; plan & host campaign celebration

Sample Timeline

	Hours	M1	M2	M3	M4	M5	M6	M7	M8	M9
Task 1: Prep	**80**	**25**	**25**	**30**						
Solicit & select community partner		15								
Volunteer orientation & form committees		10								
Draft, finalize, & circulate RFP			25							
Evaluate proposals & collate scores				15						
Interview top-scoring firms and select installer				15						
Task 2: Launch	**30**			**25**	**5**					
Draft & finalize MOU				5						
Draft & finalize website, registration database				10						
Draft & finalize outreach materials				10						
Kickoff meeting					5					
Task 3: Saturation	**125**				**55**	**35**	**35**			
Draft & finalize workshop presentation					20					
Schedule & conduct community workshops					15	15	15			
Perform community outreach					10	10	10			
Manage database & lead communications					10	10	10			
Task 4: Wrap	**50**							**30**	**20**	
Conduct final community workshops								10		
Perform final outreach push								10		
Manage database & lead communications								10	10	
Set contracting deadline, monitor progress									10	
Task 5: Tail	**35**								**15**	**20**
Plan & execute celebration									5	10
Monitor final installations									5	5
Wrap up participant communications									5	5
TOTAL HOURS	**320**	**25**	**25**	**55**	**60**	**35**	**35**	**30**	**35**	**20**

Campaign Checklist

- ☐ Steering committee formed
- ☐ Outreach committee formed
- ☐ Request for Proposals finalized
- ☐ Proposals received
- ☐ Proposals evaluated
- ☐ Installation partner selected

Prep:

Month 1, 2, & 3

- ☐ MOU signed
- ☐ Campaign timeline finalized
- ☐ Participant database complete
- ☐ Registration website complete
- ☐ Outreach materials finalized
- ☐ Outreach plan finalized
- ☐ Registration opened

Launch:

Month 3 & 4

- ☐ Workshop content finalized
- ☐ Workshop #1 complete
- ☐ Workshop #2 complete
- ☐ Workshop #3 complete

Saturation:

Month 5 & 6

- ☐ Registration closed
- ☐ Workshop #4 complete
- ☐ Contracting deadline set
- ☐ Contracts signed

Wrap:

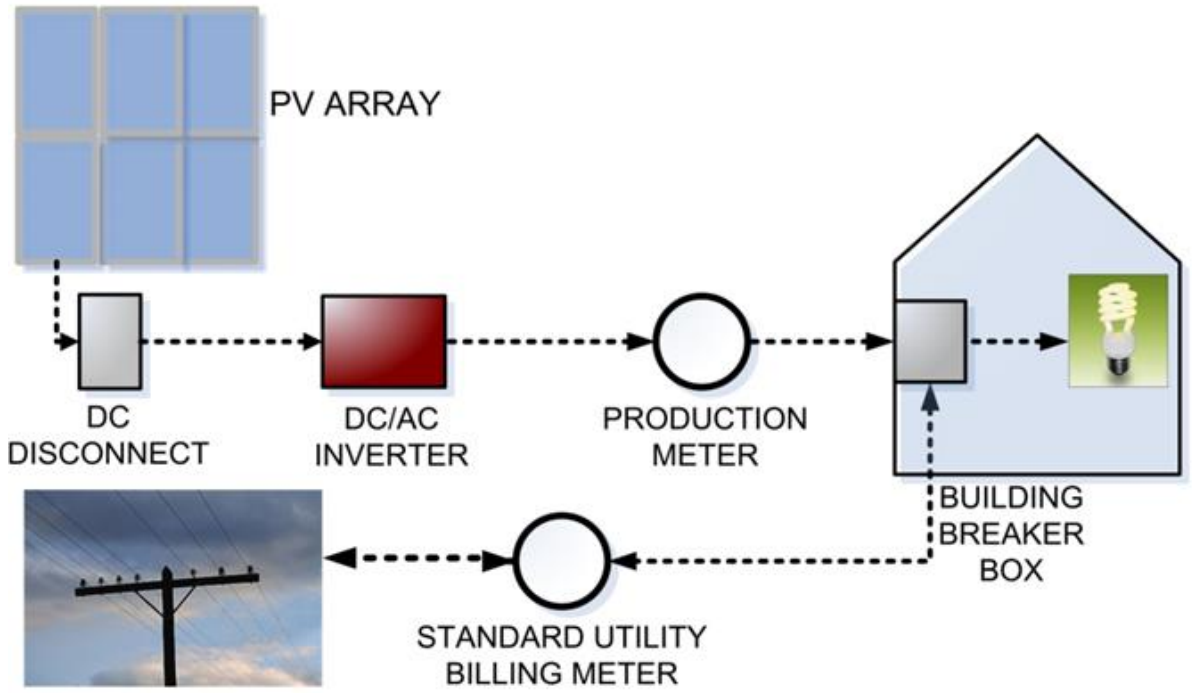
Month 7 & 8

- ☐ Installations complete
- ☐ Celebration planned
- ☐ Celebration complete

Tail:

Month 8 & 9

Solar PV Technology



Solar photovoltaic (PV) systems convert sunlight into electricity to power your home or business. When the sun shines on a solar PV array, it produces direct current (DC) electricity. This DC electricity flows through an inverter, which "translates" the power to the alternating current (AC) electricity that is used in your home. The AC electricity flows from the inverter to the production meter, which measures every kilowatt-hour produced by your system. The electricity then flows through your breaker box and powers your home's current energy load.

If your solar system is producing more energy than is being used in your home, the excess will flow to the grid through the utility billing meter. When you install a solar PV system, your billing meter will be swapped out with a bi-directional net meter, which allows you to have a push/pull relationship with the utility grid. A net meter credits your account when you push energy into the grid, and deducts from your account when you pull energy from the grid. Net excess generation is credited to your next bill as a kilowatt-hour credit. At the end of an annual period, any unused net excess generation credit is granted to the electric utility.

Solar Incentives

Federal Investment Tax Credit

Taxpaying residents who install a solar system are eligible to receive a tax credit in the sum of 30% of the total system cost. If your tax appetite isn't large enough to absorb the entire credit in one year, it can be rolled over to future years. *Begins phase-out December 31, 2019.*

Washington State Renewable Energy Production Incentive

Washington State provides an incentive for every kilowatt-hour of electricity produced, regardless of whether that electricity is used onsite or exported to the grid, for the eight years following installation. The rate received depends on when it was installed, the size of the system, and whether the solar panels were manufactured in Washington or out of state. The total amount that received from this incentive cannot be more than 50% of the total system cost, including sales tax. **This incentive has already reached its cap in Pacific Power Territory, and will not be accepting any more projects unless funding is increased by state legislature.**

Rural Energy for America Program (REAP) Grant

American agricultural producers and rural small business qualify for the REAP grant, which can cover up to $500,000 or 25% of your total project cost (whichever is lower). In order to qualify as an agricultural producer, over 50% of your gross income must come from agricultural production which includes farming crops, livestock, forestry, or dairies. In order to qualify as a rural small business, you must be located in a community with a population under 50,000 and also qualify as a small business under the federal guidelines set by the Small Business Association (SBA). Spark Northwest can provide assistance with applying for REAP grants.

Utility Net Metering

Utility customers may receive credits for delivering excess electricity back to the grid. When your solar system is producing more than your home's current load, that excess electricity is pushed back into the grid, making your meter "spin backwards" and lowering your electric bill. The utility customer is credited at retail rate for any electricity pushed into the grid, and only pays for the net amount of energy used. Excess credits are rolled over to the next billing period. Any credits is left in April of each year are forfeited.

More information on all federal, state, and utility incentives can be found at www.dsireusa.org.

Solarize Group Discount

Participating solar contractors are able to achieve savings through group purchasing. These savings are passed on to the customer in the form of the Solarize discount. Depending on the installation partner, the Solarize discount is typically 10-15% off the retail cost of a solar system.

Pricing Example

Example #1: Solar system made in Washington

- System size: 6 kilowatts (6,000 watts)
- Retail system cost (after sales tax): $3.50/watt
- Solarize discount: $0.50/watt
- Cost of electricity: $0.11/kilowatt-hour
- Annual production: 1,000 kilowatt-hours/kilowatt installed

Stage	Cost/(Benefit)	Notes
Sticker Price *System size x Retail system cost*	$21,000	
Solarize Discount *System size x Solarize discount*	($3,000)	Comes from reduced cost of customer acquisition
Upfront Cost **Sticker price – Solarize discount**	$18,000	
Federal Investment Tax Credit *Upfront cost x 0.30*	($5,400)	One time 30% tax credit; can be rolled over into subsequent years
Utility Net Metering *System size x Annual production x Cost of electricity*	(660)	Credit accrues to utility bills; annual true-up each April
NET COST AFTER YEAR ONE	$11,940	

Pricing Example

Example #2: Solar system made outside of Washington

- System size: 6 kilowatts (6,000 watts)
- Retail system cost (after sales tax): $3.00/watt
- Solarize discount: $0.50/watt
- Cost of electricity: $0.11/kilowatt-hour
- Annual production: 1,000 kilowatt-hours/kilowatt installed (in Western WA)

Stage	Cost/(Benefit)	Notes
Sticker Price *System size x Retail system cost*	$18,000	
Solarize Discount *System size x Solarize discount*	($3,000)	Comes from reduced cost of customer acquisition
Upfront Cost *Sticker price – Solarize discount*	$15,000	
Federal Investment Tax Credit *Upfront cost x 0.30*	($4,500)	One time 30% tax credit; can be rolled over into subsequent years
Utility Net Metering *System size x Annual production x Cost of electricity*	($660)	Credit accrues to utility bills; annual true-up each April
NET COST AFTER YEAR ONE	$10,500	

General Lessons and Considerations

The following lessons and considerations are based on feedback from Solarize campaigns around the country.

Tap the Grassroots

Solarize campaigns are successful because they tap the grassroots to design and market the program. In a positive feedback loop, the process of creating and deploying the program builds community pride that encourages higher levels of participation in the community.

Involve the Community in Decision-Making

The RFP process is an opportunity for the community to create an empowering statement of values. With guidance from technical experts, volunteers craft the contractor selection criteria and exercise choice in the selection of the installer(s).

Use Community-Based Marketing

Solarize is a classic example of community-based social marketing: Information reaches people through face-to-face encounters with friends and neighbors, house parties, and other social interactions. Although the campaign uses the web and other traditional media, the thrust of the marketing appeal is personal. In contrast to a plea from the government or the utility, the appeal comes directly from a friend or neighbor.

Question for Reflection: What are the informal neighborhood communication networks in your community? Is there a popular local hangout? A blog that everyone reads? A beloved community newspaper or radio program?

Collaborate with a Trusted Local Organization & Assign a Project Manager

A successful campaign collaborates with a trusted local organization that has a history of helping people. Local organizations provide "third party validation" which instills trust in the program. Regardless of the organization, each campaign has a dedicated project manager to orchestrate the effort.

Question for Reflection: Which organization(s) in your community could serve as a trusted partner?

Plan for Success

The first Solarize effort in Portland set a goal of 25 installations. When 350 residents signed up, the manual process of entering registrant information into a spreadsheet quickly became

untenable, and the contractor realized that they needed a customer service plan to keep in touch with customers over the several months that they would have to wait to get through the installation queue.

Project organizers should plan for success and put efficient systems in place for capturing registration information, sharing information with contractors, and following up with customers. Consider selecting more than one contractor, so that no single contractor is overwhelmed with jobs.

Smaller contractors in particular may need support to build their customer relationship management systems to handle a program of regular follow-ups to keep warm leads "warm" until they can reach the customer. Project organizers can help contractors by ensuring that they have thought through their customer service plan.

Question for Reflection: What would success look like in your community? Number of solar systems installed? Number of people educated about solar? Sense of community growth and cohesion around a common goal?

Pricing Considerations

To what extent is the success of Solarize due to low prices? Campaign results suggest that prices and incentives vary widely from market to market, and project organizers should consider several points when designing the price of the offer.

Absolute Price is Less Important than the Perception of a Good Deal

In general, most people don't know what a solar installation is supposed to cost, so they have no price "yardstick" to evaluate the program offering. More important than getting "the best deal" is the assurance that participants are not getting a bad deal. As long as the price is set the same for everyone, and it is demonstrably less expensive than the "going rate" for individual solar installations, people perceive the cost as "a good deal." In fact, many RFP committees select final bids that were not the lowest price, but the best value, providing a reasonable price for high quality service.

Fixed Price vs. Descending Price: Pros and Cons

Some Solarize campaigns effectively use a descending price scale to encourage higher participation. While a descending price can motivate early enrollees to recruit others, it also adds complexity: it delays the time at which the final price is determined, so the contractor cannot quote a final price to early enrollees. Contractors might quote the highest price, and collect payment in several installments, with a contract clause that the final installment will be adjusted to reflect the final price.

However, organizers might consider fixed flat pricing from the start, and use other means to encourage recruiting. In many cases, the contractor's ability to offer a lower price is not due to the savings on volume purchases of equipment as much as the savings in time and effort in marketing. Larger contractors often have access to volume equipment pricing even without the group purchase, so their savings are more likely to be realized in the community-run sales and marketing. They can commit to their lowest price knowing that the grassroots community-based social marketing effort will bring them hot leads with a high conversion rate.

Question for Reflection: Pricing aside, what other factors might members of your community see as important in selecting a quality solar installer?

Program Funding Considerations

Deploying a Solarize campaign costs money. Despite harnessing volunteer labor for everything from planning to marketing to contractor selection, a successful campaign will need the oversight of a project manager and will incur costs for marketing materials, database administration, and communications. Some campaigns have relied on staff at neighborhood coalitions or the city. Others have secured grants to assist with campaign funding. Communities without paid staff or grants should consider other options for funding.

Collect a Per Watt Fee

Project organizers could consider building a small per watt fee into the contractor's scope of work which is then passed on to the customer. The contractor can still offer a competitive price, because they are saving money on marketing, while the program establishes a source of funding for everything from staff time to outreach materials. Organizers might still need seed funding to launch the project until the installations and fees begin to flow.

Create a Buyer's Co-op

Some groups have had success with adopting a co-op model to fund their Solarize efforts, charging program participants a fee of $0.10 per watt (e.g. $250 for a 2.5 kW system) to join the co-op. The fee was intended to cover program management, database administration, and outreach. However, it may be more palatable to customers to have the co-op fee rolled into the contractor fee, so that they only write one check.

Leverage Contractor Marketing Dollars and Expertise

As noted, the community-led marketing campaign saves contractors money. In return, the selected contractors may have marketing materials and expertise that they can

share with the campaign. For example, contractors can provide yard signs, marketing flyers, rent a booth at the farmer's market, and cover other incidental marketing costs. In past campaigns, installers have provided financial assistance with everything from door hangers to bus and radio advertisements.

Secure Local Utility Program Funds

Electric utilities may be interested in supporting the labor and/or material costs for a Solarize campaign as a way of delivering a popular customer service. The campaigns provide outreach and education about energy and build a constituency that interacts more closely with their utility. In addition, utilities may be able to claim Renewable Energy Credits (RECs) from programs that they sponsor. In Washington, utilities that incentivize solar PV can double count that production toward meeting their Renewable Portfolio Standard.

Question for Reflection: Which funding method (or combination of funding methods) do you think would work in your community? Why?

Forming Committees

	CONTRACTOR SELECTION	OUTREACH & EDUCATION
Need	5-7 volunteers Consistent commitment required	3-10 volunteers Variable commitment okay
Duration	3 months (Prep, Launch)	3-6 months (Launch, Saturation, Wrap)
Responsibilities	• Draft Request for Proposals • Circulate Request for Proposals • Develop scoring rubric • Score proposals • Interview top-scoring firms • Select installer(s) • Participate in kickoff meeting – handoff to outreach committee	• Recruit volunteers and coordinate volunteer assignments • Schedule community workshops • Develop outreach plan • Finalize outreach materials • Distribute outreach materials • Present at local meetings, events, markets, etc. • Generate attendance at workshops
Characteristics	• Analytical • Comfortable digesting technical information • Able to accommodate 1-2 half- or full-day meetings • Not affiliated with a local solar installer • Experience with green building, architecture a plus!	• People person • Many community connections • Comfortable talking to strangers • Experience with marketing, graphic design a plus! • Experience with community organizing a plus!

Brainstorm: Contractor Considerations

Exercise:

1. Without consulting with fellow members of the contractor selection committees, rank the following list of categories on a scale of 1 (not important) to 5 (very important). **Try to reserve a ranking of "very important" for no more than 5 categories.**

2. Circle back with the contractor selection committee. Tally a total score for each category and note in the space provided.

3. Discuss the contractor selection committee's total scores—assess where priorities lie. Are there major differences between committee members? Other categories that committee members feel should be on the list? Use this information to shape the Request for Proposals, and to develop weights for the scoring rubric you will use to evaluate proposals.

Priority	Not Important		Somewhat Important		Very Important	TOTAL
Contractor offers lowest solar system prices	1	2	3	4	5	
Contractor offers a wide variety of solar system options	1	2	3	4	5	
Contractor offers solar system components made locally	1	2	3	4	5	
Contractor is based in the community	1	2	3	4	5	
Contractor has been in business for a long time	1	2	3	4	5	
Contractor has a large number of staff	1	2	3	4	5	
Contractor has high number of professional certifications	1	2	3	4	5	

Priority	Not Important		Somewhat Important		Very Important	TOTAL
Contractor is a union shop	1	2	3	4	5	
Contractor provides comprehensive employee benefits	1	2	3	4	5	
Contractor offers ownership opportunities to employees	1	2	3	4	5	
Contractor has a history of community involvement	1	2	3	4	5	
Contractor offers assistance with marketing	1	2	3	4	5	
Contractor offers fixed prices	1	2	3	4	5	
Contractor offers tiered prices	1	2	3	4	5	
Contractor incorporates sustainability into business practices	1	2	3	4	5	
Contractor collaborates with student training programs	1	2	3	4	5	
Contractor offers additional services (ex: energy retrofits, EVs)	1	2	3	4	5	
[other]	1	2	3	4	5	
[other]	1	2	3	4	5	
[other]	1	2	3	4	5	

Brainstorm: Contractor Selection Questions

Exercise:

Pretend that you've just gotten three bids for a solar installation on your own home. Surprise – all of the bids quote the same price! How will you decide which contractor to work with? Brainstorm questions that you would ask to differentiate one solar contractor from another.

1. _____
   _____
2. _____
   _____
3. _____
   _____
4. _____
   _____
5. _____
   _____
6. _____
   _____
7. _____
   _____
8. _____
   _____

Sample Questions for your Contractor

1. What kind of demand do you expect in this Solarize campaign? How would you handle greater than expected demand, if necessary?

2. Pretend I'm a Solarize participant – walk me through your process, from receipt of my registration information through site assessment, contracting, and permitting. If more than one contractor will be involved, please include an explanation of how leads are split between firms.

3. Please bring a standard example of a customer bid. Walk me through the bid, as you would with a typical customer.

4. What do you think will be the top 3 successful outreach mechanisms for spreading the word about this Solarize campaign? What types of assistance and materials can your firm provide to help with these outreach efforts?

5. Please specify the state/country where each of the proposed systems are made. Include information about production vs. manufacturing of specific parts when possible.

6. Looking at the system options presented in your proposal, what percentage of your sales does each system type typically comprise? If you tend to sell one system more than another, can you explain why?

7. Based on your typical residential installations, what costs savings (in %) would Solarize participants be achieving with your proposed prices?

8. How will you avoid bottlenecks when processing a large number of leads?

9. How do you plan to store, stage, and maintain equipment, from the time it is shipped to your firm through its installation on a participant's home? Please include your plan for on-site equipment storage during the installation process, if relevant.

10. Please bring a standard example of a "Customer Care Book" and/or materials that you leave with the homeowner following system installation.

11. What information will you provide to assist homeowners in obtaining financing?

12. Are you currently applying for and/or involved in any other solar group buy projects? How would you prioritize this Solarize campaign relative to the rest of your workload?

Tips for Contractor Selection

Use the contractor as a resource—don't get bogged down in the details.

Members of the contractor selection committee are tasked with selecting a contractor that will best serve the needs and values of their community. Selection committee members often get bogged down in the technical details of solar, especially those for whom solar technology is unfamiliar. *It is important to remember that selection committee members do not need to know everything about solar technology!* One of the best ways to serve on the contractor selection committee is to pretend that you're selecting a contractor for your own home. What questions would you need answered to feel confident in this decision?

If the selection committee is getting bogged down with technical questions about solar, table those questions for after the contractor is selected. Once selected, the solar contractor will be there as a resource to answer technical questions posed by the community—they are the solar experts! This will help keep the committee on track during the selection process.

Keep interviews effective by asking questions that matter.

Interviews provide a valuable chance to interface with the contractor and get key questions answered. In many cases, the contractor's ability to effectively interact with the selection committee (and potential customers) is just as important as their answers to interview questions. *Make sure that the questions asked in interviews are ones that will matter in the selection committee's decision making process.* Valuable questions test how the contractor will respond to difficult or unexpected situations, interact with the customer, and go above and beyond to serve the target community—these are questions that will differentiate one contractor from another. Questions that are likely to produce the same answer from each contractor should be tabled until after the contractor selection process.

Prioritize back office processes and quick customer contact.

Through Solarize campaigns, contractors receive a large batch of leads after every workshop and are encouraged to follow up with them within one week. Quick, predictable follow up with workshop attendees is vital to maintain excitement and efficiently move participants through the process. However, scheduling 30, 50, or even 100 customer contacts can prove overwhelming for an office staff not accustomed to processing large batches of leads in a short period of time. Inputting customer data into a spreadsheet quickly becomes untenable when dealing with upwards of 100 leads. During interviews, ensure that there is a staff person dedicated to maintaining the back office component of the contractor's business. Better yet, suggest that the contractor use a customer relationship management (CRM) software to help manage leads in an efficient manner.

Pay attention to additional cost factors.

The RFP template provided includes a standard pricing form (Exhibit C). The pricing form asks the contractor to set a standard price-per-watt for each system type, and includes a section to detail additional cost factors—any non-standard factors that may result in an increased system cost. *Pay attention to these adders and how they might impact the target community.* For example, if 80% of the target housing stock has wood shake roofs and the contractor proposes a $0.50 per watt adder for installing on wood shake, the actual cost to many participants is likely to be much higher than the standard prices would suggest. As necessary, ask the installer to explain the reasoning behind their price adders during interviews.

But, don't spend too much time on price.

At the outset, it may seem that price is the most important component of a contractor's proposal. For some participants, this may be the case—but as a selection committee member it is vital to consider proposals in their entirety. *In fact, Solarize campaigns around the country have shown that the perception of "getting a good deal" is more important than meeting any particular price point.* As long as the price is set the same for everyone, and it is demonstrably less expensive than the "going rate" for individual solar installations, people perceive the cost as "a good deal."

Post-interview deliberations about solar prices can easily devolve into a frustrating comparison of apples and oranges—contractors all offer a per-watt price, but often use varying parameters for additional cost factors. To address this, have the selection committee develop a "standard system": set the system size, system type, roof slope, roof type, and number of stories and apply proposed prices to that system to get a better idea of what a real-world installation might cost. If the system costs are close enough between contractors (i.e. less than $1,000-$2,000 difference in total cost), table the discussion of price altogether.

Set a timeline, and stick to it!

I would be easy to spend weeks dissecting the merits and failings of one contractor over another—but this is not in the best interest of the selection committee. *While it is important to set aside enough time to seriously consider the options at hand, it is also important to avoid getting derailed by minor details.* In many cases, the selection committee is choosing between a handful of well-qualified contractors. If the committee is spending an excess amount of time on proposal evaluation and scoring, move on to interviews—meeting contractors face-to-face can help fill the holes left by written proposals. Likewise, if the selection committee is vacillating between contractors post-interview, hone in on what differentiates the contractors from one another. Opinions change with discussion, so hold periodic check-in votes to assess which contractors are "out" or "in." Most importantly, set a decision deadline and stick to it.

Brainstorm: Community Stakeholders

NAME	CONTACT PERSON	PHONE/EMAIL	WHO WILL CONTACT?
Community leaders, active citizens			
People with computer, media, PR skills			
Environmental and sustainability groups			
Community organizations, service clubs			
Chamber of Commerce, business groups			
Utility representatives			
Local government staff, elected officials			
Local banks, credit unions			

Brainstorm: Outreach Opportunities

NAME	CONTACT PERSON	PHONE/EMAIL	WHO WILL CONTACT?
Community newspapers			
Organizational newsletters			
Community blogs			
Event calendars			
Local radio			
Utility communications			
Poster/flyer sites			
Social media			
Other			

Tips for Community Outreach

Break down outreach tasks by type or geography.

The outreach team is tasked with spearheading community engagement for the duration of the Solarize campaign registration period. This can prove to be a daunting assignment, especially when targeting a large geographic area. To make outreach tasks easier for volunteers to digest, break them down by type or geography. For example, have one volunteer manage all flyer distribution, one volunteer manage all news media contact, one volunteer manage all social media, and so on. Or, split the target community into reasonably sized zones, and assign a volunteer outreach lead for each zone. Breaking down outreach into manageable tasks gives each volunteer a sense of personal responsibility and accomplishment.

Keep it simple—expensive advertising is not necessarily more effective.

Solarize outreach teams have experimented extensively with different forms of outreach, testing what works best in their community. If the resources are available, outreach volunteers may gravitate towards expensive outreach tools like television, newspaper, and radio advertisements. While these forms of outreach do generate a large number of "hits," they have proven significantly less effective in getting people out to a Solarize workshop. Instead, reach a large audience by embracing the grassroots nature of the campaign—ask participants to tap their personal networks, set up a weekly table at the local farmers market, or pass out flyers at popular community event.

Maximize word of mouth—build the buzz!

When Solarize participants are asked how they heard about the campaign, they consistently cite a conversation with a neighbor or friend that sparked their interest. Time and time again, word of mouth has topped the list as a means of getting people interested in the program. Encourage your outreach team to spread the word within their personal networks, and encourage those folks to forward program information along to *their* networks. Personal conversations with neighbors and friends serve to instill trust in the campaign and reinforce program messaging. Oftentimes, a conversation will remind someone that they've already seen a Solarize flyer or news article, and get them to come out to that next workshop.

Every community is different.

Ultimately, every community will employ a different blend of outreach tactics to build the buzz around their campaign. In a small community, strategically placed signs or flyers at popular intersections might be the magic bullet, while larger communities might need a widespread social media campaign to jumpstart interest. Think about how you find out about community events, and go from there. Don't be afraid to experiment!

Program Branding Considerations

The "Solarize" concept originated in 2009 in Portland, Oregon. With the publication of Spark Northwest's *The Solarize Guidebook*, the Solarize model has since spread across the nation. Spark Northwest supports the replication of Solarize campaigns, which further our mission to create clean energy communities. Capitalizing on this exciting trend, several solar group purchase campaigns have sprung up that use similar marketing efforts but have distinct differences from the community-led Solarize model. These campaigns could potentially dilute the Solarize brand or confuse the market, and campaign organizers must walk a fine line between encouraging the spread of a successful idea and maintaining brand integrity.

In some places, Solarize has been trademarked. For example, the City of Portland has the service mark for "Solarize" in Oregon, and they allow anyone who meets their criteria to use the name. Likewise, Spark Northwest has trademarked "Solarize Northwest," "Solarize Washington," and "Solarize Seattle." Under a Creative Commons license (http://creativecommons.org/licenses/by-nc-nd/3.0/us/), those interested in replication are welcome to share our materials as long as they are not used for a commercial purpose. (Selling solar installations is a commercial purpose for the installer, but not for the community group that organizes the campaign!)

To use the Solarize name, a Solarize campaign should contain three key elements:

- Competitively selected contractor
- Grassroots outreach
- Time limited campaign

Campaign organizers should be sure to incorporate all three elements, and may consider securing a creative commons license for their campaign name.

While Spark Northwest does want others to use the ideas presented in this workbook and *The Solarize Guidebook*, they are not permitted to copy our website content, outreach materials, or workshop presentations without explicit permission. If outside contractors or organizers attempt to reuse campaign materials as their own, Spark Northwest will urge them to:

- Use the word "Solarize" only if they meet the three established criteria listed above.
- If not meeting the three established criteria listed above, avoid confusion in the marketplace by not using words that sound similar to "Solarize."
- Use Spark Northwest materials and language only if they have completed a Solarize U training or have received explicit permission in writing from Spark Northwest.

Appendix 1: Frequently Asked Questions

Why are solar systems manufactured in Washington more expensive than those manufactured out of state?

Several reasons. For one, the Washington solar manufacturing industry is set up to serve a largely local market, whereas other US companies like SolarWorld or SunPower serve a global market – the Washington solar industry isn't producing at the same scale as other large US companies yet.

Is the cost per watt just for the panels, or is it all-inclusive?

Costs presented include all system costs – components, hardware, and labor. The only reason that a system cost would exceed the stated cost per watt is if your system falls outside of the "standard" installation outlined by the installer. If that is the case, you will be subject to small adders for the non-standard pieces of your installation. The adders have been pre-negotiated by your community just like the standard cost per watt.

Where does the group discount come from?

Solarize uses grassroots organizing to mobilize the community and spread the word about the program, which saves money for the installer in marketing costs. Solarize also educates neighbors as a group, which saves time for the installer because they don't have to individually educate each lead. As such, the Solarize discount is much more dependent on reduced customer acquisition costs than reduced material acquisition costs. Contrary to common perception, very little (if any) of the discount is actually derived from the installer's ability to buy in bulk from the manufacturer.

Is my annual production incentive considered taxable income?

No, not by the State of Washington, and probably not by the IRS. The Federal Government generally doesn't tax energy efficiency incentives.

What if my tax appetite isn't big enough to absorb the Federal Tax Credit?

If your tax appetite isn't large enough to absorb the entire credit in one year, it can be rolled over to future years. However, the legal language leaves it unclear as to whether the remaining tax credit can be rolled over for just one year or for as many years as is necessary. Consult your accountant.

How much does a site assessment cost?

Nothing! A Solarize site assessment is free and no-obligation.

How much space does a solar system take up?

The general "rule of thumb" is that one kilowatt of solar requires 80-100 square feet of roof space. Total space required will vary based on how big your solar system is.

Will solar panels harm my roof?

Solar panels will actually extend the lifetime of your roof! They protect the roof surface from harmful UV rays and weathering effects, which both contribute to roof deterioration.

What if I have an old roof?

Most installers recommend that you have at least 10-15 years left on your roof in order to install solar PV so you don't have to pay to take down and reinstall your solar panels shortly after you put them up. If your roof is close to the end of its life, it is generally a good idea to re-roof at the same time as you install solar. Some people re-roof only the section under the solar modules at the time of their installation, and re-roof the rest at a later date.

What is the process for re-roofing if you already have a solar system?

It is relatively simple to un-install the solar modules to accommodate a re-roofing project, and then re-install them after the roof is completed. Your installer will charge you a small fee (typically in the range of $1000-2000) to complete a residential un-install/re-install process.

How will a solar system affect the value of my home?

Recent studies have shown that solar PV systems increase home value and the speed at which homes sell.

What if I want to sell my home? Do I keep the benefits of the system, or do they transfer to the next owner?

When you move, you will need to notify the utility by filling out paperwork that transfers system ownership and incentives from you to the new owner. You will not retain system ownership or incentive benefits. The good news is that solar usually increases the resale value of your home, so you may come out ahead financially, even if your system has not paid back yet.

Will I have power when the grid goes down?

Only if you have battery back-up. When the grid goes down, utility linemen expect that no power will be entering the grid when they are doing repairs. If your solar system is producing even a small amount of power, it could be life-threatening to line workers. To address this issue, today's inverters will not function when there is no utility power, thus preventing your solar system from pushing power into your home or the grid.

One option is an inverter with a “secure power supply” as one of the options. This inverter will provided power to a single outlet when the sun is shining.

So what about battery backup?

Residential battery systems have dropped in price a lot in the past few years, but they are still fairly expensive, ranging from $5,000-$15,000. Unlike with solar, battery systems generally don’t provide you with any revenue streams or lower energy bills, so you will not be able to “pay back” this investment. If having backup power is worth the cost for you, then most solar installers can design and install a system for you. Another option is to design your solar system to allow battery backup in the future, when prices may be lower.

Technology progresses fast – won’t solar PV be twice as efficient and half as expensive in 10 years?

Historical data shows that solar PV efficiency progresses at the rate of about 0.1% per year. That means in that in 10 years, solar PV might be about 1% more efficient. Prices have come down a lot, but we don’t know if that trend will continue forever. In the meantime, incentives will step down or sunset, and you’ll miss an opportunity to make clean energy!

What about solar shingles?

Solar shingles are an exciting product that could make going solar easier if you are already replacing your roof, or if you want the sleek aesthetics that they offer. However, they are more expensive than traditional solar, and few products are currently available in Washington. Solar shingles are also not a good fit for Solarize, since not many participants will be planning a roof replacement during the campaign period.

What about my roof/utility bill/budget…?

The best way to see if and how solar will work for you is to schedule a site assessment! The installer will work with you one-on-one to determine how solar will play into your current energy use, roof space, and budget.

Appendix 2: Solar Advocacy & Resources

National

American Solar Energy Society (www.ases.org)

The American Solar Energy Society (ASES) is the nation's leading association of solar professionals and advocates. Since 1954, ASES has sought to inspire an era of energy innovation and speed the transition to a sustainable energy economy.

- ***Become a member:*** Visit the ASES web page to become a member. As a member, you will receive a subscription to the ASES publication *Solar Today*.

The Vote Solar Initiative (www.votesolar.org)

Vote Solar is a non-profit grassroots organization working to fight climate change and foster economic opportunity by bringing solar energy into the mainstream. Since 2002, Vote Solar has engaged in state, local and federal advocacy campaigns to remove regulatory barriers and implement key policies needed to bring solar to scale.

- ***Take Action:*** Visit Vote Solar's "Take Action" page to see how you can contribute to advancing solar policy in Washington State.

DSIRE Database (www.dsireusa.org)

DSIRE is a comprehensive source of information on state, federal, local, and utility incentives and policies that support renewable energy and energy efficiency. Established in 1995 and funded by the U.S. Department of Energy, DSIRE is an ongoing project of the North Carolina Solar Center and the Interstate Renewable Energy Council.

- ***Interactive Map:*** DSIRE offers the go-to resource for state-by-state information on solar incentives and policies. Visit the interactive map for a full breakdown of Washington's incentives, and see how they stack up .

The Solarize Guidebook (available at www.sparknorthwest.org)

The Solarize Guidebook, authored by Spark Northwest, is intended as a road map for project planners who want to convert "interest" into "action," break through market barriers, and transform the market for residential solar installations in their communities. The guidebook provides lessons, considerations, and step-by-step plans for project organizers to replicate the success of the Solarize model. *The Solarize Guidebook* was prepared for and funded by the Department of Energy, under the SunShot initiative.

State

Solar Washington (www.solarwashington.org)

Solar Washington is the Washington State chapter of ASES. By visiting the Solar Washington website, you can find out about local meetings, events, and volunteer opportunities. Solar Washington is often on the lookout for volunteers to help with advocacy events.

- ***Become a member:*** Annual contributions allow Solar Washington to host presentations from leading figures across the solar industry. Solar Washington continues to grow its role in shaping policy, helping to ensure that Washington State has a sustainable, robust solar energy policy for years to come. Additionally, Solar Washington provides networking opportunities for those interested in the solar industry.
- ***Solar Tour:*** Each year, Solar Washington organizes local tours of solar installations around the state. The group asks local volunteers to provide assistance with site coordination, signage, and acting as a docent on tour day. You do not need to have solar installed on your home to help out!

Local

Support a local Solarize campaign

Galvanize your neighbors, spread the word, and watch solar take root in your neighborhood.

Solar tour

Act as a local liaison for the Solar Tour with Solar Washington (see above).

Work with your utility

Talk to your electric utility to find out what incentives and support they provide for solar customers.

Nationwide Solarize Programs

Cities and states around the country are joining the Solarize movement! Each program has a unique flavor, and can offer valuable lessons learned.

- ***Solarize Northwest (***www.solarizenw.org***)***
- ***Solarize Portland (***www.solarizeportland.org***)***
- ***Solarize Pendleton (***www.solarizependleton.com***)***
- ***Solarize Massachusetts (***www.solarizemass.com***)***
- ***Solarize Connecticut (***www.solarizect.com***)***
- ***Solarize Santa Barbara (***www.cecsb.org/solarize-santa-barbara***)***

Disclaimer