

# TIPS FOR ADVANCING COMMUNITY SOLAR

## ONE TOWN'S EXPERIENCE AND ADVICE

[www.waterburyleap.org](http://www.waterburyleap.org)

### CONTEXT:

Over the past few years, the Waterbury Local Energy Action Partnership (Waterbury LEAP) has taken the lead in inspiring far more residents in Waterbury and Duxbury to go solar. They undertook a solar challenge called “Waterbury/Duxbury Solar Year” to motivate homeowners to invest in solar, and they worked closely with their local schools and municipalities — and continue to do so — to advance PV systems for public institutions and beyond. Their story is a model for others to follow. One of their intrepid local leaders — [Jamison Ervin](#) — outlined their solar goals and the keys to their success, below...



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### The Solar Challenge:

- The first Waterbury/Duxbury Solar Year: (2012-2013)
  - Launched in April 2012 at the Waterbury LEAP Fair, the aim was to double community solar in one year.
  - LEAP created a photo display, held a summer solar celebration, wrote articles, held a solar for businesses meeting, held open houses, began discussions with select boards and school boards.
  - Within 11 months, they had doubled the total installed solar in our two towns!
- The second Waterbury/Duxbury Solar Year (2013-2014)
  - Emboldened by success, LEAP launched the second Waterbury/Duxbury Solar Year in April 2013, and they are on track to meet the goal.
  - There have been many new residential installations throughout the year, the vast majority of which are modest, middle-income homes; many are low-income.
  - In December 2013, they celebrated with a ribbon cutting of the state's largest solar school array in Duxbury.
  - They flipped the switch on a new 32-kilowatt array on our firehouse.
  - There are plans for a 500-kilowatt municipal array in Waterbury Center, a 150-kilowatt community array, and several other large projects for 2014.
  - LEAP (Waterbury/Duxbury) is track to quadruple the 2012 installed solar capacity in mid-2014.

### **The numbers:**

- In 2012 the two towns had 375 kilowatts of installed community solar capacity; in 2013 they had 750 kilowatts, and in 2014, they will have 1500 kilowatts of local, renewable community solar, equivalent of more than one full solar panel for every single one of the 6700 men, women and children who live in the two towns.
- To put these numbers in perspective, Duxbury has the highest per capita solar in Vermont, and Waterbury has the third. The two towns have 3.5 times the state's average, in a state that already ranks 9th in the nation. If the two towns were compared with other states, they would be leading Arizona by more than 50 percent, and leading the nation by a margin of more than 12 to one. In some parts of North Duxbury, that figure is closer to 25 times the national average.

### **SOME TIPS FOR UNDERTAKING A SOLAR CHALLENGE OR SOLAR CAMPAIGN:**

1. **Name the initiative and call it something.** LEAP called theirs the "Waterbury/Duxbury Solar Year," but it could have been anything along those lines. Having a name for it meant they could use it and design a logo (which they did, including a brochure). Having a name means it's easier to talk about.
2. **Get select board buy-in as early as possible.** LEAP approached both the Waterbury and Duxbury selectboard as one of the first things they did. (Here is the letter they used to solicit interest and explain the challenge, as well as the resolution that resulted.) Once they had this commitment, they could refer to it at public meetings ("because of the select board's commitment, we investigated a range of options..." etc.). The selectboard's statement of support; helped create a cascade of yes'. They understood that helping local residents go solar was good for jobs, a good economic investment for residents (saving the average homeowner about \$12,000 over 25 years) good for the town and just a good thing to do. LEAP also worked to cultivate champions on the select board before the vote. They identified two select board leaders to work closely with before the vote, and they become leaders on it.
3. **Make the initiative visible.** LEAP did this through radio ads, a display downtown, a banner, a table at the farmer's market (just twice, but that had good exposure). Almost everyone in town knows about Waterbury LEAP.
4. **Hit the print media.** LEAP paid someone to write half a dozen articles on solar throughout the year (every 6-8 weeks). Energy committee member Jamison Ervin also wrote a few articles in addition. Having articles exploring different aspects of solar (the economics, the aesthetics, the learning for schools, the numbers, etc.) helped to make it part of news discourse. These articles were printed in the *Waterbury Record*, the free local rag that EVERYONE reads. So they had very good distribution. It's also important to be ready to defend something with preemptive journalism....LEAP knew the Sweet Road array would cause controversy, but they had an article at the ready for when the first complaints came in. It also helped to have Tom Drake (the school principal) and Jason Gibbs (school board member)

write an article about the school array, telling how much it would save, and how important it was to their sustainability and STEM curriculum. This dispelled any complaints about aesthetics almost immediately.

5. **Use social media.** LEAP didn't do this as well as they could have, but the digital networks in neighborhoods are very dense and extensive now. They used facebook and Front Porch Forum as our two main vehicles. These tools have very good reach if used well...
6. **Pat yourself on the back in public.** It doesn't hurt to let reporters know that Waterbury LEAP did this and that...it helps to build momentum and gain recognition. So wherever they could, they would explain our successes as part of the storyline.
7. **Help leaders envision change.** People responded well to "Wouldn't it be great if Crossett Brook had the largest school solar array in the state." LEAP members and other local leaders were sitting in a classroom, looking out onto the field, and Jamison Ervin said "Imagine if you could generate a third of your own energy from this little parcel." Tom Drake the principal stopped the meeting and said "we're going outside right now to look at this!" Helping leaders catch a glimpse of what the future looks like is very empowering. As well, LEAP had 3D generated images by a local young leader, which helped make tangible the abstract.
8. **Reassure leaders that this is normal.** One thing that select boards and schools want to know is that their decision is normal in the larger context, even if not locally. Showing pictures of other schools with solar, sending articles where towns and schools have solar- this helps them feel like it's a normal step, and they are not too out there.
9. **Help envision siting options.** One of the most powerful things you can do is help people understand what a solar array looks like and where it's going. Jamison Ervin and Alan Pierce's son spent 40+ hours doing 3-D design work for the school and for the town, to show what the options were. When they held local meetings, he was able to present the information in a spatially explicit 3-D manner, allowing people to 'see' what the arrays would look like in different settings. This requires a good deal of time; it's not easy necessarily but it's a powerful way to help overcome one of the biggest challenges — siting new facilities.
10. **Find and form partnerships with natural allies and leaders.** LEAP's leaders were Jason Gibbs on the school board, who has political aspirations, and Tom Drake, principal, who has school leadership aspirations. Our poster-girl teacher was Sarah Popowicz, science teacher, who advocated incorporating solar into curricula.
11. **Build on existing agendas.** Part of the reason the school board was so enthusiastic about the idea was that it tied in with their desire to be seen as a leader in sustainability (they have the state's only integrated sustainability curriculum), and more particularly, STEM. They were very jazzed about this issue. For select boards, LEAP stressed the value of jobs and investment that the solar arrays would bring to the town.
12. **Do the homework.** This is the key role of any energy committee; to predigest the results and the choices. Make it easy for local leaders to get to yes. Select boards and school boards don't have time to research different finance options, or the

costs, or the siting. LEAP researched everything, from potential sites (they had an intern for 2 weeks doing just this), potential finance models, different layout and design, potential impacts, cost savings, what other schools did. LEAP leader Jamison Ervin also wrote the draft RFI/RFP.

13. **Involve the numbers people early on.** This is critical. It means meeting with the business manager from a town, and the school business manager. They will ultimately verify the numbers.
14. **Make it fun.** LEAP had a mid-summer solar fest, where they had free pizza, free ice cream, free local music and invited the public, and seven local installers. It was fun, and about 15 families signed up that evening for solar.
15. **Bring in the big guns.** It doesn't hurt to have a press release with Governor Shumlin every now and then. He was very accommodating, and it was good to have his name associated with the efforts. Great PR.
16. **Show the diverse face of solar.** This is one of the most effective things we did. It made it a reality, seem easy, make it compelling. LEAP leaders took photos of every single solar installation in both our towns. This allowed them to have a visual display that showed the wide diversity of homes. They used this at almost all town meetings, so people could see what solar looked like. It allowed everyone to believe that solar was something for people like them, and it helped normalize the concept. People would see their home somewhere in the photos...
17. **Make it personal.** LEAP had a few home parties, where people came to their neighbor's home to see solar. Many people are intimidated by the mechanics of solar, and having a friend or neighbor walk through how it works, how much it costs, what the benefits are, etc. really helps. It's astonishing how many people have no clue how solar works ("Do I need batteries?" "How does GMP keep track of my electricity?"). This helps demystify the process and make it accessible.
18. **Play the matchmaker.** Part of the job of effective town energy committees is simply making introductions. In this case, it was between the school board/select board, the installers, and the investor. Town energy committee leaders can play a role in engineering key meetings....
19. **Get the numbers for boasting rights.** LEAP leaders spent about a day doing the research behind the statement "Duxbury is #1 in the state in per capita solar." While they admit their numbers might not be perfect, they believe they are pretty accurate. Because they had data on every household and business and school and muni building, they feel able to make their claims in confidence. Few other towns have the data, therefore they can't really rebut your argument. It's very powerful to say "we have more than one panel for every single person in our two towns," and "on a per capita basis, we're leading Arizona by a 50% margin in installed solar." Starting points: Vermont Energy Atlas, as well as the state Certificate of Public Good list. This allowed them to calculate differences between Vermont towns, and the photo display gave them tangible evidence too.
20. **Make the numbers clear and tangible.** Homeowners, businesses, schools and governments all want to know the numbers. How much will this cost and how much will this save? But they are different for each group, and vary widely depending on finance model. The key role for town energy committees is to unpack the complexity, and show people different finance models and options, and then

put that together into different scenarios (e.g., if you buy a 6 kw system at x/installed watt you will save Y over 25 years).

### **OTHER CRUCIAL KEYS TO SUCCESS...**

1. **Have a strong town energy committee and committee structure.** Clear internal leadership on your town energy committee is key. Not everyone can (or should) do everything. Identifying particular people to lead on a project — channeling their passion and making them champions — is a great way to harness limited people power and build off of people's strengths.
2. **Raise money to support your efforts.** To undertake big projects like a solar challenge, securing funds that your committee can spend to enhance your campaign — banners, brochures, photos, food — is key. To the best of your ability, ensuring funds are available to spend in a discretionary way so that spending is adaptive to the needs and opportunities at hand is also important. The New England Grassroots Environment Fund has seed grants for town energy committees or communities pursuing efforts like this. Find more information at: <http://grassrootsfund.org/>. Or, reach out to local businesses as partners and potential supporters.
3. **Lift all boats!** There are a lot of solar installers in Vermont. Highlighting the choices people have for potential partners in their project is important. For a solar campaign, create a list of all installers available to do business in your area and make it accessible to all; posting it on your web site or printing and bringing it to local events.
4. **Showcase other solar options.** Most Vermonters don't have a viable site for solar on their roof or land, and many people rent. Showcasing how solar can be made available to all local residents — through a community solar model — is also important. Be sure to identify and point people to resources they can turn to if solar is a stretch on their home or business. For community solar options, visit [www.vecan.net/communitysolar](http://www.vecan.net/communitysolar).

*Many thanks to Jamison Ervin for sharing these tips. Jamison lives in Duxbury, serves on the board of Waterbury LEAP, Vermont's only independent town energy committee; has worked for 23 years in international environmental policy, focusing on land-use planning, climate resilience and biodiversity finance; has served for more than 20 years on local Vermont planning boards, land trusts and conservation commissions. She holds a Ph.D. from UVM in land-use planning in Vermont, and can be reached at [jervin@sover.net](mailto:jervin@sover.net) or 802-244.5875.*