

BUENA VISTA SOLAR SHARE REPORT
ON
COMMUNITY SOLAR INTEREST SURVEY RESULTS

Introduction

The Buena Vista Community Interest Survey was requested by representatives of the Town of Buena Vista and Sangre de Cristo Electric Association to determine how interested residents of Sangre de Cristo Electric Association territory and of the greater Buena Vista area would be in the concept of a community solar project. The survey was created in Survey Monkey by volunteers of Buena Vista Solar Share, a group interested in promoting a community solar project in Buena Vista, and was offered from December 1-31, 2016. It was promoted through fliers included with the Town of Buena Vista December water bills, announcements on the Town of Buena Vista website and Facebook pages, announcements on the What's Happening in Buena Vista Facebook page, and in an organic effort spread through individual Facebook pages. It was further promoted through a note on Sangre de Cristo Electric Association December bills, an email sent by Sangre de Cristo Electric Association to over 3800 of its members, an article in the Chaffee County Times, a multi-week listing in the What's Happening section of the Chaffee County Times, a letter to the editor in the Chaffee County Times, and a blanket email to interested residents asking them to spread the word. Because the email about the survey that Sangre de Cristo Electric Association sent to its members was not received by some until February, 2017, the survey stayed open until March 1, so that a few more people could participate.

The following is a report by Buena Vista Solar Share, which interprets the results of the Community Interest Survey and suggests ramifications for the proposed community solar project for Buena Vista.

Discussion

The Community Interest Survey was completed by 245 residents. Only one survey per resident was allowed. Below, each survey question is listed, along with our analysis of the results. Please refer to the Survey Monkey results document, which can be found at bvsolarshare.org for complete results of the survey, including graphs and charts of responses.

1. If you were to participate in an affordable community shared solar program, how much of your average annual energy use would you want to replace with solar energy?

239 people responded to this question

- 85% of respondents indicated a desire to use solar for 50% or more of their energy. (85% = 203 people)
- 50% said they would want to use solar for 50-75% of their energy. (50% = 119 people)
- 35% said they would want to use solar for 100%. (35% = 83 people)

The average household can supply 100% of their energy needs with approximately 20 280W solar panels. So,

- Based on 20 panels = 100%, 83 people x 20 panels = 1660 panels
- Based on 10 panels = 50%, 119 people x 10 panels = 1190 panels

If 360 panels represents a 100kw project, then 1800 panels represent approximately a 500kw project.

Clearly, these results will not convert into actual committed participants in the project at the levels indicated by their responses to question 1. They only represent general interest. But we must also assume that some number of interested people did not complete the survey. What these results do show is a serious interest in providing a significant percentage of their energy through solar power. This interest level and our hypothetical calculations, above, also indicate that there may be enough interest to support up to a half megawatt (500kW) project, or perhaps more.

2. Please indicate the most appealing aspects to you about community shared solar? (check all that apply)

- 82% like solar because it is good for the environment.
- 79% like that they can have solar without putting it on their property
- 78% like that solar reduces use of fossil fuels
- 73% like the potential for financial benefit
- 72% like that it is located within the community
- 61% like that maintenance costs and upfront costs are minimal
- 58% like that project employs local workers
- 43% like that it uses new technology
- 2% are not interested

The responses to this question help us to understand why people would be interested in solar power. The results indicate a large majority of respondents are interested in solar in order to help protect the environment and to become more independent of fossil fuels. Also, 79% like the idea of not having to put solar panels on their own property. In addition, three-quarters of respondents are interested in reducing the amount they pay for electricity, and nearly the same percentage like the idea of generating power locally. 61% are concerned about low maintenance and upfront costs, so the project needs to be as efficient and low cost as possible. And 58% like the idea of a community solar project employing local workers.

3. What monthly change in your bill (i.e., net cost or savings) would you require to be interested in participating?

- 226 people said they would be somewhat to very interested if it saved them a large amount of money
- 173 people said they would be somewhat to very interested if it saved them a little money
- 128 said they would be somewhat to very interested if it saved them no money at all
- Only 6 people said they would be interested if their bills went up

These results tell us that the majority of people are concerned that a community solar project save them money on their electricity. But it also indicates that many people would still be interested even if a community solar project didn't save them anything as long as their bills didn't increase. This indicates to us a serious level of interest.

4. If you had to pay a one-time subscription fee that allowed you to receive solar power for 20 years, please indicate the highest amount you would be willing to pay:

- 58% would be willing to pay \$500 or less.
- 36% would be willing to pay \$500.
- 25% would be willing to pay \$750- \$1000
- 35% would be willing to pay \$1000 or more
- 15% would be willing to pay \$1500 or more

The largest single response category was 36% willing to pay \$500. These results indicate to us that there are a significant number of people wanting to spend \$500 or less on a subscription to the solar garden. That means we should try to keep the subscription rate as low as possible, including, if necessary, by providing a mechanism for those who can't afford more than \$500 to be able to participate—for example by paying for subscriptions in installments over time through financing, or by providing an option for shares of less than one panel to be sold. It should be noted that 35% would pay \$1000 or more in order to participate, which indicates a strong, serious interest.

5. Please indicate the primary reasons that might discourage you from participating in a community shared solar program. (check all that apply)

- 39% said the application/set up fee could discourage them from participating
- 34% said nothing would dissuade them
- 33% said they would need financial benefit to participate
- 17% need more information/ don't understand how it would work
- 10 and 12% said they would prefer to put up their own solar or didn't want to make a long- term commitment
- 1% would rather have a system close to their house

It has been pointed out to us that the term “application/set up fee” is confusing, and that many may not have understood what the term meant. It would have been better to say ‘participation fee’ or ‘subscription’. Because of this confusion, the results may have been skewed. Nonetheless, 39% of respondents indicated that the fees for the project might be a reason not to participate. This indicates a concern that high initial fees might be a deterrent to participation. This is also supported by the 33% who said financial benefit would be necessary for them to participate. It is notable that 34% of respondents said they would participate no matter what.

Obviously, more information will need to be forthcoming on the project for people to make a commitment. The purpose of the survey was only to ascertain general interest levels.

6. Do you own or rent your home?

- 90% own their home.
- 10% rent.

The fact that 90% of respondents own their own home may reflect that most people who responded to the survey understand that community solar is a long term investment. Also, many renters may not think of their situation as stable or permanent and therefore are not thinking

about investing in alternative energy. Also, asking the question helped communicate the idea that renters are eligible to participate.

7. Annual household income:

- 27% make \$40,000/year or less
- 50% make \$60,000/year or less
- 67% make \$80,000/year or less
- 78% make \$100,000/year or less
- 21% make over \$100,000/year

The response to this question indicates that while 50% of respondents make \$60,000 or less, 50% make \$60,000 or more. It depends on how you look at it. The largest category of respondent was 27% making \$40,000 or less, closely followed by 23% making \$41,000-\$60,000. This reflects the idea that community solar can help people get solar power who can't afford to put solar panels on their own property. That community solar can save money through shared costs and economy of scale is one of the things that attracts people to community solar.

We also note that there may be a correlation between income level and the results of Question 4, which asked about willingness to pay a one-time subscription fee. If the relationship is valid, and people with lower incomes are less willing to pay one time subscription fees, this supports the idea that community solar is a more economical way for people with lower incomes to participate in solar energy and that we should strive to include financial structures that allow them to do so.

8. Which of the following best describe the location of your residence?

77% of respondents reside in northern Chaffee county, 12% in southern Chaffee county, and the remainder in other parts of Sangre de Cristo territory.

This reflects that the survey was better promoted in northern Chaffee county than in other parts of Sangre de Cristo territory. Thus, the survey results may not indicate lack of interest in other regions of Sangre de Cristo territory.

9. Would you like to be kept informed of the project progress and start date? If so please leave your contact information:

165 out of 245 people want to be kept informed

10. Please feel free to add any additional comments below.

75 comments and questions were entered in response to this question. Those comments and questions are addressed in a separate document entitled "Comments on Community Interest Survey" on the bvsolarshare.org website.

Conclusion:

We feel that 245 respondents is a significant response to the community interest survey, especially considering that the survey was offered during the busy holiday season, and that it

was promoted more heavily in northern Chaffee County than in other regions of Sangre de Cristo territory. We are pleased with the overwhelmingly positive response to the survey. We are also impressed by indications that respondents gave thoughtful, serious consideration to their responses and comments.

We at Buena Vista Solar Share feel that the results of this survey indicate a strong interest in the community solar concept, and that there is enough interest to justify a significantly larger community solar project than the originally planned 100kW. We feel that a project of 500kW should be considered. A 500KW project would require approximately 2.5 acres of land, well within the 5 acres that is being considered near the rodeo grounds.