

MILLION SOLAR ROOFS CASE STUDY

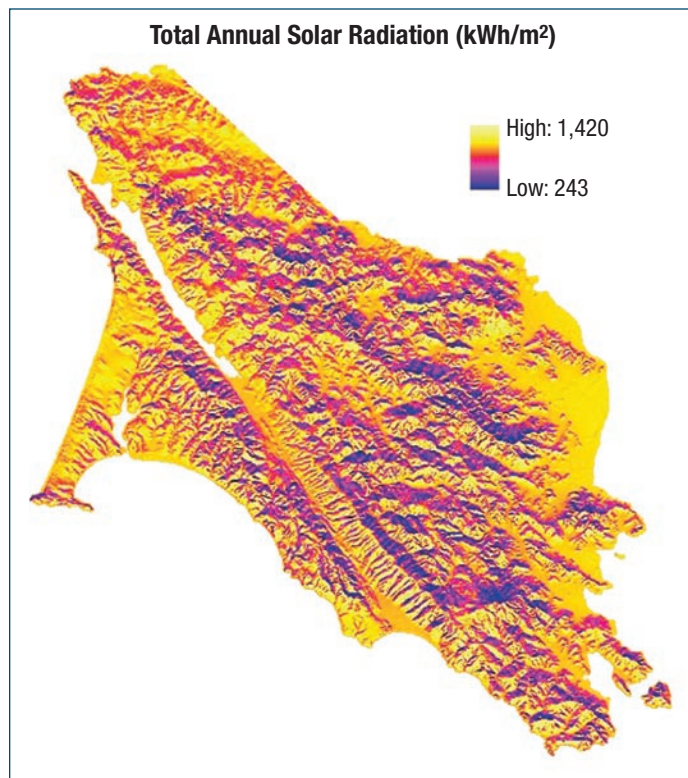


Targeted Outreach Marin Solar Program's Solar Potential Map

Problem: Lack of Awareness for Solar

Located in California, Marin County has the benefit of an established net metering law, interconnection standards, and a state sponsored incentive program. The next logical step for the Marin Solar Program (MSP) was to build on these state initiatives through an outreach and education campaign in the area. Due to their limited budget, however, MSP needed to concentrate on a narrow audience.

Typical awareness campaigns for new technologies are millions of dollars. MSP, however, had \$6,500. Even after constricting the scale of the program to include only Marin County, the target population was too large given their level of funding.



The Solar Potential Map of Marin County first identified areas with significant solar radiation. Coordinates were then cross-referenced with addresses in the county database to develop a prospect list.

Solution: Market Analysis and the Solar Potential Map

First, MSP selected a segment of the market to focus on. They chose to direct their attention to increasing the participation rate in the commercial incentive program since it had a high degree of available capacity and a moderate level of interest. However, there are 4400 commercial rooftops in Marin County, which was still too many to target given the program's budget.

Next, to prevent funds from being wasted on buildings without solar capacity, MSP developed a Solar Potential Map of Marin County. Working with the county planning department, MSP used a Geographic Information System (GIS) application to identify acceptable commercial sites for solar installations. As a result, 58 MW of capacity was detected, and the target audience was narrowed to 745 commercial rooftops. With the target segment selected and the audience minimized, MSP could now start their outreach campaign.

Direct mail seemed to be a natural vehicle to distribute MSP's information since there were a large number of people to contact, limited funds to do so, and addresses available. Before contacting all 745 building owners, however, MSP tested a mailing to 275 (500 pieces of mail total), sending building owners and facility managers valuable information on their building's solar capabilities and the state's incentive program. They then followed up with an additional mailing to 380 buildings (650 pieces of mail total).

There were a number of tactics MSP employed to elicit a higher response rate for their mailings. For example, the mailing was sent from Marin County's Community Development Agency which added value in the recipient's mind and led to a higher probability of opening. In addition,



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recipients were provided three ways to act, so individuals could respond in a manner they were most comfortable with. In the first mailing, recipients could 1) attend a solar workshop by the local utility, 2) receive an information packet from the county, or 3) receive a site visit to assess solar options from the county. In the second mailing, respondents were given the option to attend a Solar Fair (which replaced the utility workshop), where those interested in solar met with different installers in the area and attended a seminar on procurement, available economic incentives and financing methods.

“We felt that by the time an attendee left (the Solar Fair), they had the information they needed to make a decision one way or the other about solar. We also tried to provide the tools for them to act if they decided to install.” says Gwen Johnson, Solar Program Coordinator for the County of Marin.

Results: Remarkable Response Rates

The first mailing MSP sent received a 7.6% response rate, which is almost four times the industry average (2%). The follow up mailing received a slightly lower response rate of 5.5%, however still performed well. After conducting these two mailings, MSP had found 75 building owners interested in commercial installations while adhering to their \$6,500 budget (\$5,000 for the Solar Potential Map and \$1,500 for design, printing, and postage for the mailings).

Furthermore, the efforts of the Marin Solar Program are paying off in terms of installations. Last year, over 1 MW of photovoltaics was installed on commercial roofs in Marin County, up 160% from 390 kW the year before. MSP is now working with installers to better measure the impact their outreach has on installations. By providing valuable information to a targeted audience, MSP seems to have found a winning formula for their awareness campaign. Recognizing

the opportunity for other MSR Partnerships to utilize this tool, MSP has assisted others in implementing a Solar Potential Map in their area and published a document describing the project and their methodology.

How Does the Solar Potential Map Work?

The Solar Potential Map developed by the Marin Solar Program uses Geographic Information System (GIS) software called Solar Analyst to identify areas in Marin County that receive an acceptable amount of sunlight to make efficient use of photovoltaics. Buildings in these areas are then mapped in, and rooftop pictures are reviewed to reveal any apparent inhibitors to solar installations. The building address is then cross-referenced to the county's database to assess what type of building it is and who the owners are so they can be informed of the site's solar capabilities and what incentive programs it qualifies for.

“It's a simple process, actually, but you need a partner in the Planning department,” says Dana Armanino, primary developer of the Solar Potential Map. “The GIS portion of the work is fairly straightforward, however it's very time consuming. Also the Planning department has access to information that is critical to the construction of the map and identification of the buildings. Partnering with someone in Planning can speed up the project.”

Recently, an additional 50 MW of capacity was mapped into the Solar Potential Map for Marin County, expanding MSP's outreach campaign. In addition to outreach efforts, the Solar Potential Map has also helped provide assessment of policy and technical assistance for county planners.

For more information on how you can implement a Solar Potential Map in your area, contact your regional MSR program manager.

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