

CASE STUDY | SANTA BARBARA, CA

SANTA BARBARA (population 88,410) has made solar a priority. The city has two fire station solar installations and a 159kW installation at rental car quick turnaround facility (installed in 2010), which it owns outright. The city also has almost 400kW in two arrays at its corporate yard (installed in 2009) that are financed through power purchase agreements (PPAs). Santa Barbara is currently exploring the potential of a 500kW installation at the airport. Santa Barbara has elected to go with PPAs instead of outright ownership on larger installations because the city does not need to invest capital in the projects and is able to avoid much of the risk associated with system ownership, which is transferred to the developer.

“Solar doesn’t seem to always make financial sense,” said Alelia Parenteau, an Energy Analyst for the city of Santa Barbara. “We’re doing it because it is the right thing to do, and often there is also a financial benefit. Solar is the most tangible green thing.”



315 West Carrillo, Housing Authority of the City of Santa Barbara installation on a Mission tile roof with parapet, installed in 2006.

To facilitate solar, Santa Barbara has developed an over-the-counter solar permitting process for applicants who go through the [check list](#) for the zoning permits, and the process is generally completed in an hour. The check list is available online – as are most documents, as the city has a general philosophy of internet accessibility. If a project meets the requirements on the check list, contractors can bring in plans that meet the requirements on the first visit to the Building and Safety Division for an over-the-counter

approval. All of the requirements are very clear and on the website. The streamlined over-the-counter permitting has been a success and fewer than ten percent of projects need to be pulled aside for potential concerns.

“We’re really proud of our over-the-counter permitting system. We came up with a list of the things that are essential for the Planning Division to check for with a solar energy system and we put it all on one sheet of paper,” said Heather Baker, AICP Project Planner in the Design Review and Historic Preservation Section in the Community Development Department. Of the 170 municipalities in California with populations over 50,000, Santa Barbara ranks 9th in number of solar installations per capita (0.81 installations per 100 people). The city is also ranks 19th in installed capacity per capita.

Santa Barbara is known for its Hispanic architecture in its El Pueblo Viejo District. The city adopted [Solar Energy Design Guidelines](#) in December 2006. The Design Guidelines were written in consultation with local solar contractors, are heavily illustrated, as the city wanted to provide clear examples of design recommendations. Part of the idea behind the guidelines is that if homeowners follow them, residents see that solar can be attractive and integrated into the distinctive design of Santa Barbara’s buildings. Then, the neighbors near attractive solar systems may consider solar on their own property. The city refers to these projects “leadership solar projects.”

The [design guidelines](#) address installation on mission tile roofs – a special challenge in the area – recommending that homeowners with mission tile roofs consider ground mounted systems, systems on accessory structures that do not have tile roofs (such as garages), or “an architecturally compatible parapet screening method to hide the panels.” The design guidelines also address solar installations on historic structures, stating that the installations should not be visible from the public right of way, and installations should not damage the structure or alter its exterior.

“We feel that solar should always be viewed as a benefit to the community and shouldn’t detract from a community resource such as a structure of merit or landmark,” Baker noted. In addition to addressing solar on Santa Barbara’s historic structures, the design guidelines focus on

solar on new construction. Integrating solar into new construction is a priority in Santa Barbara, and finding space for an installation without piecing around air vents is a common challenge on the city's existing housing stock. As a result, the design guidelines recommend at least 300 square feet of roof space with appropriate solar orientation for solar installations for residential units, allowing for a future well-designed standard residential size installation.

In 2006, Santa Barbara also started a [Solar Design Recognition Program](#). The program recognizes both active and passive solar systems in three major categories: "Not Publicly Visible"; "Design Challenge" for publicly visible systems; and "Special Challenge" for systems on mission tile, historic structures, or commercial, institutional, or industrial properties. Awards are also given for projects which made good use of passive solar heating, cooling and lighting methods. Passive solar projects are identified by coordinating with the Santa Barbara Contractor's Association's local "Built Green" program. For each award category, two levels of awards are given: plaque awards – wood plaques, carved by a local artist using a magnifying glass and the sun's energy, recognizing excellence in that category – and certificate awards. Award winners are advertised via press release, have their photo taken with the Mayor, are recognized at a City Council meeting, and have photos of their work and their names posted on the city's website. Nearly 200 total solar projects received award recognition at four ceremonies, held in 2007, 2008, 2009, and 2011.

"We've seen increased interest in the program every year," Baker said. "Part of what the program does is to help maintain a good working relationship with the solar contractors as they are publicly appreciated and we also recognize those homeowners who have made a commitment to sustainability."

In addition to sponsoring the awards program, the city of Santa Barbara attends the Community Environmental Council's (CEC) annual Earth Day Celebration, where a poster of Solar Design Recognition Program winners is displayed. City representatives also generally attend other CEC solar events such as their "Solar Sunday" event. The city's sponsorship of and presence at these events shows a commitment to solar, as well as to continuing to building a positive working relationship with solar companies who work in Santa Barbara.



Victoria Garden Mews Project – active and passive solar, not publicly visible, installed in 2011.



Plaques made by a local artist are awarded to projects recognized through the Solar Design Recognition Program.

The city has worked with the Housing Authority of the City of Santa Barbara (HACSB), which has installed 100kW of solar on four properties around the city using federal stimulus funds and enabled by California's Multifamily Affordable Solar Housing Initiative. City staff is working towards providing guidance to HACSB on specifications for solar contracts to require solar design guidelines compliance.

Santa Barbara also supported the local [Solarize Santa Barbara](#) program, which was run by the CEC during the summer of 2011. The goal of the program was to reduce the cost of solar for city residents. Since 2006, the city has also provided CEC handouts which promote solar energy in the

lobby near the permitting counter and in other well-trafficked locations in city hall. .

Santa Barbara's solar energy promotion and education efforts were recognized in 2011 by the California Central Coast Chapter of the American Planning Association with an "Outstanding Planning Award: Education Project Award, Award of Excellence".

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