

Creating a Streamlined Permitting Process for Rooftop Solar Photovoltaic

Partnering with local jurisdictions to improve the solar PV system permitting process while educating and supporting contractors



As the solar marketplace continues exponential growth, local governments experience an influx of solar permitting applications. The U.S. Department of Energy (DOE) estimates that soft, or nonhardware, costs of solar power, such as installation labor, transaction costs and supply chain costs, account for 64 percent of the total cost of a new solar photovoltaic (PV) system.^{*}

Local governments have control over two variables that can reduce the following costs:

- Permitting processes and their associated fees, which are approximately 4 percent of the total costs
- The design and administration of the permitting process creates an opportunity for local governments to directly reduce solar costs to consumers



Develop a streamlined permitting process for single-family solar photovoltaic (PV) systems



GOALS

Lower the soft (nonhardware) costs of solar power for consumers, increasing accessibility



Develop an efficient and replicable process that can serve as a model for other jurisdictions

"These guidelines allow homeowners to bypass the expensive structural engineering process. When you put a system on your roof, there's sometimes uncertainty about whether your rafters can support the modules, and so you bring in an outside structural solar engineer. We created a prescriptive process that would apply to 80–95% of the homes in the Green Corridor and could save up to \$3,500."

- Carla Din, director of the East Bay Green Corridor

THE SOLUTION

In collaboration with the Center for Sustainable Energy, the East Bay Green Corridor developed a Regional Solar Policy Initiative. The resulting standardized processes for single-family residential solar installations included:

- Streamlined permitting Rapid over-the-counter permitting in six cities; 3-7 day turnaround in three cities
- Uniform permit application
- Innovative structural guidelines allowing bypassing of expensive and time-consuming engineering assessments
- Cost-recovery permit fees in all cities

Creating a uniform permitting process for the region allowed East Bay solar companies to reduce their soft costs because they were able to reduce time spent dealing with nine unique permit applications to filing one standardized form. It also resulted in reduced permit application errors, saving the building department many hours in staff resources.

PROJECT DETAILS

Regional Landscape

Berkeley is a partner with local universities and eight neighboring cities in the East Bay Green Corridor. This partnership was created to strengthen the region's support for green industries, environmental resiliency and green employment opportunities. In 2010, the group identified guidelines for a uniform solar energy permitting process across multiple jurisdictions as a priority in order to drive the local solar market and bring it to scale. By bringing in CSE solar planning expertise, the partner jurisdictions and local contractors benefited from an improved permitting process for both city officials, contractors and consumers.

Improved Process for All Parties

According to a nationwide survey conducted by Clean Power Finance, one in three installers avoids selling solar in areas with difficult permitting. By allowing electronic permitting submission while slowly phasing out over-the-counter permitting, City of Berkeley building department officials were able to improve the transition to electronic permitting, increase submissions online and reduce errors.

Projected Solar Growth

The City of Berkeley's support of rooftop solar installations by streamlining the permitting process in their region through collaboration and by taking the time to train local contractors to use new electronic forms is paying off. As of April 2015, the city reports it is at 45 percent of its 2020 goal of 3,200 residential and commercial solar installations and currently generates more than 10,000 megawatt-hours of solar electricity a year.

Key Impacts

- 1. The standardized documents outlining how to expedite solar permitting were adopted by more than 70 percent of California municipalities.
- 2. The California Solar Permitting Guidebook was the first state-mandated solar permitting document in the United States. The document has been downloaded by web visitors from over 400 cities in 27 states and 19 countries.
- 3. CSE provided training to more than 130 jurisdictions and solar organizations, reaching over 1,000 individuals across California.

To learn more about the SunShot Rooftop Solar Challenge or connect with a solar permitting expert, contact the Center for Sustainable Energy.