## California Low Income Solar Programs

California has 2 programs to encourage solar in existing lower-income households, with a budget of \$216.7 million through 2016. Both are managed by the California Public Utilities Commission (CPUC) under its \$2.2 billion, 10-year California Solar Initiative. The CPUC set aside 10% of its program funds for low-income solar for the sake of equity and because low-income households have different needs, including poor economics, aging roofing structures, inadequate education on energy management, higher foreign language outreach and marketing needs, and lack of access to a federal residential tax credit. A separate program at the California Energy Commission works with builders to install solar in new "affordable homes" developments. For more information:

http://www.cpuc.ca.gov/PUC/energy/Solar/070424 csilowincome.htm or www.gosolarcalifornia.ca.gov .

## 1. Single-Family Low-Income Incentive Program

**Goal:** To provide low-income homeowners access to solar photovoltaic systems, while decreasing their electricity usage and reducing energy bills, without increasing monthly expenses.

**Scope:** Roughly 5,000 owner-occupied homes over the next 8 years. Eligibility is defined by SB1 (2006) and AB 2723 (2006) as owner-occupied homes that received city, state, or federal home-buying assistance, such as loans, grants, tax-exempt mortgage revenue bonds, etc. Households must meet income definitions of "low income residential housing", as defined in California Public Utilities Code 2852 (and based on state health and safety code eligibility).

**Status:** CPUC issued its Decision on November 16, 2007 after more than 18 months of discussion with stakeholders on the optimal program. The CPUC selected a Program Manager in Spring 2008; the PM is drafting a workplan and outreach plan for CPUC approval before accepting applications (Q4 2008?).

## Two types of incentives:

i. For some homes, \$4.75 to \$7.00 per watt (of an \$8-9/watt installation), depending on Federal tax liability (therefore ability to receive a \$2,000 federal tax credit) and eligibility for energy bill-paying assistance under the California Alternate Rates for Energy (CARE) program:

Federal Income Tax Liability	Qualifying Low-Income CARE-Eligible Homeowners	Qualifying Low-Income Homeowners not eligible for CARE
\$0	\$7.00	\$5.75
\$1 to \$1000	\$6.50	\$5.25
\$1001 to \$2000	\$6.00	\$4.75

ii. For other homes, fully-subsidized 1kW photovoltaic (PV) systems for qualifying homeowners who cannot pursue loans. Only households with incomes do not exceed 50% of area median income can take advantage of the full subsidies. Up to 1,800 of the 5,000 homes.

The Program Manager determines if incentive applicants are eligible for partial or full subsidies. The program provides substantially higher incentives than the mainstream CSI program (which pays for roughly 25% of a PV installation). The incentive value is bi-annually reviewed against market prices.

**Other requirements:** Applicants must undergo an energy efficiency audit and have energy efficiency measures installed prior to receiving the solar incentives, or enroll in the CPUC's Low-Income Energy Efficiency program if eligible.

Implementation: The Program Manager (PM) is contracted through the investor-owned utilities because funds for the California Solar Initiative are collected from a small electricity distribution rate charge by the three major utilities. The chosen PM, Grid Alternatives, is a San Francisco-based provider of solar installations to lower-income homes, working at times in conjunction with Habitat for Humanity and using trained volunteers. The PM will help the incentive recipients find loans and grants to cover the remaining cost of the system, and provide training on solar and traditional energy, maintenance of the system, and after-installation check-up's. Outreach will be conducted in at least English, Spanish, and Chinese, and possibly two other state languages, Vietnamese and Tagalog, or other languages as determined by the PM.

Details of Grid Alternatives' bid and workplan are still unclear. It appears Grid will contract with 2-3 manufacturers for dedicated supply, and possibly at below-market price in return for the PR value. Grid may also be working to secure bulk loans through banks or through residential Power Purchase Agreement providers.

AB 2723 (2006)'s definition of eligibility by home purchase assistance is highly challenging: the PM must identify 5,000 qualifying homes from among 33 million state residents via city and county databases. Many of them are not eligible for Low-Income Energy Efficiency program due to differing income limits.

## 2. CSI Multifamily Low-Income Incentive Program

**Status:** The CPUC has not finalized its decision on the design and management due to the extreme complexity of this market. It tasked the three mainstream solar incentive administrators (two utilities and a non-profit organization) to develop a proposal by July 2007. That proposal failed stakeholder support, and CPUC staff developed another draft proposal in February 2008.

**Scope:** The two governing laws required the CPUC to provide solar in multifamily buildings as well as to single-family homes. The laws include renters and owners in multifamily units where at least 20% of the units are to low-income tenants as defined by CPUC code.