

The Solar Alliance

California Solar Initiative Fact Sheet

April 2011

The CSI has been the most successful solar program in the United States in terms of cost-effective use of ratepayer dollars to generate job creation, small business development, renewable energy deployment, solar cost reductions and new innovation.

California Snapshot

Solar jobs	36,000 ¹
Solar MWs installed	800 ²
Solar energy systems installed	80,000
Net energy savings to schools, public agencies and non-profits	\$1.3 billion
Solar energy cost reduction since CSI began	>30%
Private capital invested in CA solar companies since the CSI began	\$4.5 billion



Solar installation at Bakersfield College

1: The Solar Foundation, 2010 National Solar Jobs Census

2: 800 MW includes over 500 MW installed through the CSI program since 2007, and over 300 MW installed through programs that pre-dated CSI since 2000. Source: <http://www.qosolarcalifornia.org/>

Since this visionary program was created by the Legislature and launched four years ago, it has delivered these benefits to California:

- **New companies entering the market at record pace.** The CSI has been a powerful driver of new business creation. The CSI is sparking innovation and competition in the market which is why new participants in the marketplace - primarily small businesses - have won market share.
- **Created new jobs.** As a result of the growth in the solar industry spurred by the CSI, California now has 36,000 solar jobs. Source: *The Solar Foundation, 2010 National Solar Jobs Census*
- **Supported solar for low-income housing.** The CSI has dedicated \$216M to support solar installations on single and multi-family housing in California. These programs have sparked workforce training partnerships with over 30 job training programs and will bring the benefit of solar to over 16,000 low-income families.

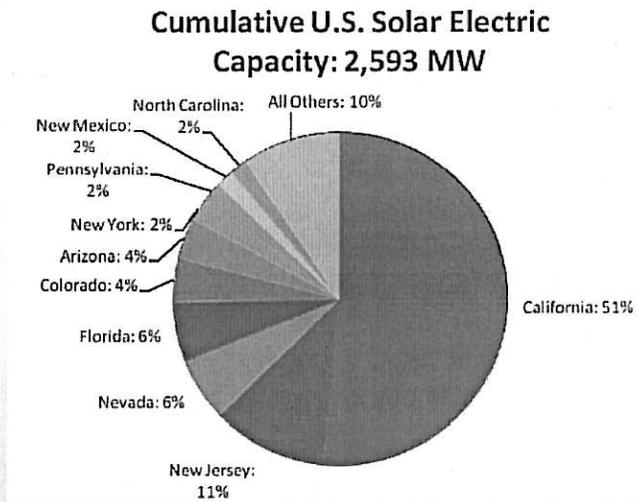


Volunteers with Grid Alternatives and Habitat for Humanity install solar on low-income housing in Oakland, CA

- Created the fastest deployment of solar power in the United States.** Approximately 80,000 solar energy systems are now installed in CA, totaling 800 MW, resulting in over a million metric tons of annual CO2 pollution reduction. Thanks to the CSI, California is now the leader in the nation in terms of installed solar capacity, solar jobs, and solar investment. Partly as a result, the California Energy Commission rejected the need for a new fossil-fired peaker plant at Chulavista in 2009. *Source: Powers, B. "CEC Cancels Gas-Fired Peaker, Suggesting Rooftop Photovoltaic Equally Cost-Effective," Natural Gas & Electricity, August 2009.* In total installed capacity, this rooftop solar program is currently equal to 2 large-sized power plants.

2010 INSTALLATIONS, TOP 10 STATES	PHOTOVOLTAICS (MWdc)
California	258.9
New Jersey	137.1
Nevada	61.4
Arizona	54.0
Colorado	53.6
Pennsylvania	46.8
New Mexico	42.8
Florida	35.2
North Carolina	30.7
Texas	22.6
Rest of U.S.	135.2
Total	878.3

Source: SEIA/GTM Research US Solar Market Insight Year in Review 2010



- Created \$1.3 billion in net cost savings for schools, public agencies and non-profit organizations.** Approximately 38% of application MWs for CSI-supported systems involved projects from the public and non-profit sectors since 2007. Solar energy systems installed on California schools, water districts, local governments and non-profits will generate a net electric bill savings of \$1.3 billion over the lifecycle of the systems.³

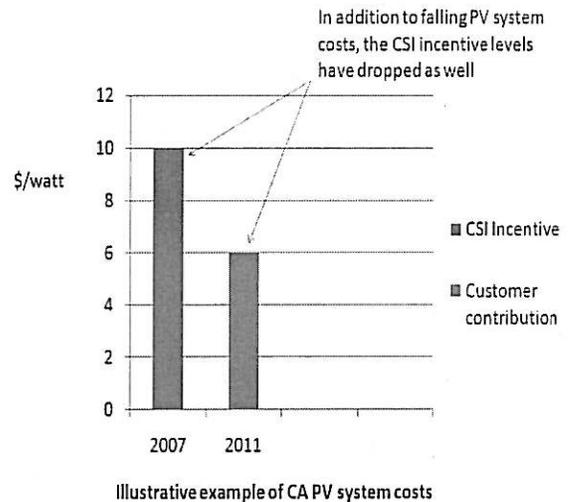


A ground-mounted PV system installed for an agricultural customer in Delano, CA

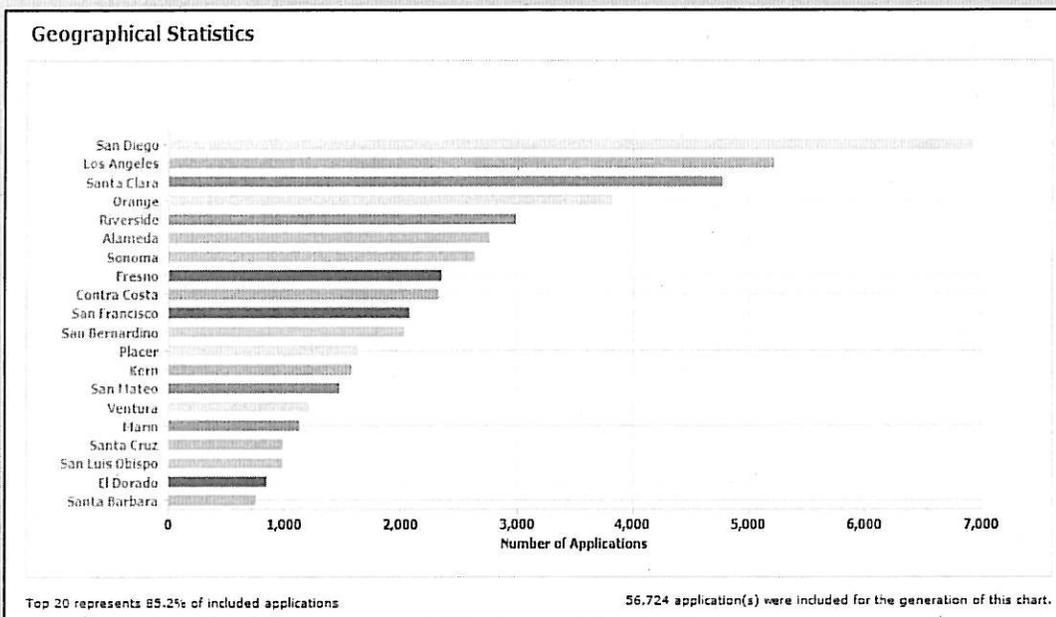
- Reduced the cost of solar energy systems.** The CSI has been instrumental in achieving economies of scale and driving down solar costs. In 2007, when the CSI was first implemented, solar systems were being installed at average costs exceeding \$10.00/watt. Today, many California solar companies can install solar on homes and businesses for \$6.00/watt – which has also helped create conditions to reduce costs for larger PV systems. In January, 2011, Southern California Edison submitted 250 MW of solar PV contracts for approval which were below the state’s Market Price Referent for combined cycle gas turbines – in other words, below the avoided cost of conventional energy that the utility would otherwise have paid.

3: Calculation based on CSI dataset March 2, 2011 which includes 1,738 systems labeled "Government or Non-Profit" as the host customer; does not capture "Commercial" systems also serving public sector buildings through a PPA or other arrangement. Methodology: Capacity Factor: Schools/Higher Ed- 21%; Water districts/utilities- 22%; Other government/non-profit- 20%. Useful Life: 30 years with 0.5% annual performance degradation. Avoided energy costs methodology: avoided cost during solar generation periods assumed flat for useful life and stated in nominal dollars. Avoided energy cost rate: \$0.18/kWh for schools, government offices, and non-profits; \$0.12/kWh for water districts/utilities.

- Program is succeeding even as incentive levels fall.** By design, CSI incentive levels have fallen as demand has increased. The average incentive level has dropped from \$2.50/watt in 2007 to \$0.35/watt today while the solar market continues to expand. January 2011 was the highest month on record – in terms of # of MWs installed (25 MW) as well as number of projects installed (1,787). This means that every ratepayer dollar invested in the CSI program today generates seven times the amount of solar than would have been installed at the outset of the program, making the CSI a cost-effective policy. This is part of the reason why the Division of Ratepayer Advocates (DRA) supports the CSI program⁴.



- Delivered infusion of new capital to the California economy when it was most needed.** Over \$4.5 billion of private sector investment has flowed into California solar companies since the CSI program began in 2007. This capital has accelerated solar cost reductions by enabling the industry to invest in innovation and scale up. *Source: Data from Ernst and Young reports and Greentech Media.*
- CSI has helped bring solar to counties around the state.** Here are the top twenty counties in the CSI program in terms of number of applications:



Source: California Solar Statistics Geographical Statistics chart; available by MW, by # of applications, and \$ of reservation. http://www.californiasolarstatistics.ca.gov/reports/locale_stats/

4: DRA testimony on March 7, 2011 at Legislature's hearing on the CSI program: "DRA's analysis shows that solar PV installations in the CSI program are appropriately reflecting the changes occurring in the solar industry through declining prices...CSI is an effective mechanism for transforming the Solar PV market and excess CSI generation can be cost-effective for non-CSI participant ratepayers."

The Solar Alliance

Our members represent the entire value stream of solar photovoltaic manufacturing, investment and financing to development and installation.

