

California Solar Initiative

Moving California towards a cleaner energy future

Installer Fact Sheet

The California Solar Initiative (CSI) offers cash incentives for the install of on-site fixed or tracking photovoltaic (PV) systems. PV installers play an important role in the solar application process and in most cases, will submit the required paperwork and apply for permits on behalf of customers who decide to purchase and install PV systems.

PROGRAM OVERVIEW

As part of the Governor's Million Solar Roofs program, California has set a goal to create 3,000 megawatts of new, solar-produced electricity capacity by 2017 – moving the state toward a cleaner energy future and helping lower the cost of solar systems for consumers.

ELIGIBLE PARTICIPANTS

All Residential, Commercial, Government, and Non-Profit electric customers of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) are eligible to apply for incentives. The CSI program pays incentives for residential solar installations on existing structures, as well as new and existing non-residential structures. New residential construction projects are funded through a different program, the California Energy Commission's (CEC) New Solar Homes Partnership Program.

INCENTIVE STRUCTURE

The CSI pays two types of incentives to solar customers:

- Expected performance-based buydown (EPBB)** — For solar projects less than 100 kW until 2008, and less than 50 kW after 2008, an up-front incentive based on an estimate of the system's future performance is provided. You can calculate the EPBB incentive by entering the system specifications into the online EPBB incentive calculator at www.csi-epbb.com.
- Performance-based incentives (PBI)** — A flat cents-per-kWh monthly payment for all metered output (for the initial 5 years of operation) from eligible solar systems equal to or greater than 100 kW (50 kW after 2008). Any project size may opt in to receive this type of incentive.

As illustrated in Table 1, incentive levels for the CSI program will be automatically reduced over the duration of the program based on the volume of MW of solar reservations issued. Projects are counted toward the MW trigger

once they are deemed eligible, have paid an application fee (if applicable), and have received a confirmed reservation. Incentive levels may vary by customer class and Program Administrator* service territory. To determine the current incentive 'step', consult the Program Administrator's website or refer to the CSI Statewide Trigger Point Tracker at www.csi-trigger.com which provides real-time updates based on the volume of MW reservations received.

ELIGIBLE TECHNOLOGIES

PV systems up to 5 megawatts (MW) in capacity are eligible, although incentives are paid only for the first (1) MW of capacity. The CSI does not provide rebates for solar hot water systems. A pilot program for solar hot water systems is available in San Diego. Solar technologies other than PV will be added to the CSI program shortly. Consult the Program Administrator's website for the latest updates and information.

WARRANTY REQUIREMENTS

All systems must have a minimum 10-year warranty that protects against system or component breakdown. Meters must have a one-year warranty. Effective January 1, 2008 the warranty requirement for meters will increase to 5 years unless the CEC establishes alternate requirements.

ENERGY EFFICIENCY REQUIREMENTS

All existing residential and commercial customers will be required to have an energy efficiency audit conducted of their existing home or building. Acceptable audit protocols consist of an on-line or telephone audit provided

by the customer's utility. Proof of a completed energy efficiency audit must be submitted to the utility with the solar incentive application. Consult the CSI Handbook for further details concerning the energy efficiency audit program requirement. In the future, existing structures must meet specific energy efficiency standards. The CPUC and CEC will develop these energy efficiency requirements in 2007.

INSTALLER / EQUIPMENT SUPPLIER REQUIREMENTS

To participate in the CSI program, eligible companies that **install** system equipment must be listed with the Program Administrator. The Program Administrator will request the following information:

- Business name, address, phone, fax, and e-mail address
- Owner or principal contact
- Business license number (if applicable)
- Contractor license number
- Proof of good standing on the records of the California Secretary of State as required for corporate and limited liability entities
- Reseller's license number (if applicable)

This information must be submitted to the Program Administrator before a company can become eligible to install systems under the CSI Program, and must be updated annually. The information must be received by the Program Administrator before the Applicant can receive any reservation confirmation or incentive payment, and must be updated annually by March 31.

Table 1 - EPBB and PBI Payment Amounts by Step

MW Step	Statewide MW in Step	EPBB Payments (per watt)			PBI Payments (per kWh)		
		Residential	Commercial	Gov't/ Nonprofit	Residential	Commercial	Gov't/ Nonprofit
1	50	n/a	n/a	n/a	n/a	n/a	n/a
2	70	\$ 2.50	\$ 2.50	\$ 3.25	\$ 0.39	\$ 0.39	\$ 0.50
3	100	\$ 2.20	\$ 2.20	\$ 2.95	\$ 0.34	\$ 0.34	\$ 0.46
4	130	\$ 1.90	\$ 1.90	\$ 2.65	\$ 0.26	\$ 0.26	\$ 0.37
5	160	\$ 1.55	\$ 1.55	\$ 2.30	\$ 0.22	\$ 0.22	\$ 0.32
6	190	\$ 1.10	\$ 1.10	\$ 1.85	\$ 0.15	\$ 0.15	\$ 0.26
7	215	\$ 0.65	\$ 0.65	\$ 1.40	\$ 0.09	\$ 0.09	\$ 0.19
8	250	\$ 0.35	\$ 0.35	\$ 1.10	\$ 0.05	\$ 0.05	\$ 0.15
9	285	\$ 0.25	\$ 0.25	\$ 0.90	\$ 0.03	\$ 0.03	\$ 0.12
10	350	\$ 0.20	\$ 0.20	\$ 0.70	\$ 0.03	\$ 0.03	\$ 0.10

Companies that **sell** system equipment must be certified by the CEC and must furnish the same information as listed above to the CEC on their form NSHP-4. This information must be submitted to the CEC before a company can become eligible to participate in the CSI program, and must be updated annually by March 31.

LICENSING REQUIREMENTS

Unless self-installed by the owner, all systems must be installed by appropriately licensed California contractors in accordance with rules and regulations adopted by the State of California Contractors State Licensing Board (CSLB). Installation contractors must have an active A, B, or C-10 license, or a C-46 license for photovoltaic (PV) systems. Although not required, installation contractors are encouraged to become certified by the North American Board of Certified Energy Practitioners (NABCEP). For additional information on NABCEP, visit www.nabcep.org.

METERING REQUIREMENTS

The CSI program requires accurate solar production meters for all projects that receive CSI program incentives. Accurate measurement of solar output is of paramount importance to ensure optimum value for both solar owners and ratepayers.

- For systems receiving EPBB incentives, a basic meter with accuracy of ± 5 percent is required.
- For any system receiving PBI incentives, an interval data meter with accuracy of ± 2 percent is required.

Performance monitoring and reporting may also be required as specified in the CSI Handbook. The California Energy Commission's list of qualifying performance monitoring system providers can be found at www.energy.ca.gov.

NET ENERGY METERING

Incentives can offset up to 100% of onsite electrical load. Net Energy Metering allows for the flow of electricity both to and from the customer through a single, bi-directional meter. With net metering, during times when the customer's generation exceeds his or her use, electricity from the customer to the utility offsets electricity consumed at another time. In effect, the customer is using billing credits for the excess generation to offset electricity purchased at other times.

INTERCONNECTION

PV systems must be permanently interconnected to the electrical distribution grid of the utility providing service to the customer. Portable systems are not eligible. The system interconnection must comply with applicable electrical codes and utility interconnection requirements. Consult the CSI Handbook for further details concerning interconnection including insurance requirements. Proof of interconnection and parallel operation is required prior to receiving an incentive payment.

INCENTIVE APPLICATION PROCESS

A CSI Statewide Database has been created to streamline the application process and eliminate the need to manually complete the incentive application paperwork. While the application is being completed online, the forms can be printed and submitted along with other documentation required to complete the application process. The CSI Statewide Database allows installers to manage all of their projects from a single source while obtaining 'real-time' status updates on individual solar projects. Contact the applicable Program Administrator or visit www.gosolarcalifornia.ca.gov.

The CSI application fee is 1% of the unadjusted requested CSI program incentive amount.

Application fees are rounded to the nearest dollar amount. However, application fees are not required for residential projects or systems that are smaller than 10 kW.

After the customer selects the solar installer and chooses either the EPBB or PBI payment option, the installer submits a reservation request application via the CSI Statewide Database, along with a hard copy of the application and all required incentive claim documentation. The incentive claim documentation includes, but is not limited to, all application forms, proof of utility service, worksheets, energy efficiency audit documentation, interconnection agreement, executed purchase agreements, and proof of project milestones, including the fulfillment of all inspection requirements (if required) as described in the CSI Handbook. Once this documentation is received, and the system passes inspection, the Program Administrator will issue the incentive payment.

TRAINING

CSI Program Administrators hold monthly training opportunities to clarify the administrative processes, shading methodology, the online application database, and other program information. See each Program Administrator's website to find the next training opportunity.

RESOURCES

- To obtain a copy of the CSI Program Handbook or to receive further CSI program details, visit www.GoSolarCalifornia.ca.gov.
- The EPBB Calculator can be found at www.csi-epbb.com to assist you with a preliminary evaluation of a site's potential for solar.
- To view a list of participating installers, visit the CEC website at www.consumerenergycenter.org/erprebate/database/fulllist.php.

*PROGRAM ADMINISTRATORS

Southern California Edison
Attn: California Solar Initiative
Program Administrator
6042A North Irwindale Ave.
Irwindale, CA 91702
Email: greenh@sce.com
Phone: 1-800-799-4177



Pacific Gas & Electric Company
Attn: California Solar Initiative
P.O. Box 7265
San Francisco, CA 94120-7265
Email: solar@pge.com
Business Customers: 1-800-468-4743
Residential Customers: 1-800-933-9555
Solar Hotline: 1-415-973-3480



California Center for Sustainable Energy
Attn: SELFGEN Program Manager
8690 Balboa Avenue, Ste. 100
San Diego, CA 92123
Email: csi@energycenter.org
Phone: 1-858-244-1177 (866) -SDENERGY
Fax: 858-244-1178



This fact sheet is intended to be an overview and introduction to the California Solar Initiative (CSI). It is not intended to replace the CSI Program Handbook. If there are differences between the Handbook and this fact sheet, the Handbook shall prevail. Please see the most recent version of the Handbook for the most up-to-date information.