

ECONOMIC AND FISCAL IMPACT STATEMENT

(REGULATIONS AND ORDERS)

STD. 399 (REV. 12/2008)

See SAM Section 6601 - 6616 for Instructions and Code Citations

AGENCY NAME California Energy Commission	CONTACT PERSON Sherrill Neidich	TELEPHONE NUMBER (916) 651-1463
DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400 Establish Solar Offset Program		NOTICE FILE NUMBER Z

ECONOMIC IMPACT STATEMENT

A. ESTIMATED PRIVATE SECTOR COST IMPACTS (Include calculations and assumptions in the rulemaking record.)

1. Check the appropriate box(es) below to indicate whether this regulation:

- a. Impacts businesses and/or employees
- b. Impacts small businesses
- c. Impacts jobs or occupations
- d. Impacts California competitiveness
- e. Imposes reporting requirements
- f. Imposes prescriptive instead of performance
- g. Impacts individuals
- h. None of the above (Explain below. Complete the Fiscal Impact Statement as appropriate.)

h. (cont.) _____

(If any box in Items 1 a through g is checked, complete this Economic Impact Statement.)

2. Enter the total number of businesses impacted: unknown Describe the types of businesses (Include nonprofits.): housing developers, solar PV manufacturers, retailers and installers (see attached)

Enter the number or percentage of total businesses impacted that are small businesses: unknown

3. Enter the number of businesses that will be created: unknown eliminated: 0

Explain: New regs could increase PV installation on new homes, however regs do not mandate PV installation on new homes.

4. Indicate the geographic extent of impacts: Statewide Local or regional (List areas.): _____

5. Enter the number of jobs created: ukn or eliminated: 0 Describe the types of jobs or occupations impacted: home construction, PV manufacturers, retailers and installers (see attached)

6. Will the regulation affect the ability of California businesses to compete with other states by making it more costly to produce goods or services here?

Yes No If yes, explain briefly: _____

B. ESTIMATED COSTS (Include calculations and assumptions in the rulemaking record.)

1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime? \$ unk

a. Initial costs for a small business: \$ _____ Annual ongoing costs: \$ _____ Years: _____

b. Initial costs for a typical business: \$ _____ Annual ongoing costs: \$ _____ Years: _____

c. Initial costs for an individual: \$ _____ Annual ongoing costs: \$ _____ Years: _____

d. Describe other economic costs that may occur: _____

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2. If multiple industries are impacted, enter the share of total costs for each industry: unknown

3. If the regulation imposes reporting requirements, enter the annual costs a typical business may incur to comply with these requirements. (Include the dollar costs to do programming, record keeping, reporting, and other paperwork, whether or not the paperwork must be submitted.): \$ 400.00

4. Will this regulation directly impact housing costs? Yes No If yes, enter the annual dollar cost per housing unit: unknown and the number of units: ukn

5. Are there comparable Federal regulations? Yes No Explain the need for State regulation given the existence or absence of Federal regulations: Under federal law there is no requirement for a seller of production homes to offer solar as an option to home buyers.

Enter any additional costs to businesses and/or individuals that may be due to State - Federal differences: \$ 0

C. ESTIMATED BENEFITS (Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.)

1. Briefly summarize the benefits that may result from this regulation and who will benefit: Offering solar as an option to prospective home buyers will benefit the environment (less energy consumed), home buyer (increases home value, lower electricity bills), solar installer/retailer (will increase productivity), seller of production homes (possibly increase home sales)

2. Are the benefits the result of: specific statutory requirements, or goals developed by the agency based on broad statutory authority?

Explain: Public Resources Code Section 25405.5, enacted by Senate Bill 1 (Murray, Chapter 132, Statutes of 2006)

3. What are the total statewide benefits from this regulation over its lifetime? \$ unknown

D. ALTERNATIVES TO THE REGULATION (Include calculations and assumptions in the rulemaking record. Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.)

1. List alternatives considered and describe them below. If no alternatives were considered, explain why not:

2. Summarize the total statewide costs and benefits from this regulation and each alternative considered:

Regulation:	Benefit: \$ _____	Cost: \$ _____
Alternative 1:	Benefit: \$ _____	Cost: \$ _____
Alternative 2:	Benefit: \$ _____	Cost: \$ _____

3. Briefly discuss any quantification issues that are relevant to a comparison of estimated costs and benefits for this regulation or alternatives:

4. Rulemaking law requires agencies to consider performance standards as an alternative, if a regulation mandates the use of specific technologies or equipment, or prescribes specific actions or procedures. Were performance standards considered to lower compliance costs? Yes No

Explain: _____

E. MAJOR REGULATIONS (Include calculations and assumptions in the rulemaking record.) Cal/EPA boards, offices, and departments are subject to the following additional requirements per Health and Safety Code section 57005.

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1. Will the estimated costs of this regulation to California business enterprises exceed \$10 million? Yes No (If No, skip the rest of this section.)

2. Briefly describe each equally as an effective alternative, or combination of alternatives, for which a cost-effectiveness analysis was performed:

Alternative 1: _____

Alternative 2: _____

3. For the regulation, and each alternative just described, enter the estimated total cost and overall cost-effectiveness ratio:

Regulation:	\$ _____	Cost-effectiveness ratio: \$ _____
Alternative 1:	\$ _____	Cost-effectiveness ratio: \$ _____
Alternative 2:	\$ _____	Cost-effectiveness ratio: \$ _____

FISCAL IMPACT STATEMENT

A. FISCAL EFFECT ON LOCAL GOVERNMENT (Indicate appropriate boxes 1 through 6 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.)

- 1. Additional expenditures of approximately \$ _____ in the current State Fiscal Year which are reimbursable by the State pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code. Funding for this reimbursement:
 - a. is provided in _____, Budget Act of _____ or Chapter _____, Statutes of _____
 - b. will be requested in the _____ Governor's Budget for appropriation in Budget Act of _____
(FISCAL YEAR)

- 2. Additional expenditures of approximately \$ _____ in the current State Fiscal Year which are not reimbursable by the State pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code because this regulation:
 - a. implements the Federal mandate contained in _____
 - b. implements the court mandate set forth by the _____
court in the case of _____ vs. _____
 - c. implements a mandate of the people of this State expressed in their approval of Proposition No. _____ at the _____
election; (DATE)
 - d. is issued only in response to a specific request from the _____
_____, which is/are the only local entity(s) affected;
 - e. will be fully financed from the _____ authorized by Section _____
(FEES, REVENUE, ETC.)
_____ of the _____ Code;
 - f. provides for savings to each affected unit of local government which will, at a minimum, offset any additional costs to each such unit;
 - g. creates, eliminates, or changes the penalty for a new crime or infraction contained in _____

- 3. Savings of approximately \$ _____ annually.
- 4. No additional costs or savings because this regulation makes only technical, non-substantive or clarifying changes to current law regulations.

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5. No fiscal impact exists because this regulation does not affect any local entity or program.

Other.

B. FISCAL EFFECT ON STATE GOVERNMENT (Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.)

1. Additional expenditures of approximately \$ _____ in the current State Fiscal Year. It is anticipated that State agencies will:

a. be able to absorb these additional costs within their existing budgets and resources.

b. request an increase in the currently authorized budget level for the _____ fiscal year.

2. Savings of approximately \$ _____ in the current State Fiscal Year.

3. No fiscal impact exists because this regulation does not affect any State agency or program.

4. Other.

C. FISCAL EFFECT ON FEDERAL FUNDING OF STATE PROGRAMS (Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.)

1. Additional expenditures of approximately \$ _____ in the current State Fiscal Year.

2. Savings of approximately \$ _____ in the current State Fiscal Year.

3. No fiscal impact exists because this regulation does not affect any federally funded State agency or program.

4. Other.

FISCAL OFFICER SIGNATURE		DATE
		
AGENCY SECRETARY ¹ APPROVAL/CONCURRENCE		DATE 10/12/2010
DEPARTMENT OF FINANCE ² APPROVAL/CONCURRENCE	PROGRAM BUDGET MANAGER 	DATE

- The signature attests that the agency has completed the STD.399 according to the instructions in SAM sections 6601-6616, and understands the impacts of the proposed rulemaking. State boards, offices, or department not under an Agency Secretary must have the form signed by the highest ranking official in the organization.
- Finance approval and signature is required when SAM sections 6601-6616 require completion of Fiscal Impact Statement in the STD.399.

Attachment to Form 399 Economic and Fiscal Impact Statement

Establish Solar Offset Program

This document contains an analysis of the potential economic and fiscal impacts resulting from the implementation of the proposed regulations.

Background

The proposed regulations would make specific the process for implementing Public Resources Code Section 25405.5, enacted by Senate Bill 1 (Murray, Chapter 132, Statutes of 2006).

Public Resources Code Section 25404.5, provides:

- A seller of production homes shall offer a solar energy system option to all prospective homebuyers that enter into negotiations to purchase a new production home on land for which an application for a tentative subdivision map was completed on or after January 1, 2011. The seller of production homes must disclose the following to the prospective homebuyer:
 - The total installed cost of the solar energy system option
 - The estimated cost savings associated with the solar energy system option
- The Energy Commission shall develop an offset program that allows a developer or seller of production home to forgo the solar as an option offer by installing a solar energy system generating specified amounts of electricity on other projects. The energy required to be generated at the offset location shall be equal to the amount of electricity of a similarly sized project, assuming 20 percent of the prospective home buyers would have installed solar energy systems.

Economic Impact

The proposed regulations (and legislation) require the seller of production homes to offer solar as an option to all prospective home buyers. This regulation could impact the cost of a production home to both the home developer and prospective home buyer. It is estimated that the average cost of a residential solar installation, less than 10 kW, is \$8.49 per watt (California Public Utilities Commission, California Solar Initiative, 2009 Impact Evaluation). The median sized solar energy system installed is 2 kW or 2,000 watts. The cost of installation for this solar energy system, before state rebates and federal tax incentives will be approximately, \$16,980.

If the prospective home buyer did select solar as an option, the cost of this option would increase the purchase price of the home, and therefore affect housing costs. It must be taken into consideration that this is an option and a home buyer is not required to select this option. If the prospective home buyer did not want to add the additional cost of a solar energy system in their purchase price, but were still interested in installing a system, they could lease a solar energy system which would remove the high initial cost.

It should also be taken into consideration that due to the downturn in the economy, fewer new homes are being built. According to statistics compiled by the Construction Industry Research Board for the first eight months of 2010, in the state of California, 17,101 building permits were pulled for single-family homes. As a comparison, in 2006, 108,121 building permits were pulled for single-family homes. There were also 11,979 permits pulled for multi-family homes the first eight months of 2010, compared to 56,130 permits pulled in 2006. It is unknown how many prospective home buyers will select solar as an option on the new homes built in 2011. However, home buyers might welcome this opportunity to add a solar energy system on their home. They will be able to incorporate the cost of the system into their monthly mortgage payment and know that the investment may be offset through reduced energy costs and the increased value of their home.

If the developer does select the option to offer solar as an option to a prospective home buyer, the costs to the developer will be minimal. They will pass the cost of this option onto the home buyer.

If the developer selects the option to install an offset solar energy system, there would be a cost to the developer. It is unknown at this time how big this offset solar energy system would be or the cost to install it. It is estimated that the average cost of a large commercial solar installation, over 10 kW, is \$7.09 per watt (CPUC California Solar Initiative, 2009 Impact Evaluation). Since it is unknown how large an offset system will be installed we can only provide an estimate.

If a developer built a housing development that consisted of 100 homes, and our regulations assume that 20 percent of prospective home buyers will install a solar energy system, then 20 homes would be the number that would be offset. The Energy Commission has already determined that a 2 kW solar energy system will be used as the baseline for determining expected time-dependent valuation weighted equivalent energy of the solar energy system for the offset location. The developer will need to determine the required capacity (in kW AC) of the offset solar energy system as calculated by the Solar Offset Program Calculator, Version 1. The developer will divide the homes that are being offset by the required capacity. In this example, the developer would need to build an offset solar energy system that is at least 40 kW or 40,000 watts. The cost to build this offset solar energy system would be approximately \$283,600. This is an approximate number, since it is unclear what the developer will actually pay for the offset solar energy system and the required capacity that was calculated.

The developer could pass the cost of the offset system onto the purchase price of the homes in the housing development that is using the offset. This is also an unknown.

Economic Benefits

Senate Bill 1, "Million Solar Roofs Initiative", put California on track toward building a million solar roofs in a ten-year period (2006 – 2016). One million solar roofs will greatly increase the state's rooftop solar energy capacity, providing the output equivalent of five modern electric power plants or 3,000 MW. Solar energy is a renewable alternative to building power plants that burn fossil fuels and emit greenhouse gases, which lead to global warming and climate change.

The implementation of the Homebuyer Solar Option will provide new home buyers with an option to install solar on their home while it is being constructed, and to incorporate the cost of this option into their monthly mortgage payment. This option might steer prospective home buyers to new construction homes. Per the *Consumer's Guide to the California Solar Initiative*, there are many reasons for a home owner to install a solar energy system, 1) Solar finance experts suggest that every 1,000 Watts of power from a solar energy system adds \$20,000 to the resale value of a home, 2) solar energy systems are extremely reliable and are able to produce clean energy from the sun for up to 25 years, 3) using solar to power a home can dramatically reduce a person's carbon footprint, 4) there are state incentives and federal tax credits available for the installation of a solar energy system on a home which would reduce the cost of the system. One other important benefit to the home buyer is the reduction in electricity costs which could also offset the cost of the solar energy system.

Due to the benefits of solar, there could be an increase of installations of solar energy systems. This increase could impact businesses in a positive way by increasing the manufacture of solar modules and inverters (could decrease the cost of these products and create new jobs), boost sales by retailers (could add new businesses and create new jobs), improve the workload of installers (could reduce the cost of installations and add to the workforce) and possibly increase sales of new construction homes (possible job creation).

Conclusion

It is very difficult to determine the economic impacts of these regulations since there are many variables involved. There is uncertainty with the number of new homes that will be constructed in the future, how many developers will offer solar as an option to prospective home buyers, how many home buyers will select the option, and what will be the cost of this option. It is also unclear how many developers will select the option to install an offset solar energy system, how many homes will be offset, and how much this system will cost.

The cost estimates provided for both a residential solar energy system and offset energy system will provide a base for the possible economic impact to both the home buyer and developer of production homes.