



**STATE BOARD OF EQUALIZATION
STAFF LEGISLATIVE BILL ANALYSIS**

DRAFT

Date Amended:	05/21/09	Bill No:	<u>AB 1028</u>
Tax:	Sales and Use	Author:	Blumenfield
Related Bills:	AB 150 (Smyth)		

BILL SUMMARY

This bill would provide a sales and use tax exemption for qualified renewable energy systems, as defined, during the month of April of each year from 2010 to 2020, inclusive, subject to future implementation of a carbon-based fee in this state.

Summary of Amendments

Since the previous analysis, this bill was amended to, among other things, limit the exemption to systems that produce alternating current rate peak electricity of not more than 10 kilowatts and make the operation of the provisions contingent on the adoption of greenhouse gas emission fees under the California Global Warming Solutions Act of 2006.

ANALYSIS

CURRENT LAW

Under existing law, the sales or use tax applies to the sale or use of tangible personal property in this state, unless otherwise exempted or excluded by statute. Under current law, the sales and use tax applies to sales and purchases of equipment used to generate electricity to the same extent as it applies to any other sale of tangible personal property that is not otherwise exempted or excluded from tax by statute.

Revenue and Taxation Code Section 6353, however, provides a sales and use tax exemption for sales and purchases of gas and electricity when delivered to consumers through mains and lines.

PROPOSED LAW

This bill would add Section 6398 to the Sales and Use Tax Law to provide a sales and use tax exemption for sales and purchases of “qualified renewable energy systems” purchased on and after April 1, to and including April 30 of each year from 2010 to 2020, inclusive. This bill would define “qualified renewable energy systems” to mean those systems deemed by the California Public Utilities Commission to be eligible solar electric equipment under the California Solar Initiative that produces at least one kilowatt, and not more than 10 kilowatts, alternating current rated peak electricity that meets criteria established by the California Solar Initiative. This bill also clarifies that a qualified renewable energy system is a system that is placed in service in a utility territory covered by the California Solar Initiative.

This bill provides that the proposed exemption would become operative when both of the following have occurred:

- 1) The establishment of a greenhouse gas emission fee under the California Global Warming Solutions Act of 2006.

This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the Board’s formal position.

- 2) The Legislature appropriates revenue from the greenhouse gas emission fee imposed pursuant to the California Global Warming Solutions Act of 2006 sufficient to fully offset the revenue loss to the General Fund.

As a tax levy, the bill would become effective immediately upon enactment, but operative on April 1, 2010. The provisions of this bill would remain in effect until July 1, 2020, and as of that date be repealed.

IN GENERAL

The California Public Utilities Commission (CPUC) initially created a solar program by regulation, known as the California Solar Initiative. In 2006, SB 1 (Ch. 132, Murray) authorized the California Solar Initiative Program in statute to be administered by the CPUC through California's three major investor-owned utilities—Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric. All electric customers of these three utilities are eligible to apply for cash rebates for solar for existing homes, as well as existing and new commercial, industrial, government, non-profit, and agricultural facilities—within the service territories of the three investor-owned utilities.

Under the California Solar Initiative, solar photovoltaic systems (which are roof-mounted, ground-mounted, or building-integrated), as well as non-photovoltaic electric displacing systems and electric generating systems are eligible for rebates. Non-photovoltaic solar systems include solar water heaters, solar space heating and solar cooling systems, and electrical generating solar systems, such as dish sterling, solar troughs, dish and lens, and concentrating solar systems.

The rebates vary according to system size, customer class, and performance and installation factors. There are two incentive programs available to customers: Expected Performance Based Buydown (EPBB) and Performance Based Incentive (PBI). Under the EPBB program, purchasers of solar systems of less than 50 kilowatt may apply for a lump sum cash rebate. Customers receive their rebate payment after their new system is fully installed and interconnected. Under the PBI program, customers with solar systems between 50 kilowatt and 1 megawatt may apply for rebates at a fixed monthly payment amount over a five-year period. The rebate is determined by the actual output of the system, as metered and reported to the utility.

COMMENTS

1. **Sponsor and purpose.** This bill is sponsored by the author and is intended to provide an incentive for homeowners and small businesses to purchase solar energy systems. According to the author's office, this bill is part of Assembly Member Blumenfield's Solar Stimulus Package consisting of seven bills that would promote the use of solar and renewable energy systems by schools, universities, nonprofit entities, public agencies and homeowners.
2. **The May 21, 2009 amendments** (1) limit the exemption to systems that produce alternating current rate peak electricity of at least one kilowatt and not more than 10 kilowatts, (2) make the operation of the provisions contingent on the adoption of greenhouse gas emission fees under the California Global Warming Solutions Act of 2006, and an appropriation by the Legislature of revenue from the fees sufficient to fully offset the revenue loss to the General Fund due to the exemption, and (3) extend the sunset date to July 1, 2020. **The May 13, 2009 amendments** (1) clarified that the proposed exemption applies to qualified renewable energy systems

This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the Board's formal position.

that are placed in service in a utility territory covered by the California Solar Initiative, and (2) incorporated Board staff suggested technical amendments.

3. **Specific rules apply to construction contracts.** Under the Sales and Use Tax Law, generally, contracts for improvements to real property, such as the installation of a solar energy system, constitute construction contracts and the contractor is responsible for payment of the tax on his or her purchase of materials, such as electrical wiring, piping, etc. furnished and installed in the performance of a that contract. Solar panels which are combined with other tangible personal property and installed as roofing shingles, skylights, wall panels or windows, and become an integral and inseparable part of the real property are considered materials. Other and more common types of solar panels, however, are considered fixtures when they are an accessory to a building or structure and do not lose their identity as an accessory when installed. In most applications, solar panels installed as part of a solar energy system are considered fixtures.

The contractor is regarded as a retailer of fixtures, such as solar panels, and the sales tax applies to the sale of the panels by the contractor to the customer. The tax applies to the sales price, which is the price stated in the contract. If the contract does not state the sales price, then the sales price is the cost price to the contractor, assuming the contractor purchases the fixtures in completed condition. Typically, a contractor who furnishes and installs a solar energy system bills the customer on a lump sum basis, without any separate charge for the materials, fixtures, or sales tax. In such cases, the contractor would receive the benefit of the proposed exemption on his or her purchase of the components of the system. It is not certain that a contractor billing in lump would pass on this tax savings to the customer since the tax is not reflected in the contract.

4. **Definition for qualified renewable energy systems needs clarifying.** A qualified renewable energy system would be a system deemed by the CPUC to be eligible solar electric equipment under the California Solar Initiative that produces alternating current rate peak electricity of at least one kilowatt and not more than 10 kilowatts. Administered by the CPUC, the Initiative provides solar incentives for photovoltaic and non-photovoltaic solar energy systems. SB 1 (Murray, Chapter 132, Stats. 2006) authorized the program in statute and provided definitions and eligibility criteria for solar energy systems, including criteria for solar incentives.

Public Resources Code Section 25781 defines the California Solar Initiative to mean the program providing ratepayer funded incentives for eligible solar energy systems adopted by the CPUC in Decision 06-01-024. Section 25781 also defines "solar energy system" to mean a system that meets or exceeds the eligibility criteria established by the California Energy Commission and CPUC pursuant to Section 25782, which includes the eligibility requirements for solar energy systems receiving ratepayer funded solar incentives. Since the term for a solar energy system is defined in the Public Resources Code, perhaps the definition in this bill should contain similar language. Clarification of this term will help the Board to administer the proposed exemption.

The CPUC has published the California Solar Initiative Program Handbook, which describes the requirements for receiving incentives for the purchase and installation of solar energy systems. However, the program handbook does not contain a comprehensive list of eligible solar electric systems. Since the CPUC administers

the program, perhaps the CPCU can provide Board staff with a listing of eligible solar electric systems.

Finally, solar photovoltaic are comprised of equipment and components such as inverters, net meters, mounting equipment, tracking equipment, pipes, pumps, and wiring. While Board staff notes that the California Solar Initiative website lists eligible photovoltaic panels and inverters, we don't see other equipment and components. Would the proposed exemption apply to related equipment and components?

Board staff is willing to work with the author's office to draft amendments to address these issues.

5. Which solar energy systems would be eligible for the proposed exemption?

The provisions of the bill appear to limit the proposed exemption to smaller solar energy systems with a system size ranging from one kilowatt to not more than ten (10) kilowatts. These systems are primarily residential with a minor amount of small commercial and/or government systems. According to the California Solar Initiative website, the average residential system is four (4) kilowatts (or 4,000 watts). Information on the website also states that residential and small commercial solar systems are generally less than 10 kilowatts.

In addition, these systems must be considered to be eligible solar electric systems by the CPUC under the California Solar Initiative, which covers only those systems which are placed into service within the three investor-owned utility territories of Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric. This means that only those purchases of solar energy systems installed within those three utility areas would qualify for the proposed exemption. According to the CPUC website, these three utilities represent approximately 75 to 80 percent of California's electric use. Board staff notes that the proposed exemption would not apply to purchases of solar energy systems installed within a publicly-owned utility service territory. For example, a purchase of solar energy system to be installed at a property in the City of Sacramento, which is located within the Sacramento Municipal Utility District service territory, would not qualify for the proposed the exemption.

6. Operation of the proposed exemption would be contingent on certain conditions.

The conditions are the adoption of a greenhouse gas emission fee under the California Global Warming Solutions Act of 2006, and the appropriation by the Legislature of revenue from the fees sufficient to fully offset the revenue loss to the General Fund due to the exemption. However, the bill does not contain provisions with regard to how this would be administered. Would the Board be required each year to provide the Legislature with an estimate of the revenue loss? Should the bill contain provisions requiring the Department of Finance to provide notice to Board staff that an appropriation has been made? Who would be responsible for ensuring that the revenue loss due to the exemption reconciled to the appropriation made by the Legislature? Since the CPUC administers the California Solar Initiative program, perhaps they should be the agency responsible for the administration of this offset mechanism.

7. **Other States.** Board staff surveyed several states which provide a sales and tax exemption for solar energy systems. These states were selected due to their similarities to California's economy and tax laws.
- Florida, during the 2007 Legislative Session, enacted a sales and use tax exemption for solar water heaters, solar space heaters, photovoltaic systems and solar pool equipment. The exemption also applies to equipment and requisite hardware that provide for collecting, transferring, converting, storing or using of energy for water heating, space heating and cooling, or other applications that would otherwise require the use of a conventional source of energy such as natural gas or electricity.
 - Minnesota, in 2005, enacted a sales and use tax exemption for solar energy products, which include photovoltaic panels, building-integrated solar electric products, and solar thermal systems such as solar hot water heaters. The exemption also applies to other components of a solar electric installation such as inverters, piping, wiring, racks, and batteries.
 - New York, during their 2005 Legislative Session, enacted a sales and use tax exemption for residential solar energy systems equipment, which is defined as an arrangement or combination of components installed in a residence that utilizes solar radiation to product energy designed to provide heating, cooling, hot water or electricity.
8. **Related Legislation.** AB 150 (Smyth) would provide a sales and use tax exemption for sales and purchases of energy efficient products, as defined, sold for home or personal use only, on the first Saturday immediately following Earth Day (which occurs on April 22), beginning in 2010.

COST ESTIMATE

The Board would incur costs related to notifying affected retailers and contractors, verifying claimed exemptions, preparing a special publication and exemption certificate, and answering inquires from the public and taxpayers. An estimate of these costs is pending.

REVENUE ESTIMATE

BACKGROUND, METHODOLOGY, AND ASSUMPTIONS

This bill would provide that during the month of April of each year from 2010 to 2020, inclusive, the gross receipts from the sale, storage, use, or other consumption, in this state, for qualified renewable energy systems that have been approved by the CPUC to be eligible solar electric equipment under the California Solar Initiative Incentive program. A qualified renewable energy system is defined as a system that produces at least one kilowatt and not more than ten (10) kilowatts capacity of alternating current rated peak electricity.

According to information we received from the CPUC, since 2007, \$911 million in qualified renewable energy systems (20,600) have been approved under the California Solar Initiative Incentive program. Since that time, over \$593 million renewable systems (14,000) have been completed. The average value of each qualified renewable system amounts to \$44,200 as shown:

This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the Board's formal position.

California Solar Initiative Qualified Renewable Energy Systems

Total value of qualified renewable energy systems	\$911,000,000
Total number of qualified renewable energy systems	20,600
Average value of each energy system	\$ 44,200
Non-taxable labor charges (50% of system cost)	\$ 22,100
Taxable gross receipts subject to tax holiday exemption	<u>\$22,100</u>

The actual number of renewable energy system not yet completed that may qualify for this proposed exemption during the tax holiday period cannot be determined. However, as an order of magnitude, if 500 taxpayers purchased these systems during the tax holiday period, the taxable gross receipts would amount to \$11.1 million (500 x \$22,100). The state and local sales and use tax revenue loss would amount to \$994,500.

REVENUE SUMMARY

The annual revenue loss from exempting qualified renewable energy systems during the period April 1, 2010 to April 30, 2010 amounts to \$994,500 in state and local sales and use taxes as follows:

	<u>Revenue Loss</u>
State (6.00%)	\$663,000
Fiscal Recovery Fund (0.25%)	27,600
Local (2.00%)	\$221,000
District (0.75%)	\$82,900
Total	<u><u>\$994,500</u></u>

Qualifying Remark

Operation of the proposed exemption would be contingent on two conditions: (1) the adoption of a greenhouse gas emission fee under the California Global Warming Solutions Act of 2006, and (2) the appropriation by the Legislature of revenue from the fees sufficient to fully offset the revenue loss to the General Fund due to the exemption. Thus, the exemption would only take effect if other funding from a greenhouse gas emission fee backfills the General Fund revenue loss attributable to the proposed exemption. Accordingly, should these conditions be met, the annual General Fund revenue loss of \$663,000 would be eliminated. However, the annual revenue loss attributable to the Fiscal Recovery Fund and the local funds would remain.

Analysis prepared by:	Debra A. Waltz	324-1890	06/12/09
Revenue prepared by:	Bill Benson	445-0840	
Contact:	Margaret S. Shedd	322-2376	
Is			1028-2dw.doc

This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the Board's formal position.