

# ANALYSIS OF ORIGINAL BILL

Franchise Tax Board

Author: Ruskin Analyst: Gail Hall Bill Number: AB 2849

Related Bills: See Legislative History Telephone: 845-6111 Introduced Date: February 24, 2006

Attorney: Patrick Kusiak Sponsor: \_\_\_\_\_

**SUBJECT:** Solar Or Wind Energy Systems Credit/Extends Repeal Date To January 1, 2011

## SUMMARY

This bill extends the repeal date of the Solar or Wind Energy Systems Credit.

## PURPOSE OF THE BILL

Author's staff has indicated that the purpose of this bill is to continue to encourage the use of alternative energy sources and move California toward greater energy self-sufficiency.

## EFFECTIVE/OPERATIVE DATE

As a tax levy, this bill would be effective January 1, 2006, and would be operative for taxable years beginning on or after January 1, 2006, and before January 1, 2011.

## POSITION

Pending.

## ANALYSIS

### FEDERAL/STATE LAW

**Federal law** currently provides a 30% tax credit to individuals and businesses for the purchase and installation of solar hot water systems and solar photovoltaic systems. Photovoltaic refers to the process by which sunlight is converted into electricity through the use of solar cells. The maximum tax credit for individuals is \$2,000 for solar hot water systems and \$2,000 for solar photovoltaic systems. Business entities do not have a cap on the total credit amount, provided it has sufficient tax liability. The tax credit for individuals may be carried forward to future years, but businesses only have two years in which to take the credit. A chart comparing the federal business tax credit to the individual tax credit is provided in Appendix A.

In addition, a tax credit is available to businesses for the production of electricity from certain renewable resources equal to 1.5 cents multiplied by the kilowatt-hours of electricity produced by the taxpayer from qualified energy resources at a qualified facility. Qualified energy resources include wind, closed-loop biomass, and poultry waste.

Board Position:

\_\_\_\_\_ S      \_\_\_\_\_ NA      \_\_\_\_\_ NP  
\_\_\_\_\_ SA      \_\_\_\_\_ O      \_\_\_\_\_ NAR  
\_\_\_\_\_ N      \_\_\_\_\_ OUA        X   PENDING

Department Director

Date

S. Stanislaus

5/1/06

**Current state law** has no provisions that allow a tax credit for solar or wind energy systems<sup>1</sup>.

## **THIS BILL**

This bill would extend the operative dates for the Solar or Wind Energy System Credits to taxable years beginning before January 1, 2011, and revise the respective repeal dates to December 1, 2011. This bill would apply to corporation taxpayers (CTL) and personal income taxpayers (PIT).

## **IMPLEMENTATION CONSIDERATIONS**

This bill would not significantly impact the department's programs and operations.

## **LEGISLATIVE HISTORY**

SB 1017 (Campbell, 2005/2006) would have extended the Solar Or Wind Energy System Credit to taxable years beginning on or before January 1, 2017. SB 1017 was held in the Senate Revenue and Taxation Committee.

SB 1660 (Scott, Stats. 2002, Ch. 487) expanded the Solar Energy Credit to include wind energy systems and require certification of solar and wind energy systems by the State energy Resources Conservation and Development Commission.

SB 17XX (Brulte, Stats. 2001, Ch. 12) allowed a 15% Solar Energy Credit for the purchase and installation of a solar energy system on property in this state.

## **PROGRAM BACKGROUND**

For taxable years beginning on or after January 1, 2004, and before December 1, 2006, state law provided a 7.5% tax credit, after deducting the value of any financial incentives, for taxpayers who purchased a solar or wind energy system for installation and electrical generation in California. The credit was available for both PIT and CTL.

For taxable years 1990 through 1993, state law allowed a tax credit of 10% of the cost of a solar energy system installed on premises, used for commercial purposes that were located in California, and owned or leased by the taxpayer. The credit could not be claimed for any solar energy system with a generating capacity in excess of 30 megawatts for any taxable year unless the federal government provided at least a 10% federal credit for that solar energy system.

For 1987 and 1988, state law allowed a credit of 12% of the cost of commercial solar energy systems installed on commercial premises, cooperatives, apartment buildings, or other similar multiple dwellings.

From 1976 to 1988, state law allowed the solar energy tax credit for personal and commercial premises. The credit was refundable for modest income individual taxpayers until 1982 and was

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<sup>1</sup> Prior law for the Solar and Wind Energy Credit applied to taxable years beginning on or after January 1, 2004, and before January 1, 2006 (Revenue & Taxation Code Sections 17053.84 and 23684).

significantly modified several times. The credit was allowed as a percentage of the purchase and installation costs of solar energy systems on premises owned by the taxpayer. Except for taxpayers allowed a refund, any unused credit could be carried over indefinitely.

**OTHER STATES' INFORMATION**

The states surveyed include *Florida, Illinois, Massachusetts, Michigan, Minnesota, and New York*. These states were selected due to their similarities to California's economy, business entity types, and tax laws. Research found that *Massachusetts and New York* have energy related credits.

In *Massachusetts*, an owner or tenant of *Massachusetts* residential property is allowed a credit for the lesser of 15% of the net cost of the renewable energy source property or \$1,000. Renewable energy source property includes solar energy systems and wind energy systems for nonbusiness purposes.

In *New York*, an individual taxpayer is allowed a solar energy system equipment tax credit. The credit is equal to 25% of the qualified solar energy system equipment defined as a combination of components utilizing solar energy that produces energy designed to provide heating, cooling, hot water, or electricity for residential property. The credit shall not exceed \$3,750 for systems placed in service on or after January 1, 2006, but before September 1, 2006, and \$5,000 for systems placed in service after September 1, 2006.

**FISCAL IMPACT**

This bill would not significantly impact the department's costs.

**ECONOMIC IMPACT**

Revenue Estimate

Based on data and assumptions discussed below, the PIT and Corporation Tax revenue loss from this bill would be as follows:

Estimated Revenue Impact of AB 2849 Effective On Or After January 1, 2006 Enactment Assumed After June 30, 2006 (\$ Millions)			
	2005-06	2006-07	2007-08
Solar Energy Credit	-\$7	-\$7	-\$7

This bill does not consider the possible changes in employment, personal income, or gross state product that could result from this measure.

### Revenue Discussion

The estimated revenue impact is based on the 2004<sup>2</sup> departmental data for the Solar or Wind Energy Systems Credit usage that was approximately \$350,000 for corporations and \$6 million for PIT. The Solar or Wind Energy Systems Credit would be calculated based on the purchase and installation costs of the solar equipment less any federal or local incentives taken by the taxpayer. It is estimated that even with the new federal solar tax incentives and the new solar cash rebate program offered by the California Energy Commission, the number of solar installations in California will increase, but after deducting the federal and local incentives, the impact on the revenue estimate would be insignificant for the periods shown above.

### **LEGISLATIVE STAFF CONTACT**

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<sup>2</sup> Most recent departmental data.

APPENDIX A  
Federal Solar Credit – Business vs. Individuals

Federal	Old Incentive	New Incentive	Credit Window	Credit Cap	Eligible Systems
Business Credit <sup>3</sup>	10%	30%	1/1/06 – 12/31/07 At 30%; reverts to permanent 10% thereafter	No Cap	Equipment used To generate electricity using solar energy, solar hybrid lighting, solar domestic water heating (excluding swimming pools)
Individuals Credit <sup>4</sup>	None	30%	1/1/06 – 12/31/07	\$2,000 per system/for each solar technology	Equipment used To generate electricity using solar energy, solar domestic water heating (excluding swimming pools)

<sup>3</sup> Internal Revenue Code (IRC) Section 48.

<sup>4</sup> IRC Section 24D.

APPENDIX B  
California Income Tax Expenditures  
(Update April 2005)

Description	Actual Revenue Loss Calendar Year 2002	Estimated Revenue Loss Fiscal Year 2004/2005	Estimated Revenue Loss Fiscal Year 2005/2006	Estimated Revenue Loss Fiscal Year 2006/2007
Solar Energy Systems Credit (\$ Millions)	4	7	7	8

In tax year 2002, the amount of credits applied was \$4.2 million, and the credits were applied on 2,369 Personal Income Tax returns and 15 Corporation Tax returns. The distributional analysis is illustrated below:

Solar Systems Credit (Personal Income Tax)

Adjusted Gross Income Class	Number of Returns Reporting Credit	Amount of Credit Claimed (Thousands of Dollars)
Less Than \$10,000	*	*
\$10,000 to \$19,999	28	\$ 2.4
\$20,000 to \$49,999	335	139.2
\$50,000 to \$99,999	904	960.0
\$100,000 to \$199,999	742	1,433.9
\$200,000 to \$499,999	263	782.1
\$500,000 to \$999,999	54	270.5
More Than \$999,999	43	364.0
Total	2,369	\$3,952.0

\* Fewer than three taxpayers have AGI less than \$10,000. To preserve confidentiality, the data for taxpayers with AGI less than \$10,000 has been included with the data for AGI between \$10,000 and \$20,000.

Source: 2002 PIT Return Merge File  
Detail may not add to total due to rounding

Discussion

The purpose of this credit is to encourage investment in solar- and wind-based energy systems. By replacing fossil fuel systems, solar- and wind-based systems improve air quality and reduce dependence on oil imports. Solar energy systems may be particularly useful for replacing "peak load" generators (that often are among the worst air polluters), since solar systems generate the most energy on warm sunny days when electricity demand is generally the highest. An additional benefit to alternative energy generating equipment is that it is often located at the place that the electricity will be consumed, reducing the need for transmission and distribution infrastructure. This program can be considered successful if it leads to an increase in installations of solar and wind generating capacity. Additional benefits will accrue if the new installations spur innovations or generate economies of scale that reduce the cost of alternative energy sources relative to fossil fuel sources. Credits claimed for alternative energy projects that would have been undertaken even in the absence of the credit are a windfall to the taxpayers receiving them. It is not known how many projects receiving this credit would not have been undertaken in the absence of this credit.