



STATE BOARD OF EQUALIZATION STAFF LEGISLATIVE BILL ANALYSIS

Date Amended:	02/16/11	Bill No:	Assembly Bill 204
Tax Program:	Sales and Use Tax	Author:	Halderman
Sponsor:	Author	Code Sections:	RTC 6378.2
Related Bills:	AB 1376 (Nestande)	Effective Date:	Upon enactment

BILL SUMMARY

This bill would provide a partial (7.25%) sales and use tax exemption for purchases of equipment by a biomass energy facility, as defined, for use in its biomass energy production in this state.

ANALYSIS

CURRENT LAW

Under existing law, as provided by SB 71 (Ch. 10, Stats. 2010, effective 3/24/10), certain “projects” may be approved for a state and local sales and use tax exclusion by the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA). The bill amended Public Resources Code (PRC) Section 26003 and added PRC Section 26011.8 to include within the definition of “project” equipment used to manufacture products that produce energy from alternative sources such as solar, wind, and *biomass*. SB 71 allows CAEATFA to authorize a sales and use tax exclusion for purchases of tangible personal property utilized for the design, manufacture, production, or assembly of advanced transportation technologies or alternative source products, components, or systems, which includes renewable energy equipment, combined heat and power equipment, and alternative transportation equipment in California.

Current law defines renewable energy to include "solar, biomass, wind, geothermal, hydroelectricity under 30 megawatts, or any other source of energy, the efficient use of which will reduce the use of fossil and nuclear fuels."

Participating parties may apply to the CAEATFA to receive the sales and use tax exclusion. In approving qualifying projects, the law requires that the CAEATFA consider:

- The extent to which the project develops manufacturing facilities, or purchases equipment for manufacturing facilities, located in California.
- The extent to which the anticipated benefit to the state from the project equals or exceeds the projected benefit to the participating party from the sales and use tax exclusion.
- The extent to which the project will create new, permanent jobs in California.
- To the extent feasible, the extent to which the project, or the product produced by the project, results in a reduction of greenhouse gases, a reduction in air or water pollution, an increase in energy efficiency, or a reduction in energy consumption, beyond what is required by any federal or state law or regulation.

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- The extent of unemployment in the area in which the project is proposed to be located.
- Any other factors the authority deems appropriate in accordance with this section.

When the total value of exclusions awarded reaches \$100 million annually, the CAEATFA must provide a 20-day notice to the Legislature prior to approving additional projects.

Current law directs CAEATFA to adopt emergency regulations for purposes of implementing PRC Section 26003 and 26011.8. Pursuant to this legislative mandate, CAEATFA approved emergency regulations at the September 22, 2010 Board meeting. The OAL approved the emergency regulations on October 4, 2010, putting them into affect for 180 days until April 15, 2011. CAEATFA is currently completing the regular rulemaking process.

Regulation 10033, *Eligibility Requirements and Application Evaluation*, interprets and makes specific the criteria for evaluating and approving a project. In general, a project must receive both a total score greater than or equal to the threshold value of 1,000 (based on the project criteria as established in SB 71) and an environmental benefits score of greater than or equal to 100 to be recommended for a sales and use tax exclusion. In addition, in order for a facility to be eligible for a sales and use tax exclusion, the tangible personal property must be “used substantially” for the design, manufacture, production or assembly of an alternative source product, component or system. The regulation defines “used substantially” as used more than 75 percent for the design, manufacture, production or assembly of an alternative source product, component, or system during the longer of (1) one year, or (2) one-half of the weighted average of the estimated useful lifespan of the qualified property, as specified.

According to CAEATFA, because biomass facilities manufacture an alternative source component (biomass), these facilities may be eligible for the sales and use tax exclusion under SB 71. The equipment must be used more than 75 percent for the manufacture of an alternative source component (biomass material). In addition, the project must meet all the other criteria in SB 71, such as creating new, permanent jobs in California. According to CAEATFA, there have been several projects approved for a SB 71 sales and use tax exclusion for *new* landfill gas power facilities. A listing of approved projects can be found on CAEATFA website at www.treasurer.ca.gov/caeatfa/sb71/applicants/received.pdf. CAEATFA currently is evaluating a project to convert an existing coal plant into a renewable energy generating facility, which would use biomass waste wood material for fuel.

According to the California Biomass Energy Alliance who supports this bill, the existing biomass facilities do not meet the criteria under SB 71 because they do not create any new permanent jobs. In addition, there are currently no new biomass energy facilities being built in California. However, if a new biomass facility were to be built, that facility’s purchases of certain equipment would be eligible for the current sales and use tax exclusion, as long as the facility’s project met the other criteria in SB 71.

Other business entities engaged in manufacturing and renewable energy generation activities that either do not qualify for, or do not seek financial assistance through, CAEATFA and who make purchases of equipment and supplies for use in the conduct of their manufacturing and production activities are required to pay tax on their

purchases to the same extent as any other person either engaged in business in California.

The statewide sales and use tax rate (8.25%) imposed on taxable sales and purchases of tangible personal property is made up of the following components (additional transactions and use taxes (also known as district taxes) are levied by various local jurisdictions and are not reflected in this chart):

Rate	Jurisdiction	Purpose/Authority
5.00%	State (General Fund)	State general purposes (RTC Sections 6051, 6051.3, 6201, and 6201.3)
1.00%	State (General Fund)	State general purposes (RTC Sections 6051.7 and 6201.7, operative 4/1/09 through 6/30/11)
0.25%	State (Fiscal Recovery Fund)	Repayment of the Economic Recovery Bonds (RTC Sections 6051.5 and 6201.5, operative 7/1/04)
0.50%	State (Local Revenue Fund)	Local governments to fund health and welfare programs (RTC Sections 6051.2 and 6201.2)
0.50%	State (Local Public Safety Fund)	Local governments to fund public safety services (Section 35, Article XIII, State Constitution)
1.00%	Local (City/County) 0.75% City and County 0.25% County	City and county general operations (RTC Section 7203.1, operative 7/1/04); Dedicated to county transportation purposes
8.25%	Total Statewide Rate	

PROPOSED LAW

This bill would add RTC Section 6378.2 to the Sales and Use Tax Law to provide a partial exemption (General Fund, Fiscal Recovery Fund, Local Revenue Fund, and Local Public Safety Fund) from the sales and use tax rate of 7.25% (6.25% on and after July 1, 2011) for equipment purchased by a biomass energy facility, as defined, for use in its biomass energy production in this state.

The bill would define a “biomass energy facility” as a facility that engages in the controlled combustion, when separated from other solid waste, of any of the following materials for the purpose of producing electricity or heat::

- 1) Agricultural crop residues.
- 2) Bark, lawn, yard, and garden clippings.
- 3) Leaves, silvicultural residue, and tree and brush pruning.
- 4) Wood, wood chips, and wood waste.
- 5) Nonrecyclable pulp or nonrecyclable paper materials.

The bill specifies that the proposed exemption shall not apply to any tax levied by a county, city, or district pursuant to the Bradley-Burns Uniform Local Sales and Use Tax Law or the Transactions and Use Tax Law (also known as district taxes).

The bill would take effect immediately as a tax levy.

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IN GENERAL

Biomass electricity is drawn from combusting or decomposing organic matter. The California Energy Commission (CEC) describes four types of biomass electricity production in California—solid combustion biomass, landfill gas, digester gas, and municipal solid waste (www.energy.ca.gov/biomass/index.html).

Solid combustion biomass produces electricity from combusting organic matter (forestry and agricultural). Landfill gas is generated by the natural degradation of municipal and household solid waste and refuse by anaerobic (without oxygen) micro-organisms. The gas is collected by a collection system, which typically consists of a series of wells drilled into the landfill and connected by a plastic piping system. Digester gas involves a biological process that produces a gas principally composed of methane and carbon dioxide otherwise known as biogas. These gases are produced from organic wastes such as livestock manure and food processing waste. Municipal solid waste uses a waste-to-energy technology (not biomass or anaerobic digestion). The most common MSW waste-to-energy technology is mass burn, which involves the combustion of unprocessed or minimally processed refuse.

As previously stated, the CEC distinguishes biomass solid combustion from other biomass electricity production, such as landfill gas, digester gas, and municipal solid waste. Biomass is comprised of organic residues from plants and animals, which are obtained primarily from harvesting and processing of agricultural and forestry crops. Biomass are wastes and by-products that could be utilized as fuels for producing energy, instead of becoming landfill waste. Examples of some of the biomass residues that are utilized in solid combustion power plants are: forest slash (e.g., forest thinning), agricultural wastes (e.g., orchard and vineyard pruning and replacement and rice crop wastes), urban wood waste (e.g., wood product manufacturing wastes, construction project wood wastes, broken pallets and trusses, and landscape and right-of-way trimmings), mill waste (e.g., bark and twigs).

An example of a biomass facility is the Wheelabrator Shasta wood-fired power plant in Anderson, California. This 49.9-megawatt plant processes mill waste and forest residues from Shasta County and surrounding areas. The plant became operational in December 1987. Unusable wood wastes from surrounding public and private lands are selectively removed and processed in the plant. The plant produces more than 400 million kWh of electricity per year for sale to Pacific Gas and Electric Company under a long-term contract.

According to the CEC, California's biomass power generation was at its highest (more than 800 MW of installed capacity) from about 1990 to 1993. The expiration of price support to the biomass industry from the government is the main reason for the reduction in the biomass power generation in California. Currently, there are about 30 solid-combustion biomass facilities in operation with a total capacity of 640 MW.

COMMENTS

- 1. Sponsor and Purpose.** The author is sponsoring this bill in an effort to encourage private sector green job growth in California's renewable energy sector. According to the author, "Biomass energy is a smart investment because it creates new jobs,

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sends less waste to landfills, and reduces the likelihood of fueling forest fires, all while providing a renewable source of energy for our growing population.”

- 2. Definition of biomass energy facility needs clarifying.** According to the author’s office, the definition of a “biomass energy facility” in this bill was taken from PRC Section 40106, which defines “biomass conversion.” Section 40106 also specifies materials, which are not included in the definition of “biomass conversion,” such as materials that contain sewage sludge, industrial sludge, medical waste, or hazardous waste. Perhaps the definition in this bill should also specify materials that are not included in “biomass.”

In addition, there is no definition of a biomass facility in either the Public Resources Code or the Public Utilities Code. However, a definition for “biomass” is included in the CEC’s guidebook, dated January 2011, *Renewable Energy Program Overall Program Guidebook*, Third Edition. Perhaps the bill should incorporate a definition adopted by the CEC pursuant to either a CEC manual or regulation.

It is our understanding that the proposed exemption shall not apply to landfill gas power plants, biogas power plants (digester gas), or municipal solid waste power plants. The CEC’s website lists these entities as a type of biomass electricity production and provides a complete description of each type, including the number of facilities operating in California. However, in order to make it clear that the proposed exemption does not apply to equipment purchases made by these entities, it is recommended that the bill be amended to clarify this. BOE staff is willing to work with the author’s office to develop a definition that applies to the biomass energy facilities in this bill.

- 3. What items would qualify for the proposed exemption?** As currently drafted, the bill would provide an exemption for any equipment purchased by a biomass energy facility for use in its biomass energy production in this state. Would equipment include trucks used to transport agricultural and forestry residue to a biomass power plant? Would equipment include computers used primarily in administration or marketing? The language should specify the proposed exemption applies to equipment used primarily in a qualifying activity or operation. It is our understanding that the exemption is intended to apply to purchases of equipment and machinery, including their parts, used in the processing of biomass materials at the plant, and equipment used in the actual generation of electricity or heat from the biomass fuel source. In order to accomplish the author’s intent, we recommend clarifying that the equipment, machinery, and parts must be used *primarily* in these activities. Equipment and machinery include cooling towers, cooling water pumps, feed pumps, boilers, condensers, turbine generators, distribution control systems, stacks, and more. BOE staff is willing to work with the author’s office in developing language that reflects the author’s intent.

In addition, the language should specify that the qualifying equipment and machinery be primarily used for *off-road use*.

- 4. Partial exemptions complicate administration of the tax.** Currently, most sales and use tax exemptions apply to the total applicable sales and use tax. However, there are currently five partial exemptions in California law, where only the state tax portion (6.25%: General Fund (6%) and Fiscal Recovery Fund (0.25%)) of the state and local sales and use tax rate is exempted. These five partial tax exemptions include: (1) farm equipment and machinery, (2) diesel fuel used for farming and

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food processing, (3) teleproduction and postproduction equipment, (4) timber harvesting equipment and machinery, and (5) racehorse breeding stock. These partial tax exemptions are difficult for both retailers and the BOE. They complicate return preparation and return processing. And errors on returns attributable to these partial exemptions occur frequently, which result in additional return processing workload for the BOE.

This measure proposes a 7.25% exemption (General Fund (6%), Fiscal Recovery Fund (0.25%), Local Revenue Fund (0.50%), and Local Public Safety Fund (0.50%)), which would create a new exemption category (since current law does not have any partial exemptions other than a 6.25% exemption, which effective July 1, 2011 is reduced to 5.25%). This would require a revision to the sales and use tax return and result in a new, separate computation on the return. Some retailers would have to segregate in their records sales subject to the 7.25% exemption (proposed by this bill), 6.25% exemption (current partial exemption), sales with a full exemption (such as a sale for resale or a sale in interstate commerce), and sales that are fully taxable. This bill would add a new level of complexity, which would create a corresponding increase in errors in reporting the tax to the BOE. This increase in errors would further complicate the BOE's administration of the sales and use tax law and complicate reporting obligations of retailers.

5. **A delayed operative date is recommended.** The provisions of the bill would become effective immediately. However, since retailers generally rely on receiving an "official notice" of tax law changes from the BOE before implementing a law change, it is recommended that a delayed operative date be incorporated into the bill in order for the BOE to give proper advance notice. The following language is suggested to be added to proposed Section 2 of the bill:

"However, the provisions of this act shall become operative on the first day of the first calendar quarter commencing more than 90 days after the effective date of this act."

6. **Related legislation.** AB 1376 (Nestande) would provide a full sales and use tax exemption on tangible personal property purchased for use by a person for the construction of a facility that will use solar, biomass, wind, and geothermal energy to generate electricity of 10 megawatts or greater.

COST ESTIMATE

Because of the new partial exemption, the BOE would incur administrative costs attributable to programming, return revisions, and return processing. In addition, the BOE would incur costs to notify affected retailers, prepare a special publication and exemption certificate, audit claimed exemptions, and answer inquiries from the public and taxpayers. An estimate of these costs is pending.

REVENUE ESTIMATE

BACKGROUND, METHODOLOGY, AND ASSUMPTIONS

According to the *California Energy Commission*, there were thirty-three (33) biomass facilities operating in 2010, but four have temporarily idled for various reasons. Biomass facilities range in the size from 5 to 49 Megawatts (MW). Current biomass facilities in California have a combined generating capacity of about 640 MW.

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In conversations with the *California Biomass Energy Alliance*, an association representing biomass plants in California, the association indicated that an estimated \$60,000 to \$70,000 per MW reflects expenditures on parts and equipment related to biomass energy production. Based on the generating capacity of 640 MW and using an average expenditure of \$65,000 per MW, it is estimated that total annual equipment expenditures for the biomass industry under this bill would be \$41.6 million ($\$65,000 \times 640 \text{ MW} = \41.6 million).

REVENUE SUMMARY

This bill provides a partial sales and use tax exemption; General Fund (5%), Fiscal Recovery Fund (0.25%), Local Revenue Fund (0.50%), Public Safety Fund (0.50%). The revenue impact from exempting equipment purchased by Biomass facilities from the sales and use tax amounts to \$1.3 million in the first six months of 2012 (assuming proposal operative date is January 1, 2012), and \$2.6 million in FY 2012-13. The following depicts the estimated revenue loss:

Biomass Sales & Use Tax Loss

	1st 6 Months 2012	FY 2012-13
State 5%	\$1,040,000	\$2,080,000
Fiscal Recovery 0.25%	\$52,000	\$104,000
Local Revenue Fund 0.50%	\$104,000	\$208,000
Public Safety Fund 0.50%	\$104,000	\$208,000
Total	<u>\$1,300,000</u>	<u>\$2,600,000</u>

Qualifying Remarks. The *California Energy Commission* discussed that there are currently about eighteen idle facilities in California and there is a high likelihood that three facilities (30MW) will restart in the near future. The Commission also hints (on a low likelihood scale) that if the lumber industry rebounds and the economics of running a biomass facility improve significantly in the next two years, an estimated six additional facilities (80MW) may restart within that time period. We assume that any biomass facility that restarts in the short or long term will sustain equipment expenditures and will seek sales and use tax exemption under this statute.

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