
**Technology, Energy & Communications
Committee**

HB 1393

Brief Description: Concerning incentives for stirling converters.

Sponsors: Representatives Jacks, Haler, Crouse, Nealey, Eddy, Hunt, Short, Rolfes, McCoy and Frockt.

Brief Summary of Bill

- Creates a preferential business and occupation (B&O) tax rate for businesses that manufacture solar energy systems using stirling converters.
- Expands the Renewable Energy Cost-recovery Incentive Program to include solar stirling converters.

Hearing Date: 1/25/11

Staff: Scott Richards (786-7156).

Background:

Solar energy systems are devices or elements that use direct sunlight as an energy source in generating electricity. There are two major types of solar energy technologies: photovoltaic systems and concentrated solar power systems. Photovoltaic systems use photovoltaic cells made of semiconductor materials to convert sunlight into electricity. Concentrated solar power technologies typically use reflective devices such as troughs or mirrors to concentrate the sun's energy. This concentrated energy is then used to drive an engine or generator to produce electricity.

Business and Occupation Tax for Solar Energy Systems.

Washington's major business tax is the business and occupation (B&O) tax. The B&O tax is imposed on the gross receipts of business activities conducted within the state without any deduction for the costs of doing business. Revenues are deposited in the State General Fund. A

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business may have more than one B&O tax rate, depending on the type of activities conducted. There are a number of different rates. The main rates are: 0.471 percent for retailing; 0.484 percent for manufacturing, wholesaling, and extracting; and 1.8 percent for professional and personal services, and activities not classified elsewhere.

Preferential manufacturing B&O tax rates have been provided by the Legislature in recent years for aerospace, semiconductor microchips and materials, biodiesel fuel, aluminum smelting, solar energy systems, and timber and wood products.

In 2005 B&O tax rate reductions were provided for certain types of solar energy manufacturing. A B&O tax rate of 0.2904 percent is provided to businesses that manufacture or sell at wholesale: (1) solar energy systems using photovoltaic modules; or (2) solar grade silicon to be used in the components of a solar energy system. Taxes paid in manufacturing these systems are granted as a B&O tax credit.

In 2009 additional B&O tax rate reductions were provided. Beginning October 1, 2009, a preferential B&O tax rate of 0.275 percent is provided to businesses that manufacture or sell at wholesale either: (1) solar energy systems using photovoltaic modules; or (2) solar grade silicon, silicon solar wafers, silicon solar cells, thin film solar devices, or compound semiconductor solar wafers to be used exclusively in the components of solar energy systems. This lower B&O tax rate expires on June 30, 2014.

Cost-Recovery Incentive Payment Program for Renewable Energy Systems.

In 2005 the Legislature created a Renewable Energy Cost-recovery Incentive Program (Cost-recovery Incentive Program) to promote renewable energy systems located in Washington that produce electricity from solar, wind, or anaerobic digesters. An individual, business, or local government purchasing an eligible system may apply for an incentive payment from the electric utility serving the applicant. The incentive provides at least 15 cents for each kilowatt-hour of energy produced, with extra incentives for solar generating systems or wind generating systems that use certain components manufactured in Washington. Payments are capped at \$5,000 annually per applicant.

A utility providing incentive payments is allowed a credit against its public utility tax (PUT) for incentives paid, limited to \$100,000 or 0.5 percent of its taxable power sales, whichever is greater. If the amount of requests for incentive payments exceeds the amount of funds available for PUT credit to the utility, the incentive payments to applicants must be reduced proportionally.

The Cost-recovery Incentive Program expires June 30, 2020.

Community Solar Projects.

In 2009 and in 2010 the Legislature expanded the Cost-recovery Incentive Program to include community solar projects. Community solar projects are defined as either: (1) a solar energy system owned by local individuals, households, or non-utility businesses that is placed on the property owned by their cooperating local government entity; (2) a utility-owned solar energy system that is voluntarily funded by the utility's ratepayers where, in exchange for their financial support, the utility gives contributors a payment or credit on their utility bill for the value of the electricity produced by the project; or (3) a company-owned solar energy system that is a limited liability company, a cooperative, or a mutual corporation or association.

Community solar projects are eligible to receive incentives of 30 cents for each kilowatt-hour of energy produced, unless the amount of requests for incentive payments exceeds the amount authorized for credit to utility, in which case the incentive payments to applicants must be reduced proportionally.

Payments to a community solar project are capped at \$5,000 annually per applicant.

Incentive payments to participants in a utility-owned community solar project may only account for up to 25 percent of the total allowable credit. Incentive payments to participants in a company-owned community solar project may only account for up to five percent of the total allowable credit.

Only community solar projects capable of generating up to 75 kilowatts of electricity may receive cost-recovery incentive payments.

Summary of Bill:

Business and Occupation Tax for Solar Energy Systems.

Businesses that manufacture stirling converters are eligible to receive a business and occupation (B&O) tax rate of 0.275 percent.

Cost-Recovery Incentive Payment Program for Renewable Energy Systems.

Individuals, businesses, local governments, or community solar project participants that generate electricity from a stirling converter manufactured in Washington are eligible to receive an incentive payment for each kilowatt-hour produced. The incentive payment rate may be multiplied by a factor of 2.4.

A "stirling converter" is defined as a device that produces electricity by converting heat from a solar source using a stirling engine.

Appropriation: None.

Fiscal Note: Requested 1/21/2011.

Effective Date: The bill takes effect 90 days after adjournment of the session in which the bill is passed.