

# DEPARTMENT OF TAXATION

## 2012 Fiscal Impact Statement

1. **Patron** Mark D. Sickles

3. **Committee** House Finance

4. **Title** Income Tax: Solar Energy Equipment Tax  
Credit

2. **Bill Number** HB 883

**House of Origin:**

  X   **Introduced**

       **Substitute**

       **Engrossed**

**Second House:**

       **In Committee**

       **Substitute**

       **Enrolled**

### 5. **Summary/Purpose:**

This bill would allow an individual and corporate income tax credit for investments in solar energy equipment. The credit would be equal to 10 percent of all expenditures paid during the year for purchasing and installing equipment that (i) generates electricity from solar energy or (ii) uses solar energy to heat or cool a structure or provide hot water, up to \$1,000. In determining the expenditures, the labor of the taxpayer would not be included. The amount of the credit would not be allowed to exceed the tax liability of the taxpayer. Any unused credit could be carried over for five taxable years or until the total amount of the tax credit has been taken, whichever is sooner.

The tax credit would be allowed to be claimed in the taxable year that the purchase and installation of the equipment is completed. Under this bill, only one credit for each solar energy equipment system, and that a taxpayer would not be allowed to claim the tax credit for the purchase and installation of more than one equipment system in a taxable year.

This bill would be effective for taxable years beginning on or after January 1, 2012, but before January 1, 2016.

6. **Budget amendment necessary:** Yes.

Page 1, Revenue Estimates

7. **Fiscal Impact Estimates are:** Preliminary. (See Line 8.)

### 8. **Fiscal implications:**

#### Administrative Costs

The Department has not assigned any administrative costs to this bill because the changes required by a single bill such as this can be implemented as part of the annual changes to our systems and forms. As stand-alone legislation, the Department considers implementation of this bill as "routine," and does not require additional funding.

The Department will provide specific administrative costs on any legislation that is not “routine.” Additionally, the Department will review all state tax legislation likely to be enacted prior to the passage by each house. If the aggregate number of routine bills likely to pass either house is unusually large, it is possible that additional resources will be required. If so, the Department will identify the costs at that time.

Department of Mines, Minerals and Energy Administrative Costs

The Department of Mines, Minerals and Energy believes that it would incur administrative costs to certify the installed equipment. However, the costs are unknown because DMME does not have an estimate of the number of potential applicants.

Revenue Impact

This bill would have an unknown General Fund revenue loss. Based on DMME data related to solar thermal (water) and photovoltaic (electric) systems acquired through their rebate program, the revenue impact for 2011 would have been an estimated \$150,000, which would have included \$700,000 for solar thermal equipment and \$800,000 for photovoltaic equipment. Since 2000 when net metering went into effect, over 900 photovoltaic (PV) systems totaling over 5MW have been installed. Of these, over half were installed in the past two years as a result of the DMME solar rebate program funded through the Recovery Act (ARRA). There is limited data available for solar thermal system installation, but since 2010 there have been 300 documented installations that received rebate funds. Even though the rebate for solar thermal is more generous in offsetting system costs, more people still choose to install the more expensive PV system. It is highly likely that after April 2012 when the ARRA program ends, solar installations will revert back to their pre-ARRA rate of growth.

**9. Specific agency or political subdivisions affected:**

Department of Taxation  
Department of Mines, Minerals and Energy

**10. Technical amendment necessary: No.**

**11. Other comments:**

Federal Energy Investment Tax Credit

Under federal law, businesses may claim a tax credit equal to 30 percent of the costs of qualified fuel cell property; equipment which uses solar energy to generate electricity, heat or cool a structure, or provide solar process heat; equipment which uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight; and qualified small wind energy property.

Businesses may claim a credit equal to 10 percent of the costs of any other energy property. Other types of energy property include equipment used to produce, distribute, or use energy derived from a geothermal deposit; qualified microturbine property; combined heat and power system property; and equipment which uses the ground or

ground water as a thermal energy source to heat a structure or as a thermal energy sink to cool a structure.

To qualify for the credit, the construction, reconstruction, or erection of the property must be completed by the taxpayer or the original use of the property must commence with the taxpayer. Additionally, the property must be depreciable or amortizable and the property must meet the performance and quality standards set forth in the Treasury Regulations.

No credit is allowed with respect to property for the taxable year in which a grant is made under § 1603 of the American Recovery and Reinvestment Tax Act of 2009 or any subsequent taxable year. A recapture provision applies if a credit is claimed for any taxable year before which a grant is made.

For purposes of the credit, “qualified fuel cell property” is defined as a fuel cell power plant which has a nameplate capacity of at least 0.5 kilowatt of electricity using an electrochemical process and has an electricity-only generation efficiency greater than 30 percent.

“Qualified microturbine property” means a stationary microturbine power plant which has a nameplate capacity of less than 2,000 kilowatts and an electricity-only generation efficiency of not less than 26 percent at International Standard Organization conditions.

“Combined heat and power system property” is defined as property which uses the same energy source for the simultaneous or sequential generation of electrical power, mechanical shaft power, or both, in combination with the generation of steam or other forms of useful thermal energy; which produces at least 20 percent of its useful energy in the form of thermal energy which is not used to produce electrical or mechanical power and at least 20 percent of its total useful energy in the form of electrical or mechanical power; and the energy efficiency percentage of which exceeds 60 percent.

“Qualified small wind energy property” is defined as property which uses a wind turbine which has a nameplate capacity of not more than 200 kilowatts to generate energy.

#### Federal Residential Energy Efficient Property Tax Credit

Under federal law, individual taxpayers may claim a nonrefundable credit equal to the sum of 30 percent of qualified solar electric property, solar water heating property, fuel cell property, small wind energy property, and geothermal heat pump property expenditures made during the taxable year. The credit cannot exceed the sum of the taxpayer’s regular tax liability less any nonrefundable personal credits, foreign tax credits, Puerto Rico and possession tax credits for the taxable year. Any unused credit may be carried over to the following taxable year and added to the residential energy efficient property credit for that year.

For purposes of the residential energy efficient property tax credit, a “qualified solar water heating property expenditure” is defined as an expenditure for property to heat water for use in a dwelling unit located in the United States and used as a residence by the taxpayer if at least half of the energy used by the property for such purpose is derived from the sun. To qualify for the credit, solar water heating property must be certified for

performance by the Solar Rating Certification Corporation or a comparable entity endorsed by the government of the state in which such property is installed.

“Qualified solar electric property expenditure” is defined as an expenditure for property which uses solar energy to generate electricity for use in a dwelling unit located in the United States and used as a residence by the taxpayer.

“Qualified fuel cell property expenditure” is defined as an expenditure for qualified fuel cell property, as defined in IRC § 48(c)(1), installed on or in connection with a dwelling unit located in the United States and used as a principal residence by the taxpayer. The credit for fuel cell property cannot exceed \$500 per half-kilowatt of capacity of the qualified fuel cell property to which the expenditure relates.

“Qualified small wind energy property expenditure” is defined as an expenditure for property which uses a wind turbine to generate electricity for use in connection with a dwelling unit located in the United States and used as a residence by the taxpayer.

“Qualified geothermal heat pump property expenditure” is defined as an expenditure for any equipment which (i) uses the ground or ground water as a thermal energy source to heat a dwelling unit located in the United States and used as a residence by the taxpayer or a thermal energy sink to cool such unit, and (ii) meets the requirements of the Energy Star program.

### Proposal

This bill would allow an individual and corporate income tax credit for investments in solar energy equipment. The credit would be equal to 10 percent of all expenditures paid during the year for purchasing and installing equipment that (i) generates electricity from solar energy or (ii) uses solar energy to heat or cool a structure or provide hot water, up to \$1,000. In determining the expenditures, the labor of the taxpayer would not be included.

The amount of the credit would not be allowed to exceed the tax liability of the taxpayer. Any unused credit could be carried over for five taxable years or until the total amount of the tax credit has been taken, whichever is sooner.

The tax credit would be allowed to be claimed in the taxable year that the purchase and installation of the equipment is completed. Under this bill, only one credit for each solar energy equipment system, and that a taxpayer would not be allowed to claim the tax credit for the purchase and installation of more than one equipment system in a taxable year.

In order to claim the credit, the Department of Mines, Minerals and Energy would be required to certify to the Tax Commissioner that the equipment provides a minimum of 10 percent of the energy needs of the structure in which it is installed.

Any credit attributable to a partnership, electing small business corporation (S corporation), or limited liability company would be allocated to the individual partners, shareholders, or members, respectively, in proportion to their ownership or interest in such business entities.

This bill would require the Tax Commissioner to develop guidelines, exempt from the provisions of the Administrative Process Act, to implement the provisions of this credit.

This bill would be effective for taxable years beginning on or after January 1, 2012, but before January 1, 2016.

#### Similar Bills

**House Bill 787** would provide a refund of sales and use tax paid on the purchase of certain renewable energy equipment.

cc : Secretary of Finance

Date: 2/2/2012 tlg  
HB883F161