

**Department of Legislative Services**  
 Maryland General Assembly  
 2007 Session

**FISCAL AND POLICY NOTE**  
**Revised**

House Bill 590

(Delegate Bartlett, *et al.*)

Ways and Means

Budget and Taxation

**State Taxes - Solar Energy Grants and Devices**

This bill provides a State property tax exemption for a solar energy device installed to heat or cool a dwelling, generate electricity used in the dwelling, or to provide hot water used in the dwelling; and an income tax subtraction for grants received under the Solar Energy Grant Program.

The bill takes effect June 1, 2007; the income tax subtraction modification is applicable to taxable years beginning after December 31, 2006 and the property tax exemption is applicable to taxable years beginning after June 30, 2007.

**Fiscal Summary**

**State Effect:** General fund revenues would decrease by \$57,000 annually beginning in FY 2008 due to subtraction modifications being claimed against the personal income tax, and special fund revenues could decrease by \$5,200 in FY 2008 and by \$13,200 in FY 2012. Future year revenues reflect a constant amount of solar energy grants being awarded. Expenditures would not be affected.

(in dollars)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
GF Revenue	(\$57,000)	(\$57,000)	(\$57,000)	(\$57,000)	(\$57,000)
SF Revenue	(5,200)	(7,200)	(9,200)	(11,200)	(13,200)
Expenditure	\$0	\$0	\$0	\$0	\$0
Net Effect	(\$62,200)	(\$64,200)	(\$66,200)	(\$68,200)	(\$70,200)

*Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect*

**Local Effect:** Local income tax revenues would decrease by \$36,000 annually beginning in FY 2008. Expenditures would not be affected.

**Small Business Effect:** Minimal.

---

## Analysis

**Current Law:** Local governments are authorized to grant, by law, a tax credit against the county or municipal property tax imposed on a structure if the structure uses a solar energy device, a geothermal energy device, or a qualifying energy conservation device to provide heating or cooling for the structure, or hot water for use in the structure.

Chapter 403 of 2006 added another purpose – the generation of electricity to be used in a structure – for which a structure may use specified energy devices in order to qualify for a local option property tax credit for structures that use energy conservation devices.

Solar energy devices are not exempt from State property taxation. The State real property tax rate is \$0.112 per \$100 of assessed value. All State property tax revenues are credited to a special fund, the Annuity Bond Fund, dedicated exclusively to paying the debt service on State general obligation bonds. Local governments generally have the authority to set their own property tax rates.

**Background:** Chapter 519 of 2004 authorizes local governments to provide, by law, a property tax credit against the local property tax for specified high performance buildings. The county or municipal corporation may provide for the amount of the credit, the duration of the credit, the criteria and qualifications necessary to receive the credit, and any other necessary provisions.

A high performance building is defined as a building that: (1) achieves at least a silver rating according to the U.S. Green Building Council's Leadership in Energy and Environmental Design Green Building Rating System as adopted by the Maryland Green Building Council; (2) achieves at least a comparable rating according to any other appropriate rating system; or (3) meets comparable green building guidelines or standards approved by the State.

Chapter 128 of 2004 created a Solar Energy Grant Program administered by the Maryland Energy Administration (MEA) which provides funding for a portion of the costs to install certain qualifying solar energy systems:

- solar water heating property: 20% of system costs up to a maximum grant amount of \$2,000;
- residential photovoltaic property: 20% of system costs up to a maximum grant amount of \$3,000; and

- nonresidential photovoltaic property: 20% of system costs up to a maximum grant amount of \$5,000.

MEA indicates that 175 homeowners have participated in the program since its inception January 1, 2005. The proposed fiscal 2008 State budget includes \$1.2 million for the program.

Money allocated to the program that is not expended or encumbered is returned to the general fund at the end of the fiscal year. MEA advises that the existing grant limits are hindering its ability to award the full budgeted amount in fiscal 2007 (\$1.5 million). Through the first half of the year, MEA had awarded almost \$180,000 for 80 solar energy grants as well as another \$20,000 for several geothermal grants. MEA expects to receive significantly more grant applications in the second half of fiscal 2007, due to increased outreach and marketing of the program. Even so, MEA projects that about half of the \$1.5 million budgeted will not be spent in fiscal 2007.

**State Fiscal Effect:** The property tax exemption proposed by the bill could decrease State property tax revenues for the Annuity Bond Fund. However, the amount of the revenue decrease depends on the number of structures using solar energy devices.

Data provided by the State Department of Assessments and Taxation (SDAT) and MEA indicate that the cost of a residential photovoltaic system to generate electricity is at least \$27,000 and a solar hot water system would cost at least \$7,700. The cost for a solar heating system would likely cost more than the solar hot water system, as in some cases it is similar to the solar water heating system except that the hot water produced would be used to feed a radiant heating system.

MEA estimates that since 1999 there have been 230 installations of residential solar energy devices, including 150 photovoltaic systems and 80 solar hot water heating systems. The bill would exclude the value of these, and other specified, solar devices from a residential property tax assessment.

Assuming an average cost of \$27,000 for a photovoltaic system and \$7,700 for a solar hot water heating system, an additional 87 installations each year (based on the two-year average of grant recipients since the grant program's inception), and using the current State property tax rate of \$0.112 per \$100 of assessment, it is estimated that State property tax revenues would decrease by \$5,200 in fiscal 2008 and \$13,200 by fiscal 2012, as shown in **Exhibit 1**.

---

**Exhibit 1**  
**Estimated Effect of HB 590 – Known Installations of Solar Devices**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>
Photovoltaic Systems	(\$4,536)	(\$6,262)	(\$7,987)	(\$9,713)	(\$11,439)
Solar Hot Water Systems	<u>(690)</u>	<u>(952)</u>	<u>(1,215)</u>	<u>(1,477)</u>	<u>(1,740)</u>
<b>Total</b>	<b>(\$5,226)</b>	<b>(\$7,214)</b>	<b>(\$9,202)</b>	<b>(\$11,190)</b>	<b>(\$13,178)</b>

---

The bill would require SDAT to determine which residential properties have any of the devices specified by the bill.

Debt service payments on the State's general obligation bonds are paid from the Annuity Bond Fund. Revenue sources for the fund include State property taxes, premium from bond sales, and repayments from certain State agencies, subdivisions, and private organizations. General funds may be appropriated directly to the Annuity Bond Fund to make up any differences between the debt service payments and funds available from property taxes and other sources. The fiscal 2008 State budget allowance appropriates \$692.7 million for general obligation bond debt service costs, of which \$43.5 million are from the general fund and \$649.2 million are special funds from the Annuity Bond Fund.

To offset the reduction in State property tax revenues, general fund expenditures could increase in an amount equal to the decrease in the Annuity Bond Fund revenues or the State property tax rate would have to be increased in order to meet debt service payments. This assumes that the Annuity Bond Fund does not have an adequate fund balance to cover the reduction in State property tax revenues.

*Income Tax Subtraction Modification*

The income tax subtraction modification could be claimed beginning in tax year 2007. As a result, general fund revenues could decrease by \$57,000 annually beginning in fiscal 2008. This estimate is based on \$1.2 million in solar energy grants being awarded each year based on the amounts included in the fiscal 2007 and 2008 State budgets.

---

## Additional Information

**Prior Introductions:** None.

**Cross File:** None.

**Information Source(s):** State Department of Assessments and Taxation, Maryland Energy Administration, Department of Legislative Services

**Fiscal Note History:** First Reader - February 22, 2007  
bfl/hlb Revised - House Third Reader - March 26, 2007

---

Analysis by: Michael Sanelli

Direct Inquiries to:  
(410) 946-5510  
(301) 970-5510