Department of Legislative Services
Maryland General Assembly
2007 Session

FISCAL AND POLICY NOTE
Revised

House Bill 76 (Delegate Cardin, *et al.*)
Ways and Means Budget and Taxation

Solar Energy Tax Credit

This bill reestablishes the Solar Energy Tax Credit Program for property placed in service from July 1, 2007 through December 31, 2011. The credit is equal to 15% of the installed cost of qualified solar energy property, not to exceed $1,700 for photovoltaic property and $800 for solar water heating property. An individual who receives a grant from the Maryland Energy Administration (MEA) under the existing Solar Energy Grant Program cannot claim the tax credit under this bill.

The bill takes effect July 1, 2007 and applies to tax year 2008 and beyond.

Fiscal Summary

State Effect: General fund revenues could decrease by $387,300 in FY 2009 due to credits being claimed against the personal and corporate income taxes. Transportation Trust Fund (TTF) revenues could decrease by $19,500 in FY 2009 due to credits being claimed against the corporate income tax. Future years reflect annualization and an estimated number of credits claimed. General fund expenditures would increase by $34,000 in FY 2008, which reflects one-time tax form changes and computer programming expenditures at the Comptroller's Office.

(in dollars)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
GF Revenue	$0	($387,300)	($275,500)	($289,300)	($303,800)
SF Revenue	0	(19,500)	(13,900)	(14,600)	(15,300)
GF Expenditure	34,000	0	0	0	0
Net Effect	($34,000)	($406,800)	($289,400)	($303,900)	($319,100)

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

Local Effect: Local highway user revenues would decrease by approximately $5,900 in FY 2009 and by approximately $4,400 annually in FY 2010 through 2012.

Small Business Effect: Minimal.

Analysis

Current Law: The Solar Energy Tax Credit Program terminated July 1, 2004 and could only be claimed for property placed in service by December 31, 2004. Chapter 128 of 2004 converted the tax credit program into a grant program as discussed below.

Background: Chapter 128 of 2004 created a Solar Energy Grant Program administered by MEA. It receives an annual budget appropriation. The amount of the grant is equal to the lesser of: (1) $3,000 or 20% of the total installed cost of photovoltaic property (maximum limit is increased to $5,000 if installed on nonresidential property); and (2) $2,000 or 20% of the total installed cost of solar water heating property.

The program provides grants to individuals, local governments, and businesses for a portion of the costs of acquiring and installing photovoltaic property and solar water heating property. Photovoltaic property is defined as solar energy property that uses a solar photovoltaic process to generate electricity. Solar water heating property is solar energy property, in connection with a structure, that uses solar energy for the purpose of providing hot water for use within the structure. Both must meet standards and certification requirements specified by MEA.

Exhibit 1 lists the total amount budgeted to the program, amount awarded, and number of grants in fiscal 2005 through 2007.

Exhibit 1
Solar Energy Grant Program
Fiscal 2005-2007

Fiscal	Amount Budgeted	Amount Awarded	Number of Grants
2005	$103,500	$103,500	44
2006	75,000	75,000	30
2007	$1,500,000	*187,151	*84

*Through January 2007

The proposed fiscal 2008 State budget includes $1.2 million for the grant program. Funds allocated to the program that are not expended or encumbered are returned to the general fund at the end of the fiscal year. **Appendix 1** shows some of the renewable energy incentives offered by surrounding states and the federal government.

Exhibit 2 lists the amount of credits that were claimed under the terminated tax credit program since its inception in tax year 2000. Tax year 2004 likely represents incomplete data as it does not include taxpayers who utilized the automatic four-month extension.

Exhibit 2
Credit Claimed by Tax Year

Tax Year	Returns	Credits
2000	5	$3,445
2001	16	18,241
2002	106	94,230
2003	141	88,118
2004	89	66,080
Total	**357**	**$270,114**

State Revenues: Tax credits could be claimed beginning in tax year 2008. As a result, general fund revenues could decrease by approximately $387,300 in fiscal 2009 and TTF revenues could decrease by approximately $19,500, of which the State's share is approximately $13,700. This estimate is based on the amount of solar energy grants awarded to date in fiscal 2007 and federal Joint Committee on Taxation cost estimates for the federal solar energy tax credit program, adjusted for Maryland's population and value of the proposed State credit. In addition, MEA advises that it anticipates awarding at least one-half of the $1.5 million appropriation by the end of fiscal 2007.

Credits can be claimed for property first put in service beginning on July 1, 2007. It is assumed that these individuals will claim these credits in tax year 2008, the first year credits can be claimed as provided by the bill, resulting in an impact of one and a half tax years in fiscal 2009. It is estimated that one-fifth of the credits would be claimed against the corporate income tax.

Individuals would have the option of either applying for a grant from MEA or claiming the credit. This choice would be influenced by the level of funding received by the grant program in each fiscal year. To the extent that money is allocated to the grant program in

each fiscal year, general fund revenues losses could be less than estimated due to individuals receiving grants. Unlike the grant program, the tax credit program would not be subject to the State budget process and there is no restriction on the total amount of credits that could be claimed each year. To the extent that the grant program receives no or minimal funding, revenue losses could be significantly higher than estimated.

State Expenditures: The Comptroller's Office reports that it would incur a one-time expenditure increase of $34,000 in fiscal 2008 to add the credit to the personal income tax form. This amount includes data processing changes to the SMART income tax return processing and imaging systems and systems testing.

Additional Information

Prior Introductions: HB 810 of 2006, an identical bill, received an unfavorable report from the House Ways and Means Committee.

Cross File: None.

Information Source(s): Comptroller's Office, Joint Committee on Taxation, Maryland Energy Administration, Department of Legislative Services

Fiscal Note History: First Reader - February 5, 2007
mll/hlb Revised - House Third Reader - March 28, 2007

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Appendix 1
Renewable Energy Incentives Offered by the Federal Government and Surrounding States

		Rebates/Grants	
	Tax Credits/Exemptions	**Planning/Purchase and Installation of Renewable Energy Equipment**	**Larger Scale Research and Development and Deployment Projects/ Production Incentives**
Federal Government	• 30% personal tax credit up to $2,000 for purchase of photovoltaic or solar water heating property and up to $500 per 0.5 kW for fuel cells (applies to systems installed between Jan. 1, 2006 and Dec. 31, 2008) • Tax credit for residential energy efficiency improvements including installation of geothermal heat pumps (up to $300) • 30% corp. tax credit for renewable energy property including photovoltaic and solar water heating property (credits decrease Jan. 1, 2009) • Energy conservation subsidies provided by public utilities are nontaxable • Additional corp. tax incentives	• 25% of project costs up to $500,000 for renewable energy projects and up to $250,000 for energy efficiency improvements for agricultural producers and rural small businesses (through FFY 2007)	• Financial and technical assistance to Indian tribes for feasibility studies and cost-sharing of implementing renewable energy installations on tribal lands • Per kWh corporate tax credit for electricity generated by qualifying renewable energy sources (1.9 cent/kWh for wind, geothermal, closed-loop biomass; 1.0 cent/kWh for others)
Delaware		• Up to 50% rebate of installation costs for customers of Delmarva Power for photovoltaic, solar water heating, fuel cell, geothermal heat pump, and wind turbine systems with varying dollar amount caps (generally $22,500 for residential and $250,000 for nonresidential)	• 35% of cost of qualifying projects up to $250,000 to develop or improve renewable energy technology • 25% of eligible equipment costs up to $200,000 for projects that demonstrate market potential and accelerate commercialization of renewable technologies

		Rebates/Grants	
	Tax Credits/Exemptions	**Planning/Purchase and Installation of Renewable Energy Equipment**	**Larger Scale Research and Development and Deployment Projects/ Production Incentives**
New Jersey	• Exemption from sales tax for all purchases of solar or wind energy equipment	• Rebate based on dollar amount per watt of capacity paid, incrementally based on the size of the system installed (up to 700 kW of capacity) for solar-electric, wind, and sustainable biomass systems (*e.g.* $4.40 per watt for the first 10 kW, $3.45 per watt for the next 30 kW, etc. for solar-electric systems installed by public and nonprofit applicants) • Financial incentives (nonresidential) and loans (residential) for energy efficiency equipment including geothermal heat pumps	• $50,000 - $500,000 (with 25% cost-share requirement) for development of businesses, technologies, service, and market infrastructure in support of the state's renewable-energy industry (applications solicited in 2005 and 2006) • State renewable energy portfolio standard requires use of solar renewable energy credits resulting in an approximate $0.20/kWh production incentive
Pennsylvania*	• Exclusion of wind turbines and related equipment from property tax assessment	• Grant program for planning costs including renewable energy and energy efficient technology in school construction • Low-interest loan program ($1,000 - $10,000) to make energy efficiency improvements, including installation of renewable energy technologies, for homes	• Up to $1 million per grant or loan (in 2006) for advanced energy research and deployment projects and to assist businesses interested in locating or expanding advanced energy operations • Grants for implementation of clean and renewable energy technologies, aimed at reaching goal of 10% of state's energy obtained from clean and renewable sources (no maximum per grant; $5 million available in most recent round of funding)

		Rebates/Grants	
	Tax Credits/Exemptions	**Planning/Purchase and Installation of Renewable Energy Equipment**	**Larger Scale Research and Development and Deployment Projects/ Production Incentives**
Virginia	• State law allows and 21 cities and counties offer total or partial exemptions from property taxes for solar energy or recycling equipment		
West Virginia	• Lowered property tax basis on utility-owned wind turbines (5% of assessed value) • Lowered Business and Occupation Tax on utilities using wind-power generation – 5% (otherwise generally 40% on electricity-generating units)		
District of Columbia			• Grants of up to 50% of project costs for renewable energy projects involving photovoltaic, wind, biomass, fuel cell, hydropower, geothermal-electric, and other renewable technologies (currently $450,000 of total available funding)

*Various other local government and utility-sponsored incentives (not shown) are available in Pennsylvania.

Other states with significant renewable energy incentives include New York ($4.00 - $4.50/W rebate for installed costs up to 60% of costs or 50 kW of capacity for photovoltaic systems; additional tax incentives), California (varying solar incentives including $2.50/W of expected performance for residential and commercial systems under recently adopted program aimed at providing 3,000 MW of solar capacity by 2017), Wisconsin (25% of project costs or $35,000 for photovoltaic, wind energy, solar hot water and solar space-heating systems), and North Carolina (tax credit of 35% of installed costs up to a maximum of $10,500 for photovoltaic, wind, or other renewable energy systems for residential use).

Source: *Database of State Incentives for Renewable Energy*, Interstate Renewable Energy Council