

Department of Legislative Services
Maryland General Assembly
2007 Session

FISCAL AND POLICY NOTE

House Bill 960
Economic Matters

(Delegate Bartlett, *et al.*)

Solar and Geothermal Energy Grant Program

This bill consolidates the Geothermal Heat Pump Grant Program with the Solar Energy Grant Program and increases the grant award limits for photovoltaic and solar water heating property.

Fiscal Summary

State Effect: The bill would increase the Maryland Energy Administration's (MEA) ability to award the full amount budgeted to the program, decreasing the amount of funding cancelled and returned to the general fund at the end of a fiscal year. The Governor's proposed FY 2008 budget provides \$1.2 million for the program.

Local Effect: Increased grant amounts would make solar energy more affordable for local government grant recipients. This could result in reduced local government expenditures for electricity in future years.

Small Business Effect: Potential meaningful.

Analysis

Bill Summary: Solar energy grant award limits are increased as follows:

	<u>Current Limits</u>	<u>Proposed Limits</u>
Photovoltaic property (residential)	the lesser of \$3,000 or 20% of total installed cost	the lesser of \$15,000 or 50% of total installed cost - plus - the lesser of \$1/kWh produced in the first year or \$10,000
Photovoltaic property (nonresidential)	the lesser of \$5,000 or 20% of total installed cost	the lesser of \$50,000 or 50% of total installed cost - plus - the lesser of \$1/kWh produced in the first year or \$10,000
Solar water heating property	the lesser of \$2,000 or 20% of total installed cost	the lesser of \$2,500 or 50% of total installed cost

The bill renames the Solar Energy Grant Program as the Solar and Geothermal Energy Grant Program and repeals the Geothermal Heat Pump Grant Program. The grant limit for geothermal property remains the same, at \$1,000; however, under the bill, the grant awards are specified as being for geothermal property installed on residential property. Not more than 10% of the money in the program may be used for geothermal property grants.

Current Law: The Solar Energy Grant Program is administered by MEA. 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.

The Geothermal Heat Pump Grant Program is also administered by MEA. The program provides grants to individuals for a portion of the cost of acquiring and installing a geothermal heat pump. Individual grants may not exceed \$1,000.

Background: The Solar Energy Grant Program was created by Chapter 128 of 2004 and took effect January 1, 2005. The fiscal 2006 budget included a \$75,000 general fund appropriation for the program and funding was increased in fiscal 2007 to \$1.5 million.

The fiscal 2007 budget bill allows MEA to transfer money appropriated for the Solar Energy Grant Program in fiscal 2007 to the Geothermal Heat Pump Grant Program (created by Chapter 476 of 2005). The Governor's proposed fiscal 2008 budget provides \$1.2 million for the Solar Energy Grant 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. **Appendix 1** shows some of the renewable energy incentives offered by surrounding states and the federal government.

State Fiscal Effect: MEA advises that the existing grant limits under the Solar Energy Grant Program are hindering its ability to award the full budgeted amount in fiscal 2007. 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 (all \$20,000 has been for residential property).

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.

To the extent the bill allows more of the funding budgeted for the program to be awarded, it would decrease the amount of funding that is "cancelled" or returned to the general fund at the end of a fiscal year.

Small Business Effect: To the extent the increase in solar energy grant limits allows for more funding to be awarded for solar energy projects, the bill could have a meaningful effect on small businesses that work on solar energy projects in Maryland. MEA advises that approximately a dozen small companies have worked on recent solar projects in Maryland, of which four are very active. Among those companies, there are approximately 30 employees, and 12 to 15 of those jobs were created since the Solar Energy Grant Program began. MEA advises that a long-term, predictable financial incentive would continue to create jobs in the solar and renewable energy industry.

Additional Information

Prior Introductions: Similar bills were introduced in the 2006 session as HB 233, HB 317, SB 231, and SB 525. The House Economic Matters Committee held a hearing on HB 233, but no further action was taken. HB 317 passed the House but received an unfavorable report from the Senate Finance Committee. SB 231 and SB 525 both received an unfavorable report from the Senate Finance Committee. A similar bill was also introduced in the 2005 session as HB 1575. The House Economic Matters Committee held a hearing on the bill, but the bill was subsequently withdrawn.

Cross File: None.

Information Source(s): Maryland Energy Administration; *Database of State Incentives for Renewable Energy*, Interstate Renewable Energy Council; Department of Legislative Services

Fiscal Note History: First Reader - February 23, 2007
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Analysis by: Scott D. Kennedy

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

Appendix 1

Renewable Energy Incentives Offered by the Federal Government and Surrounding States

Rebates/Grants

	<u>Tax Credits/Exemptions</u>	<u>Planning/Purchase and Installation of Renewable Energy Equipment</u>	<u>Larger Scale Research and Development and Deployment Projects/ Production Incentives</u>
Federal Government	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • 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)

Rebates/Grants

	<u>Tax Credits/Exemptions</u>	<u>Planning/Purchase and Installation of Renewable Energy Equipment</u>	<u>Larger Scale Research and Development and Deployment Projects/ Production Incentives</u>
Delaware		<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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
New Jersey	<ul style="list-style-type: none"> Exemption from sales tax for all purchases of solar or wind energy equipment 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> \$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*	<ul style="list-style-type: none"> Exclusion of wind turbines and related equipment from property tax assessment 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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

Rebates/Grants

	<u>Tax Credits/Exemptions</u>	<u>Planning/Purchase and Installation of Renewable Energy Equipment</u>	<u>Larger Scale Research and Development and Deployment Projects/ Production Incentives</u>
Virginia	<ul style="list-style-type: none">• State law allows and 21 cities and counties offer total or partial exemptions from property taxes for solar energy or recycling equipment	efficiency improvements, including installation of renewable energy technologies, for homes	<ul style="list-style-type: none">• 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)
West Virginia	<ul style="list-style-type: none">• 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			<ul style="list-style-type: none">• 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.
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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
