

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

**FISCAL AND POLICY NOTE**

House Bill 595  
 Ways and Means

(Delegate Cardin, *et al.*)

**Tax General - Income Tax Credit - Energy-Efficient Residential Heating and Cooling Systems**

This bill creates a State income tax credit for the costs of purchasing and installing certain energy-efficient residential heating and cooling systems that meet specified energy efficiency standards installed at residential properties located in the State. If the amount of credits claimed exceeds \$8 million in any tax year, the Maryland Energy Administration (MEA) is required to adopt regulations that increase energy efficiency standards for qualifying systems. MEA is also required to develop a consumer awareness program to promote the availability of the tax credit program.

The bill takes effect July 1, 2007 and applies to tax years 2008 through 2012.

**Fiscal Summary**

**State Effect:** General fund revenues could decrease by \$6.7 million in FY 2009. Future years reflect estimated number of credits claimed. General fund expenditures could increase by \$234,000 in FY 2009 due to implementation costs at MEA and the Comptroller’s Office. Future years reflect implementation costs at MEA.

(\$ in millions)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
GF Revenue	\$0	(\$6.66)	(\$6.80)	(\$6.93)	(\$7.07)
GF Expenditure	0	.23	.20	.20	.20
Net Effect	\$0	(\$6.90)	(\$7.00)	(\$7.13)	(\$7.27)

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

**Local Effect:** Local highway user revenues would decrease as a result of credits being claimed against the corporate income tax. Expenditures would not be affected.

**Small Business Effect:** Minimal.

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## Analysis

**Bill Summary:** The bill provides that individuals or corporations may claim a tax credit for the cost of residential climate control systems that meet specified energy efficiency standards including air source heat pumps; geothermal heat pumps; central air conditioners; and gas, oil, propane, furnace, or hot water furnace or boiler. The value of the credit is based on which applicable energy standard it meets – \$150 for systems that meet U.S. Environmental Protection Agency Energy Star criteria and \$250 for systems that meet energy efficiency standards specified by the federal Energy Policy Act of 2005. Qualifying advanced main air circulating fans, however, qualify for a \$50 credit. The value of the credit may not exceed the tax liability in the tax year, and any unused amount of the credit may be carried forward three tax years. For systems installed at a principal place of residence, the credit allowed in any tax year may not exceed \$500.

If the amount of credits claimed exceeds \$8 million in any tax year, MEA has to adopt regulations that increase energy efficiency standards for qualifying equipment. MEA is also required to develop a consumer awareness program to promote the availability of the tax credit program.

**Current Law:** No similar State tax credit program exists.

**Background:** Heating and cooling (“space conditioning”) account for 50% to 70% of the energy used in the average American home. Generally, newer heating systems are more efficient. The most common type of heat pump for domestic use, referred to as a “conventional” heat pump, is the air-to-air system in which heat is taken from air (heat source) at one location and transferred to air (heat sink) at another location. In the winter, a heat pump takes heat from outside air and transports the heat inside a home. In the summer, the heat pump reverses the process, removing heat from the home and transporting it to the outside air, cooling the house in the process. Conventional heat pumps lose efficiency in providing heat when outside temperatures drop below 20 to 30°F and switch to a higher cost electric resistance back-up heating system.

MEA was created, in part, to promote the conservation and efficient use of energy, and to evaluate and coordinate energy-related policies and activities among State and local agencies. Several MEA programs promote the use of efficient use of energy and renewable energy. MEA administers the Solar Energy Grant Program created by Chapter 128 of 2004, which converted an existing tax credit program into a grant program. The program provides grants to individuals, local governments, and businesses

for a portion of the costs of purchasing and installing photovoltaic property and solar water heating property. The proposed fiscal 2008 budget includes \$1.2 million in funding for the solar energy program. MEA also administers the Community Energy and State Agency Loan Programs, which disburse loans to local governments, non-profit organizations, and State agencies in order to promote energy efficiency.

The federal Energy Tax Incentives Act (ETIA) of 2005 (Title 13 of the Energy Policy Act of 2005) contains an estimated \$14.5 billion in tax incentives designed to promote domestic energy production and conservation, including several major tax provisions related to conservation and energy efficiency that are estimated to reduce federal revenues by a total of \$1.3 billion. ETIA created a new federal tax credit under which purchases of qualified energy-efficiency improvements and property qualify for a new tax credit that equals the sum of (1) 10% of the costs of qualified energy efficiency improvements; and (2) residential energy property expenditures. The value of the credit is subject to a \$500 lifetime limit, and no more than \$200 of the credit may be attributable to expenditures on windows. There is no requirement for certification of expenditures, and the credit applies only to installation in a taxpayer's primary residence located in the United States. Generally, improvements and property must meet applicable energy efficiency standards.

Qualified residential energy property includes, with the maximum credit in parentheses, (1) advanced main air circulating fans (\$50); (2) natural gas, propane, or oil furnace or hot water boilers (\$150); and (3) "energy efficient building property" including energy efficient electric and geothermal heat pumps and central air conditioners (\$300). Advanced main air circulating fans are defined as a fan used in a natural gas, propane, or oil furnace and which has an annual electricity use of no more than 2% of the total annual energy use of the furnace. Qualifying energy efficiency improvements include (1) any insulation material or system primarily designed to reduce heat loss or gain; (2) exterior windows, including skylights; (3) exterior doors; and (4) metal roofs coated with heat-reduction pigments. The energy improvement must be expected to remain in use for at least five years. **Appendix 1** lists residential energy efficiency programs in the surrounding states.

**State Revenues:** Tax credits can be claimed beginning in tax year 2008. As a result, general fund revenues could decrease by \$6.7 million in fiscal 2009. This estimate is based on federal Joint Committee on Taxation estimates for the cost of the residential energy property tax credit provided under the ETIA and the costs of similar residential energy efficiency programs in other states, adjusted for Maryland's population and differences between these programs and HB 595. It is estimated that the vast majority of credits would be claimed against the personal income tax.

**State Expenditures:** The bill requires MEA to develop, as provided in the State budget each year, a consumer awareness program to promote the availability of the tax credit program. Based on consumer awareness expenditures in other states with residential energy efficiency programs, Legislative Services estimates that MEA would incur additional annual costs of \$200,000 annually to conduct a consumer awareness program for the credit.

The Comptroller's Office reports that it would incur a one-time expenditure increase of \$34,000 in fiscal 2009 to add the credit to the personal income tax form. This includes processing changes to the SMART income tax return processing and imaging systems and systems testing.

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### **Additional Information**

**Prior Introductions:** SB 217 and HB 305 of 2006, similar bills, were not reported from the Senate Budget and Taxation and House Ways and Means committees, respectively.

**Cross File:** SB 615 (Senator Madaleno, *et al.*) – Budget and Taxation.

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

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Analysis by: Robert J. Rehrmann

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

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**Appendix 1**  
**Residential Energy Efficiency Programs in Surrounding States**

<u>State</u>	<u>Residential Energy Efficiency Programs</u>
Delaware	Delaware Energy An\$wers Program provides grants to businesses and individuals for energy efficient appliances and central air conditioners with programmable thermostats. Maximum of \$500 per residence. State has budgeted \$8 million in one-time funding for the program. Since late September, it has disbursed approximately \$1 million related to the residential program.
District of Columbia	Personal income tax credit for energy efficient appliances, equipment, and energy-conserving renovations. Credit equals 10% to 25% for renovations, and 5% for new homes, not to exceed \$500 and \$2,000, respectively.  Energy Star home appliances rebate program provides rebates of between \$50 and \$150 for purchases through 5/31/2007 of washing machines, refrigerators, and room air conditioners.
Pennsylvania	Keystone Home Energy Loan Program provides loans for energy-efficient appliances and equipment as well as residential renewable energy equipment. Maximum loan is \$10,000 with interest rates at 5.99% or 7.99%.
Virginia	None
West Virginia	None

Source: Database of State Incentives for Renewables and Efficiency

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