

Department of Legislative Services
Maryland General Assembly
2006 Session

FISCAL AND POLICY NOTE

House Bill 1461 (Delegate Trueschler)
Environmental Matters

Energy Conservation Act of 2006

This bill allows county governments to submit energy conservation plans to the Maryland Energy Administration (MEA), identifying specified public buildings, evaluating the buildings' energy efficiency, and identifying and estimating the costs and energy savings of repairs or replacements necessary for each building to be in compliance with State energy conservation standards. Any such plans must be submitted by July 1, 2008. MEA must then review any plans submitted and provide written comment to the county within six months.

Fiscal Summary

State Effect: It is assumed a limited number of energy conservation plans could be reviewed by existing MEA staff; however, if a significant number of counties develop and submit plans, the work may need to be contracted out which could cost roughly \$5,000 per plan.

Local Effect: Counties that choose not to develop and submit an energy conservation plan would not be affected; however, counties that choose to develop a plan could incur significant costs ranging from \$3,000 to over \$20,000 per public building.

Small Business Effect: Minimal.

Analysis

Bill Summary: The bill applies to buildings that • have at least 10,000 square feet of floor space; • have been in existence, in whole or in part, for at least 30 years; • provide

a method of controlling energy usage within each building's exterior envelope; • have a permanent heating system; and • are owned by a county. Public school buildings are included.

Energy Efficiency Evaluation Chart

An energy efficiency evaluation chart is to be submitted with each energy conservation plan. The chart must indicate, for each building, the total energy consumed each year, indicated by energy type, units consumed, and cost. The chart must also include a description, including an energy efficiency estimate for heating, ventilation, and air-conditioning systems, hot water heaters, lighting, windows, doors, roofs, and any other building component specified by State energy conservation standards.

Energy Conservation Plan

An energy conservation plan must include information on • building components that must be repaired or replaced in order for each building to be in compliance with State energy conservation standards; • the estimated cost of each repair or replacement; • the energy efficiency rating for each proposed replacement; • the estimated annual energy consumption for each repaired or replacement component; • the estimated time for each repaired or replacement component to return its cost through energy savings; and • the total estimated energy savings for each building.

Current Law: MEA's statutory duties include providing advisory and consultative services and technical assistance to State and local government units, nonprofit organizations, and private entities "to establish or carry out sound energy policies or practices, including energy management and energy conservation" and evaluating and coordinating "energy related policies and activities among all agencies of the Executive Branch of the State and, where appropriate, those of the various local governments."

State regulations (referenced in the bill for applicable energy conservation standards) incorporate by reference, with modification, the 2003 International Building Code, which contains energy efficiency standards.

Background:

Current State Energy Conservation Assistance to Local Governments

MEA currently facilitates energy conservation among local governments through:

- participation in the Rebuild America partnership, a project of the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy, which works to disseminate information on and break market barriers to energy efficiency and renewable energy technologies. MEA participates on behalf of Maryland communities and local governments to facilitate the exchange of information and resources available through Rebuild America – the partnership has a program targeted specifically at energy efficiency in K-12 schools;
- administration of the Community Energy Loan Program, which offers loans to eligible nonprofits and local governments to make energy efficiency improvements, allowing energy savings to be the major source of loan repayment; and
- administration of the Solar Energy Grant Program, which provides grants to cover a portion of the costs of acquiring and installing photovoltaic property and solar water heating property.

Public School System Energy Use Monitoring

Energy consumption data for public schools were collected annually by the Maryland State Department of Education in the 1980s and early 1990s, but the program was discontinued due to the amount of work it required of local and State governments and the limited value of the program to the State government. Maryland public school systems currently monitor their energy use and cost, and energy conservation projects are included in Comprehensive Maintenance Plans, Educational Facilities Master Plans, and Capital Improvement Programs prepared annually by public school systems. Life cycle cost analyses (economic analysis of initial and recurring costs, including energy costs, aimed at reducing the overall cost of a project) are conducted for construction and systemic renovation projects funded by the Public School Construction Program. Projects are also required to meet State energy codes as required by the Department of General Services (DGS).

Energy Performance Contracts

MEA and DGS currently assist State agencies and departments in the procurement of energy performance contracting services which allow energy efficiency improvements to be made to State buildings and be paid for with the resulting energy savings. Through 2004, the State had made roughly \$84 million of improvements resulting in roughly \$10 million of annual energy savings.

Counties would likely implement energy conservation plans, if developed, through the use of similar energy performance contracts.

State Fiscal Effect: Because counties are not required to submit energy conservation plans and may incur significant costs to do so (discussed below), it is unclear whether many counties would take advantage of the option of submitting a plan to MEA for review. A limited number of reviews could be handled with existing MEA staff. MEA advises that a thorough review of a county energy conservation plan would take one staff member an average of over a week (varying with the number, size, and complexity of buildings) to review the plan and go over it with the county to identify ways to implement improvements. If numerous energy conservation plans were submitted and MEA did not have the staff resources to review the plans, the work could be contracted out, which could cost roughly \$5,000 per plan.

While the bill seems to imply that a county plan would cover all “applicable public buildings” in the county, it is conceivable that because counties have the option of whether or not to submit energy conservation plans at all, they may submit a plan for a limited number of buildings in the county, reducing the cost of developing the plan. This would reduce the amount of work required of MEA and presumably reduce the cost per plan of contracting the work out.

Local Fiscal Effect: The proposed bill would have no fiscal impact on counties that choose not to develop or submit an energy conservation plan. Counties that choose to develop and submit a plan, however, could incur significant costs, the amount of which would be affected by the number, size, and complexity of applicable buildings in the county and the extent to which information required to be included in an energy conservation plan was currently being monitored for those buildings.

County estimates of the cost of developing energy conservation plans in accordance with the bill’s requirements vary, including an estimate by Montgomery County’s Board of Public Works of \$15,000 to \$20,000 or more, per building, for the approximately 33 “applicable buildings” under the board’s jurisdiction (not including the county’s public school buildings) and an estimate of \$3,000 per building by Allegany County for 10 county buildings, not including public school buildings.

The energy consumption and related cost for public school buildings, which make up a vast majority of county buildings statewide, are currently monitored by local school systems. However, reporting information specific to particular building components in applicable buildings, with the level of detail indicated by the bill’s requirements, would likely result in significant extra costs comparable to those for other county buildings discussed above.

Assuming that any energy conservation plans that are developed and submitted to MEA would be implemented, counties could realize energy savings in the long run.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Allegany County, Montgomery County, Talbot County, Baltimore City, Maryland State Department of Education, Maryland Energy Administration, Public School Construction Program, Department of Legislative Services

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