

Department of Legislative Services
Maryland General Assembly
2010 Session

FISCAL AND POLICY NOTE

Senate Bill 656 (Senator Lenett)
Education, Health, and Environmental Affairs

Energy Performance Ratings - State, County, and Municipal Buildings

This bill requires the State and local governments to post the Energy Star rating of government-owned or operated buildings in an area of the building that is open and accessible to the public. The Department of General Services (DGS) must post a rating in each State-owned or operated building beginning October 1, 2010, for buildings with an enclosed space of 100,000 square feet or more, and beginning October 1, 2011, for buildings with an enclosed space of less than 100,000 square feet. Counties and municipalities must post the ratings in each county or municipal-owned or operated building beginning October 1, 2011.

Fiscal Summary

State Effect: General fund expenditures for DGS may increase significantly over the course of FY 2011 and 2012 for installation of utility meters, contractual services to determine ratings, and costs of posting signs. Due to uncertainties, the total cost cannot be reliably estimated. *For illustrative purposes only*, under one set of assumptions, costs increase by \$6.3 million. Ongoing contractual services costs to keep Energy Star ratings updated may be incurred in future years to the extent future updates cannot be accomplished with existing State agency staff.

Local Effect: Local government expenditures may increase in FY 2011 and/or 2012 in some jurisdictions for contractual services costs and relatively minimal costs to post signs. Costs to install utility meters may also be incurred by some local governments to the extent buildings are not individually metered. **This bill may impose a mandate on a unit of local government.**

Small Business Effect: Potential meaningful.

Analysis

Bill Summary: “Building” is defined as any enclosed structure that provides a method of controlling energy usage within its interior. “Energy Star rating” means the energy performance rating of a building as determined by the U.S. Environmental Protection Agency’s Energy Star Portfolio Manager rating system.

Current Law: DGS, in cooperation with the Maryland Energy Administration (MEA), is required to project energy-related lifecycle costs and conduct energy consumption analyses with respect to building construction and renovation, and, so that it can audit and evaluate competing design proposals, set standards for energy performance indices. DGS must also, in cooperation with MEA, establish standards and procedures for evaluating the efficiency of the design for any proposed State-financed or State-assisted building construction, which must be updated by March 1 of each odd-numbered year.

The State Building Energy Efficiency and Conservation Act of 2006 (Chapter 427 of 2006) required that:

- DGS, in cooperation with MEA, set energy performance standards to reduce the average energy consumption in State buildings from the baseline 2005 level by 5% in 2009 and 10% in 2010;
- each State agency conduct an analysis of the gas and electric consumption in each of the buildings under its jurisdiction and the cost of that consumption by December 31, 2007. The analysis was to be conducted under the direction of MEA and in coordination with DGS and was to include an examination of methods to achieve energy and costs savings; and
- each State agency upgrade its energy conservation plan, developed in consultation with DGS and MEA, to achieve the performance standards set by DGS no later than July 1, 2008.

Background:

Energy Star Portfolio Manager Rating System

The Energy Star Portfolio Manager allows the energy performance of certain types of commercial buildings to be rated on a scale of 1-100 relative to similar buildings nationwide. Not all commercial buildings are eligible to receive a rating, but types of eligible buildings include offices, hospitals (acute care and children’s), courthouses, and

K-12 schools. Colleges and universities, fire stations and police stations, and libraries are building types that appear to currently be ineligible to receive an Energy Star rating. Buildings must also meet certain criteria and at least 11 consecutive months of energy meter data that accounts for all energy use (regardless of fuel type) must be available.

Energy Star's web site indicates that the rating was developed as a screening tool, which does not by itself explain why a building performs a certain way, or how to change the building's performance, but helps organizations assess performance and identify those buildings that offer the best opportunities for improvement and recognition.

Energy Star indicates that a small number of State and local governments have established requirements for Energy Star benchmarking/rating of public and/or private buildings, including the District of Columbia, City of New York, Denver, and Hawaii and Michigan.

Efforts to Reduce State Government Energy Consumption

DGS' Office of Energy Performance and Conservation currently seeks to reduce energy consumption in State facilities through facility upgrades, a comprehensive electricity purchasing strategy, renewable energy, and the implementation of a new statewide utility database. Most of the State's energy-related facility upgrades are performed via energy performance contracts which typically consist of an energy audit, design, construction, maintenance, and monitoring and verification. There are currently 27 such projects in varying stages of development. DGS is also working on completing a State energy database of all utility consumption and expenditures. According to DGS, once fully implemented, the web-based database will enable the department to manage utility consumption, ensure the accuracy of utility billings, and implement energy reduction efforts for all State agencies.

DGS Jurisdiction

DGS' facilities and operations responsibilities are limited to only a portion of State buildings, including the Annapolis and Baltimore public buildings and grounds and 17 regional multiservice centers.

State Fiscal Effect: General fund expenditures may increase significantly over the course of fiscal 2011 and 2012 (due to the staggered compliance dates of October 1, 2010 and October 1, 2011) to meet the requirements of the bill; however, a number of uncertainties make it difficult to reliably estimate the actual cost of complying with the bill, most notably:

- uncertainty of the number of State buildings that are eligible to receive an Energy Star rating (only certain types of buildings are eligible for such a rating);
- uncertainty of the number of buildings that need individual meters installed to be able to determine an Energy Star rating for the buildings and the associated average cost of those installations; and
- uncertainty of the level of contractual work required to gather data and determine the Energy Star ratings of eligible buildings.

According to the Department of Budget and Management (DBM), there are almost 5,000 buildings owned by the State. The number of those buildings that are eligible for an Energy Star rating is uncertain. For those buildings that are eligible, potential costs associated with posting the building's Energy Star rating include: (1) the cost of installing individual energy usage meters on those buildings that do not currently have individual meters (which DGS indicates could be a significant percentage of State buildings); (2) contractual services costs to gather data and determine the Energy Star ratings of eligible buildings; and (3) the cost of posting a sign in each eligible building with the Energy Star rating of the building.

For illustrative purposes only, under one set of assumptions, costs over the course of fiscal 2011 and 2012 could total \$6.3 million, as discussed below.

Meter Installation

If it is assumed that 2,500 (50%) of the almost 5,000 State-owned buildings are eligible for an Energy Star rating (Energy Star's web site indicates the building types eligible for a rating represent over 50% of U.S. commercial floor space), even if only 10% (250) of those buildings need individual meters installed, at a cost of \$15,000 per installation, costs will total \$3.75 million. DGS indicates that there is a great deal of uncertainty regarding the average cost to install individual meters, and that costs for each installation could vary significantly depending on the actual conditions of each building. DGS also indicates that the percentage of buildings that will need individual meters installed may be significantly higher than 10% and could be a majority of State buildings.

Contractual Services to Determine Ratings

DGS estimates that costs for contractual services to determine the ratings could total \$2.5 million, assuming:

- ratings are determined for each of 2,500 buildings;

- the cost per building averages \$1,000 (one day's work – eight hours at \$125/hr); and
- 25 additional work days are required initially for data collection and evaluation to assess which buildings are eligible for an Energy Star rating.

Legislative Services advises that the costs for contractual services may be able to be reduced if existing staff of State agencies can gather data and determine the Energy Star ratings of the agencies' buildings. In fact, EPA's Portfolio Manager appears to be designed for use by building owners and managers at no cost. DGS, however, notes that there has been difficulty in gathering information from all agencies for the State energy database that is currently being developed. Accordingly, hiring a contractor to determine the Energy Star rating of all eligible buildings may be a more effective manner of meeting the bill's requirements.

Posting Signs

DGS estimates the cost to post the required signs in each building to be \$125,000 (assuming \$50 per building for 2,500 eligible buildings). Legislative Services advises that this cost appears overstated and that a more reasonable estimate is \$20 per building, resulting in a total cost of \$50,000 (assuming 2,500 eligible buildings).

Future Year Costs

Contractual services costs may be incurred in future years to periodically update Energy Star ratings to the extent updates cannot be handled by existing State agency staff. The bill does not specify how often the ratings must be updated, however.

Local Fiscal Effect: Local government expenditures in certain jurisdictions may increase for contractual services costs. Certain jurisdictions contacted indicate a need for contractual services to comply with the bill, while others indicate that the bill's requirements can be handled with existing resources.

Presumably similar uncertainties that apply with respect to State buildings also apply with respect to local government buildings, such as the number of buildings that are eligible for an Energy Star rating and whether individual meters need to be installed on any buildings. A small number of counties contacted, however, indicate that their buildings are generally individually metered.

Local governments contacted indicate that the cost of posting signs will be a relatively minimal cost.

Small Business Effect: Small businesses may benefit from the bill's requirements to the extent small businesses provide contractual services to the State or local governments to determine and post Energy Star ratings.

Additional Information

Prior Introductions: None.

Cross File: HB 705 (Delegate Stein, *et al.*) - Health and Government Operations.

Information Source(s): Department of General Services; Department of Budget and Management; Maryland Energy Administration; Maryland Department of Transportation; Board of Public Works; Baltimore City; Baltimore, Calvert, Caroline, and Montgomery counties; City of Bowie; U.S. Environmental Protection Agency; Department of Legislative Services

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