

Department of Legislative Services
Maryland General Assembly
2012 Session

FISCAL AND POLICY NOTE

House Bill 901

(Prince George's County Delegation and Montgomery
County Delegation)

Environmental Matters

Education, Health, and Environmental Affairs

Washington Suburban Sanitary Commission - High Performance Buildings
PG/MC 110-12

This bill requires the Washington Suburban Sanitary Commission (WSSC) to employ green building technologies when constructing or renovating certain commission-owned buildings. A high-performance building must meet the criteria and standards established under the “High Efficiency Green Building Program” adopted by the Maryland Green Building Council.

Fiscal Summary

State Effect: None.

Local Effect: WSSC expenditures for construction and renovation projects may increase as construction costs for high-performance buildings are typically 2% to 5% higher than traditional construction methods. WSSC revenues are not affected. **This bill imposes a mandate on a unit of local government.**

Small Business Effect: Minimal.

Analysis

Bill Summary: The bill indicates that it is the intent of the General Assembly that WSSC employ green building technologies when constructing or renovating commission-owned buildings, to the extent practical. Except as otherwise provided, if a WSSC capital project includes the construction or major renovation of a building that is

7,500 square feet or greater, the building must be constructed or renovated to be a high-performance building.

The following types of unoccupied buildings are not required to be constructed or renovated to be high-performance buildings: (1) warehouse and storage facilities; (2) garages; (3) maintenance facilities; (4) transmitter buildings; (5) pumping stations; and (6) other similar types of buildings, as determined by the commission.

WSSC may request a waiver from the high-performance building requirement from the county where a proposed capital project is located. The county council, with the approval of the county executive, may grant a waiver from the high-performance building requirement if it is determined that the use of a high-performance building in a proposed capital project is not practicable.

A high-performance building is defined as a building that (1) meets or exceeds the current version of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) green building rating system silver rating; or (2) achieves at least a comparable numeric rating according to a nationally recognized, accepted, and appropriate numeric sustainable development rating system, guideline, or standard approved by the Secretary of Budget and Management and the Secretary of General Services.

Major renovation is defined as the renovation of a building where (1) the building shell is to be reused for the new construction; (2) the heating, ventilating, and air conditioning, electrical, and plumbing systems are to be replaced; and (3) the scope of the renovation is 7,500 square feet or greater.

Current Law: Chapter 124 of 2008 required most new or renovated State buildings and new school buildings to be constructed as high-performance buildings, subject to waiver processes established by the Department of Budget and Management (DBM), Department of General Services (DGS), and the Board of Public Works (BPW). Between fiscal 2010 and 2014, the State funds 50% of the local share of increased school construction costs associated with high-performance buildings. Chapters 527 and 528 of 2010 added new community college capital projects that receive State funds to the requirement.

Chapter 124 defines a high-performance building as one that:

- meets or exceeds the U.S. Green Building Council's (USGBC) LEED criteria for a silver rating; or

- achieves a comparable numeric rating according to a nationally recognized, accepted, and appropriate rating system, guideline, or standard approved by DBM and DGS.

Only new or renovated buildings that are at least 7,500 square feet and are built or renovated entirely with State funds, or in the case of public schools are new schools, and in the case of community colleges are projects that receive any State funds, are subject to the high-performance requirement. Additionally, building renovations must include the replacement of heating, ventilation, air conditioning, electrical, and plumbing systems and must retain the building shell. Unoccupied buildings are exempt from the high-performance mandate, including warehouses, garages, maintenance facilities, transmitter buildings, and pumping stations.

For State buildings and community colleges, the waiver process must include a review by the Maryland Green Building Council and approval by DGS, DBM, and the Maryland Department of Transportation. The waiver process established by BPW for public school buildings must include review and approval by Interagency Committee on School Construction.

Chapter 116 of 2007 codified the Maryland Green Building Council, which had been established by executive order but had been dormant for several years. The council was charged with:

- evaluating current green building technologies;
- recommending cost-effective green building technologies that the State may consider incorporating into the construction of new State facilities; and
- developing a list of building types for which green building technologies should not be applied.

In December 2007, the council released its report; Chapter 124 incorporated most of its major recommendations into statute.

Background: USGBC is a national coalition of building industry leaders formed to promote construction that is environmentally responsible, profitable, and that creates healthy places to live and work. USGBC developed LEED as a self-assessment tool that measures the extent to which a building meets green building criteria on six dimensions: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation and design process. The latest standards were released in 2009, but they are in the process of being revised for 2012. The rating scale has four ratings (certified, silver, gold, and platinum).

LEED standards have been adopted by at least 34 states (including Puerto Rico). Maryland is ranked eighth in the country with 1,385 LEED registered or certified buildings. LEED's rating scale has a maximum score of 110 possible points; silver certification requires 50 to 59 points. IEQ is one of seven design categories used in the LEED assessment, and it currently offers 14 different credits and a maximum of 19 points. Under State law, high-performance buildings are not required to earn all the credits or points under the IEQ category, but only to achieve enough points across all seven design categories to earn the silver certification.

To date, four State-funded buildings have been built as high-performance buildings. According to the Green Building Council, the Hammerman Beach Services building at Gunpowder Falls State Park, completed in 2008, cost about 3.4% more than a nonhigh-performance building would have cost but is expected to generate 20% savings on energy costs and 40% reduction in water consumption over its lifespan. Goodpaster Hall on the campus of St. Mary's College of Maryland, completed in 2008, is estimated to have had a 1.6% cost premium but is expected to generate 30% savings on energy costs and 40% reduction in water consumption over its lifespan. The Universities at Shady Grove building, completed in 2007 and which achieved a LEED gold rating, is estimated to have had a 2.4% cost premium but should generate 30% savings in energy costs and a 40% reduction in water consumption over its lifespan. The Maryland Department of Transportation's headquarters is LEED gold certified and is estimated to save \$83,000 in energy costs each year compared with standard building designs. As of September 2011, seven public schools had achieved LEED gold certification; all are currently occupied. Also, 34 schools were seeking LEED silver or gold certification; of those, 5 were occupied, 10 were under construction, and the rest were in the planning stage.

USGBC acknowledges that the special regulatory and medical requirements for hospital buildings make it difficult for them to meet LEED standards for new buildings. Therefore, it unveiled LEED for Healthcare standards in late 2011; because these standards did not exist prior to June 1, 2011, hospital and other medical facilities that receive State grants are not subject to the bill's requirements.

WSSC Service Area

WSSC is the eighth largest water and wastewater utility in the country, providing water and sewer services to 1.8 million residents in Montgomery and Prince George's counties. It has over 460,000 customer accounts, serves an area of around 1,000 square miles, and currently employs more than 1,500 people. The agency operates four reservoirs, two water filtration plants, and six wastewater treatment plants. Additionally, the Blue Plains Water Pollution Control Plant handles approximately 169 million gallons per day

under a cost sharing agreement with WSSC. The commission maintains nearly 5,500 miles of water main lines and over 5,400 miles of sewer main lines.

WSSC owns approximately 347 buildings.

Local Fiscal Effect: WSSC construction costs may increase in the future as a result of the bill. However, the amount of any increase cannot be reliably estimated and depends on the actual construction and renovation costs incurred by WSSC.

Most estimates indicate that construction costs for high-performance buildings are 2% to 5% higher than construction costs for nonhigh-performance buildings, which is consistent with Maryland's limited experience. USGBC estimates that, going forward, the average cost premium for LEED silver buildings will be 2% above the cost of traditional construction. Legislative Services concurs with this estimate. However, any buildings constructed as high-performance buildings should generate substantial operational savings over their lifespan, more than covering the initial construction cost premium.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Montgomery and Prince George's counties, Department of General Services, Washington Suburban Sanitary Commission, Department of Legislative Services

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