SB 243

Department of Legislative Services

Maryland General Assembly
2009 Session

FISCAL AND POLICY NOTE

Senate Bill 243 (Senator Greenip, *et al.*)
Budget and Taxation

State Capital Projects - High Performance Buildings - Green Globe Rating

This bill broadens the definition of a high-performance building to include any building that achieves at least a two globe rating according to the Green Globes Program adopted by the Green Building Initiative (GBI).

The bill takes effect July 1, 2009.

Fiscal Summary

State Effect: Potential minimal decrease in project costs for any new or substantially renovated State building or new school that opts for Green Globes certification instead of Leadership in Energy and Environmental Design (LEED) certification. On average, Green Globes certification costs about $6,000 less than LEED certification. Legislative Services does not anticipate any significant differences in life-cycle costs for new or renovated buildings using Green Globes because the two rating systems are generally comparable.

Local Effect: Potential minimal decrease in the local share of project costs for new school construction projects, as explained above.

Small Business Effect: None.

Analysis

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 Departments of Budget and Management (DBM) and

General Services (DGS) and the Board of Public Works (BPW). In fiscal 2010 through 2014, the State funds 50% of the local share of increased school construction costs associated with high-performance buildings.

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

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

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

Only new or renovated State buildings that are at least 7,500 square feet and are built or renovated entirely with 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, 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 new schools must include review and approval by the Interagency Committee on School Construction.

Background: The U.S. Green Building Council (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. Version 2.2 of the LEED system was released in October 2005. The rating scale has a maximum score of 69 points and four ratings:

- platinum (52-69 points);
- gold (39-51 points);
- silver (33-38 points); and
- certified (26-32 points).

LEED standards have been adopted by 24 states and more than 90 local governments. There are more than 1,000 LEED-certified buildings in the country.

To date, DBM and DGS have not approved any alternative to the LEED rating system.

GBI is a coalition representing industry, construction companies, architectural firms, and academic institutions to promote green building. Through a strategic partnership with the National Association of Home Builders, GBI developed the online Green Globes assessment tool that builders can use to measure the extent to which a building meets green building criteria on seven dimensions: project management; site; energy; water; resources and materials; emissions and effluents; and indoor environment. The rating scale has four ratings that are based on the percentage of total points scored:

- 4 globes (85-100%);
- 3 globes (70-84%);
- 2 globes (55-69%); and
- 1 globe (35-54%).

There are several key differences between LEED and Green Globes, although both are considered reputable green building standards. Green Globes is broader than LEED. For example, Green Globes recognizes all mainstream forest certification systems while LEED only accepts the Forest Stewardship Council's Program. As a result, Green Globes tends to be supported by the lumber industry. Unlike LEED, Green Globes allows builders to indicate that certain features are not applicable to their design, thereby lowering the total number of points they can earn. For instance, while both systems award points for reusing an existing building, LEED penalizes builders for building new buildings while Green Globes eliminates that category from the point total for new buildings. For this reason, Green Globes is generally viewed as more favorable for smaller renovation projects. Finally, Green Globes began as an online self-assessment tool without any third-party validation, while LEED has consistently required independent third-party certification. More recently, however, Green Globes has added a third-party validation process. Overall, Green Globes certification costs about half as much (about $7,000) as LEED certification ($12,950).

To date, only three 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 cost about 3.4% more than a nonhigh-performance building would have cost, but it 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 is estimated to have had a 1.6% cost premium, but it is expected to generate 30% savings on energy costs and 40% reduction in water consumption over its lifespan. The Universities at Shady Grove building, which achieved

a LEED gold rating, is estimated to have had a 2.4% cost premium, but it should generate 30% savings in energy costs and a 40% reduction in water consumption over its lifespan.

Additional Information

Prior Introductions: None.

Cross File: HB 226 (Delegate Beitzel, *et al.*) - Health and Government Operations and Appropriations.

Information Source(s): Board of Public Works, Department of Budget and Management, Department of General Services, Maryland Department of Transportation, University System of Maryland, BuildingGreen.com, Department of Legislative Services

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