

Department of Legislative Services
Maryland General Assembly
2009 Session

FISCAL AND POLICY NOTE

House Bill 707 (Delegate Barve, *et al.*)
Environmental Matters

Maryland Energy Conservation Building Standards Improvement Act

This bill requires the Department of Housing and Community Development (DHCD) to adopt the International Energy Conservation Code (IECC) before adopting a subsequent version of the Maryland Building Performance Standard (MBPS). Future versions of the MBPS adopted after December 31, 2012 and December 31, 2019 must achieve energy savings above that achieved by comparable buildings meeting the 2006 IECC, of 30% and 50%, respectively. DHCD may adopt a modification of a building code requirement that is more stringent than in IECC, but is prohibited from adopting a provision of the International Residential Code that is less stringent than in IECC. Similarly, a local jurisdiction may adopt a local amendment to MBPS as long as the amendment does not weaken any energy conservation and efficiency provisions in MBPS. Local governments must implement and enforce the most current MBPS and any modifications thereto, within 60 days of State adoption.

Fiscal Summary

State Effect: State expenditures may increase beginning in FY 2013 due to the additional capital costs associated with constructing State buildings in compliance with the standards under the bill. Revenues are not directly affected.

Local Effect: Local government expenditures may increase beginning in FY 2010 for the cost of training code inspection and enforcement personnel or to hire additional personnel. Revenues are not directly affected. **This bill may impose a mandate on a unit of local government.**

Small Business Effect: Potential meaningful impact on small businesses within the housing construction industry. According to DHCD, increased construction costs may limit the ability for developers to build affordable housing.

Analysis

Bill Summary: DHCD must adopt by regulation, IECC, as part of MBPS. The bill defines IECC as the first printing of the most recent edition of IECC issued by the International Code Council. In addition, DHCD must adopt each subsequent version of MBPS within 9 months after it is issued instead of 12 months as required under current law.

In calculating future energy savings required under the bill for years 2012 and 2019, for residential buildings, DHCD must use the “performance path” methodology and rule set contained in IECC; for commercial buildings DHCD must use the Informative Appendix G of Standard 90.1 of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

Beginning December 31, 2009, before adopting a subsequent version of MBPS, DHCD must develop and publish elements and options in an appendix to MBPS that allow for the achievement of an additional 20% energy savings in new buildings above what is required in IECC for any year. Compliance with these standards is deemed compliance with MBPS.

Current Law: DHCD is required to adopt as MBPS the most recent version of IBC, along with applicable modifications authorized in Title 12 of the Public Safety Article. Within 12 months of the release of each new version of IBC, DHCD is required to review the new version and consider modifications. During this process, DHCD is required to accept and consider comments and hold a public hearing on any proposed modification. DHCD is prohibited from adopting any modification that is more stringent than IBC.

Background: IBC and IECC are products of the International Code Council. The International Code Council was established in 1994 as a nonprofit organization dedicated to developing a single set of comprehensive and coordinated national model construction codes. IBC has been adopted by all 50 states as well as thousands of local jurisdictions.

Efficiency in Building Codes

Maryland has adopted several energy efficiency and conservation related building code standards deemed important to reducing greenhouse gas emissions and lowering the cost of energy. IECC residential building code is compliant with the federal Energy Conservation and Production Act (ECPA), and has been adopted in 36 states, including Maryland. The American Society of Heating, Refrigerating and Air-Conditioning Engineers, a commercial building code, is compliant with ECPA and has also been adopted in 36 states, including Maryland. These codes generally regulate the leakage of heat through windows and wall materials, as well as the energy efficiency

of heating and cooling equipment. In addition, in implementing the Regional Greenhouse Gas Initiative (RGGI), the Maryland Department of the Environment is authorized to provide credits to members of the regulated community who undertake certain projects, including the creation of buildings meeting certain energy efficiency standards.

Efficiency and Performance Standards for State Buildings

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.

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 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, 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 University of Maryland at Shady Grove building, 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.

State Fiscal Effect: The current DGS professional services manual already references IECC and, therefore, the bill should have no fiscal impact on the department. Additionally, Chapter 124 of 2008 requires certain State and school buildings to be constructed to certain energy efficient specifications. However, Chapter 124 exempts buildings under a certain size, certain types of buildings, and buildings that receive a waiver from various State agencies. Therefore, the bill's presumably more stringent building code requirements will apply to new State building construction not currently covered by Chapter 124.

Although the DGS manual already considers IECC, the bill requires MBPS to achieve 30% improvement in energy savings from comparable buildings meeting the 2006 IECC by December 31, 2012, and a 50% improvement by December 31, 2019. To the extent that IECC does not accomplish this, State expenditures will increase beyond standard construction costs required by the DGS manual. These expenditures may be fully offset in future years as savings from lower energy costs are realized by various State agencies.

By requiring the adoption of IECC standards three months earlier under the bill, DHCD workload may increase but can likely be handled with existing resources.

DHCD expenditures may increase beginning in fiscal 2019 to hire additional personnel or to retain contractual assistance necessary to develop building efficiency standards that achieve the 50% energy savings requirement in the bill; this is necessary only if IECC standards do not already achieve this level of energy savings. Additionally, to the extent that the capital cost of housing construction increases, fewer dwelling units will be able to be funded with currently budgeted DHCD special and federal funds.

The Maryland Energy Administration may be tasked with training local code officials to implement the bill, but that this can be handled with existing resources.

Local Expenditures: Local housing code enforcement authorities will administer the bill's implementation and enforcement provisions by conducting building inspections and by certifying that builders are in compliance with all mandatory building code standards. In some jurisdictions this may be handled with existing resources. However, some jurisdictions may be required to expend additional funds related to inspection and enforcement training or for the cost of hiring additional personnel.

Small Business Effect: According to 2005 data from the U.S. Census Bureau, 88.9% of construction firms in Maryland had fewer than 20 employees and 98.1% had fewer than 100 employees. Legislative Services advises that this bill alters commercial and residential construction practices and may significantly increase the cost of procuring construction materials and otherwise increase the cost of doing business. These costs may be offset partially or fully by passing costs onto customers. According to DHCD, increased construction costs may limit the ability for developers to build affordable housing in Maryland.

Additional Comments: Provisions in the American Recovery and Reinvestment Act of 2009 condition receipt of federal funds from State Energy Program grants on adoption of the 2009 version of IECC and other building code standards, as well as compliance with other building efficiency provisions by 2017.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Carroll County, Harford County, City of College Park, Department of General Services, Department of Legislative Services

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Analysis by: Evan M. Isaacson

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