

Department of Legislative Services
 Maryland General Assembly
 2022 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 806 (Delegates Stein and Barve)
 Appropriations

Building Standards and Emissions Reductions – High Performance, State, and Local Government Buildings, State Operations, and Eligible Projects

This bill makes substantial changes to the State’s and local governments’ construction and maintenance of buildings to reduce greenhouse gas (GHG) emissions and generally enhance the environmental friendliness of State and local buildings. Broadly, it (1) modifies the types of buildings that qualify as “high-performance buildings; (2) requires the Department of General Services (DGS) to establish standards for the purchase of environmentally friendly construction materials and to implement the standards for the construction or renovation of State buildings; and (3) requires “covered” State and local government buildings to comply with an all-electric construction code and specified GHG emissions standards. **The bill generally takes effect July 1, 2022, except that provisions related to the use of environmentally friendly construction materials take effect July 1, 2024, and provisions related to “covered buildings” are contingent on the enactment of House Bill 831 of 2022.**

Fiscal Summary

State Effect: General fund expenditures increase by \$490,500 in FY 2023; future years reflect annualization, inflation, and ongoing costs. Capital construction costs increase by at least tens of millions of dollars for all agencies to retrofit existing buildings and meet building emissions standards, but a more reliable estimate is not feasible at this time. No effect on revenues.

(in dollars)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	490,500	331,900	339,300	346,400	353,800
Bond/PAYGO Exp.	-	-	-	-	-
Net Effect	(\$490,500)	(\$331,900)	(\$339,300)	(\$346,400)	(\$353,800)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease

Local Effect: Local capital expenditures increase significantly for local governments to comply with the bill’s requirements regarding building emissions, but a reliable estimate is not feasible. No effect on local revenues. **This bill imposes a mandate on a unit of local government.**

Small Business Effect: Meaningful.

Analysis

Bill Summary:

Buy Clean Maryland Act

“Global warming potential (GWP)” means the degree that a given mass of a chemical contributes to global warming over a given time period when compared with the same mass of carbon dioxide.

By January 1, 2024, DGS must establish a maximum acceptable GWP for each category of construction materials (including wood, cement, glass, steel, and more). DGS must base its calculation on specified factors and may (1) establish additional subcategories within each category; (2) establish an aggregate maximum acceptable GWP; and (3) consult with other State agencies, as specified. DGS must review the maximum acceptable GWP for each category every three years and may make adjustments, but it may not increase the GWP for any category.

Effective July 1, 2024, a solicitation for State capital construction (except capital maintenance projects, roads and bridges, and public schools) must specify the eligible materials to be used and the reasonable minimum usage thresholds below which the bill’s requirements do not apply. A solicitation may include a GWP for any eligible material that is lower than the acceptable GWP for that material, as determined by DGS. DGS must require a successful bidder or offeror to submit specified information for each eligible material, as specified. A contractor may not install any eligible materials until it submits a facility-specific environmental product declaration for that material, subject to exceptions.

By December 1, 2024, and annually thereafter, DGS must submit a report with specified information about the program to the General Assembly.

In administering the Buy Clean Maryland Act, DGS must strive to achieve a continuous reduction of GHG emissions over time.

All-Electric Construction and Building Emissions

A “covered building” is a State building and a local government building for which at least 50% of the construction costs are provided by the State. A covered building does not include a school.

The provisions summarized in this section are contingent on the enactment of House Bill 831 of 2022. All new construction of covered buildings must comply with an all-electric construction code established by the Maryland Department of Labor’s Building Code Administration. By January 1, 2025, any new or existing covered building with a gross floor area of at least 25,000 square feet must comply with building emissions standards established by the Maryland Department of the Environment (MDE). By January 1, 2030, these buildings must achieve a 50% reduction in net GHG direct emissions compared with specified baseline levels. By January 1, 2035, covered buildings must achieve net-zero GHG direct emissions.

By January 1 each year beginning in 2023, DGS must report on the status of GHG emissions for all State operations, including the University System of Maryland (USM). By January 1, 2025, DGS must develop and make available to the public an interagency climate action plan for achieving specified emissions from all State operations, including State-funded operations and USM.

High-performance Buildings

The bill makes several changes related to existing provisions governing “high-performance buildings” by modifying the types of buildings that meet the definition of a “high-performance building” and adding several new options and/or requirements for qualification. Among other things, there is a new option for schools and public safety buildings in rural areas, as specified.

Maryland Green Building Council

By December 1, 2022, the Maryland Green Building Council (MGBC) must (1) seek input from community and industry stakeholders on recommendations to implement the bill’s provisions and (2) report its recommendations to the General Assembly.

Current Law:

Greenhouse Gas Emissions Reduction Act

The Greenhouse Gas Emissions Reduction Act, originally enacted in 2009 and made permanent and expanded in 2016, was enacted in light of Maryland’s particular

vulnerability to the impacts of climate change. Under the Act, the State was required to develop plans, adopt regulations, and implement programs to reduce GHG emissions by 25% from 2006 levels by 2020 and to further reduce GHG emissions by 40% from 2006 levels by 2030; the 2030 reduction requirement terminates December 31, 2023. In February 2021, MDE finalized the Greenhouse Gas Emissions Reduction Act 2030 Plan.

Energy Efficiency and Conservation – High-performance Buildings

Chapter 124 of 2008 requires most new or renovated State buildings to be constructed as high-performance buildings, subject to waiver processes established by the Department of Budget and Management (DBM) and DGS. Chapter 124 defines a “high-performance building” as one that (1) meets or exceeds the Leadership in Energy and Environmental Design criteria for a silver rating or (2) achieves a comparable numeric rating according to a nationally recognized, accepted, and appropriate standard approved by DBM and DGS. Based on action approved by MGBC, DGS, and DBM, a “high performance building” also includes one that (1) earns a two Green Globes rating or better under the Green Building Initiative’s Green Globes rating system or (2) complies with MGBC’s supplement to the International Green Construction Code enacted in November 2014.

Only new or major renovations of State buildings that are at least 7,500 square feet in scope and are built or renovated entirely with State funds, community college capital projects that receive State funds, and new school buildings that receive State public school construction funds are subject to the high-performance requirement. A major renovation must also include replacement of several systems (heating, ventilation, air conditioning, electrical, and plumbing) and retain the building shell. Unoccupied buildings are exempt from the high-performance mandate, including warehouses, garages, maintenance facilities, transmitter buildings, and pumping stations.

The Maryland Green Building Council

MGBC, which is staffed by DGS, is charged with:

- evaluating current high-performance building technologies;
- recommending the most cost-effective green building technologies that the State might consider requiring in the construction of State facilities;
- providing recommendations concerning how to expand green building in the State;
- developing a list of building types for which green building technologies should not be applied; and
- establishing a process for receiving public input.

Energy Efficiency and Conservation – State Building Energy Efficiency Executive Order

In June 2019, Governor Lawrence J. Hogan, Jr., issued an executive order establishing a new energy savings goal for State government. Specifically, DGS, in cooperation with the Maryland Energy Administration, must manage a “Maryland Leads by Example” energy savings initiative that will oversee reducing, by 2029, the energy use of State-owned buildings by 10% compared to a 2018 baseline. Chapter 289 of 2020 codified the Governor’s executive order, including the goal for reducing energy use in State-owned buildings by 10%.

EmPOWER Maryland

In 2008, the General Assembly passed the EmPOWER Maryland Energy Efficiency Act, which set target reductions of 15% in per capita electricity consumption and peak demand, respectively, by 2015 from a 2007 baseline. Legislation in 2017 extended the program through its 2018-2020 and 2021-2023 program cycles and established a new annual energy savings goal of 2.0% per year, based on each electric company’s 2016 sales.

State Expenditures: The bill assigns numerous responsibilities for which DGS does not have sufficient staff or expertise. These include developing appropriate GWP’s for each eligible material, tracking and reporting on GHG emissions, and overseeing retrofitting of State buildings to meet new building emissions standards.

Therefore, general fund expenditures for DGS increase by \$490,462 in fiscal 2023, which accounts for a 90-day start-up delay from the bill’s July 1, 2022 effective date. This estimate reflects the cost of hiring three staff to perform the tasks described above. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses, including consulting costs to provide expertise on the bill’s more technical requirements.

Positions	3.0
Salaries and Fringe Benefits	\$198,433
Consultants	270,000
Other Operating Expenses	<u>22,029</u>
Total FY 2023 DGS Expenditures	\$490,462

Future year expenditures reflect full salaries with annual increases and employee turnover as well as annual increases in ongoing operating expenses. To the extent that House Bill 831 is not enacted and the provisions related to covered buildings do not take effect, costs may be less in the out years.

The bill’s requirements for State buildings to comply with an all-electric building code and meet specified building emissions standards in the out years likely means that existing

buildings must retrofit multiple building systems to comply with the bill's requirements. Any such costs (all funds) are expected to be substantial, likely in the tens or hundreds of millions of dollars over 15 years, but cannot be quantified at this time. It includes higher education expenditures by USM.

Small Business Effect: Small construction businesses that participate in the construction of State or local buildings or in retrofitting existing buildings likely benefit from a higher volume of work. They must comply with the bill's requirements regarding the use of environmentally friendly construction materials for public projects.

Additional Comments: Among other things, House Bill 831 requires MDE to develop building emissions standards for covered buildings that achieve a 20% reduction in direct building emissions by January 1, 2030, from (1) 2025 levels or (2) an alternative baseline of not earlier than 2020 if authorized under the building emissions standards developed under the bill. The standards must achieve net-zero direct building emissions by January 1, 2040. MDE must adopt regulations to implement these standards.

Additional Information

Prior Introductions: None.

Designated Cross File: None.

Information Source(s): Maryland Association of Counties; Maryland Municipal League; Public School Construction Program; Department of Budget and Management; Maryland Department of the Environment; Department of General Services; Department of Housing and Community Development; Department of Juvenile Services; Maryland Department of Labor; Department of Public Safety and Correctional Services; Department of State Police; Maryland Department of Transportation; Department of Legislative Services

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