

Department of Legislative Services  
Maryland General Assembly  
2022 Session

FISCAL AND POLICY NOTE  
First Reader

House Bill 831 (Delegates Stein and Barve)  
Environment and Transportation

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**Reducing Greenhouse Gas Emissions - Commercial and Residential Buildings**

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This bill requires the Maryland Department of the Environment (MDE) to adopt building emissions standards for “covered buildings” that achieve specified reductions in “direct building emissions.” The bill also establishes the Building Transition Implementation Task Force, which must study, make recommendations, and develop a plan to reduce greenhouse gas (GHG) emissions from the building sector. The bill also requires the Maryland Department of Labor (MDL), by January 1, 2023, to adopt by regulation the 2018 International Green Construction Code (IGCC) and adopt each subsequent version of the code within 18 months after it is issued, among other specified building code alterations.

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**Fiscal Summary**

**State Effect:** State expenditures (multiple fund types) likely increase (potentially significantly) as early as FY 2023 to meet the updated building standards and to retrofit covered buildings to meet the new emissions reductions standards. General fund expenditures for MDE and MDL increase significantly beginning in FY 2023 to develop the emissions standards, develop a plan for funding the retrofit of covered buildings, and to adopt new building standards and related requirements; however, a reliable estimate is not feasible, as discussed below. State revenues increase by an indeterminate amount from alternative compliance fees.

**Local Effect:** Although a reliable estimate of the bill’s impacts on local finances cannot be made at this time, the bill likely results in a significant increase in local expenditures. Local revenues are not directly affected. **This bill imposes a mandate on a unit of local government.**

**Small Business Effect:** Meaningful.

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## Analysis

### Bill Summary:

#### *Definitions*

“Covered building” means a commercial or multifamily residential building in the State that has a gross floor area of 25,000 square feet or more, excluding the parking garage area. “Covered building” does not include a building designated as a historic property under federal, State, or local law. “Direct building emissions” means GHG emissions produced on-site by a covered building.

#### *Building Emissions Standards and Regulations*

The bill establishes that it is the goal of the State that holistic retrofits, including weatherization measures and heat pump installations, be implemented in 100% of low-income households with minimal or no upfront costs for the resident by January 1, 2030.

MDE must 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.

To facilitate the development of building emissions standards, MDE must require the owners of covered buildings to measure and report direct emissions to MDE annually beginning in 2025.

MDE must adopt regulations to implement these provisions. The regulations must (1) provide maximum flexibility to the owners of covered buildings to comply with building emissions standards; (2) include an alternative compliance pathway allowing the owner of a covered building to pay a fee for building emissions that exceed the building emissions standards, and (3) to the extent authorized by law, include financial incentives recommended by the Building Energy Transition Implementation Task Force, which is established under the bill. MDE may not set an alternative compliance fee that is less than the social cost of GHGs adopted by MDE or the U.S. Environmental Protection Agency (EPA).

### *Building Energy Transition Implementation Task Force*

The bill establishes a Building Energy Transition Implementation Task Force. The Secretary of the Environment must designate a chair of the task force, and MDE must provide staff. Task force members may not receive compensation but are entitled to reimbursement for expenses, as specified.

The task force must (1) study and make recommendations regarding the development of complementary programs, policies, and incentives aimed at reducing GHG emissions from the building sector and (2) develop a plan for funding the retrofit of covered buildings to comply with building emissions standards. The plan may include recommendations related to (1) the creation of commercial tax credits or direct subsidy payments for building decarbonization projects; (2) the creation of financial incentives through EmPOWER and other State programs to support all aspects of the transition to electrified buildings; and (3) the use of options such as on-bill, low-interest financing to spread out the upfront costs associated with electrification retrofit upgrades.

By December 1, 2023, the task force must deliver its plan to the Governor and the General Assembly.

### *International Energy Conservation Code and Maryland Building Performance Standards*

By January 2023, MDL must adopt a modification to the International Energy Conservation Code (IECC) to provide that residential buildings that are constructed to an above-code certification program meet energy conservation requirements.

By January 1, 2023, MDL must adopt, as part of the Maryland Building Performance Standards (MBPS), (1) a requirement that new residential and commercial buildings meet all water and space heating demand without the use of fossil fuels and (2) electric-ready standards to ensure that new buildings are ready for the installation of solar energy systems, the installation of electric vehicle charging equipment, and building-grid interaction.

A local jurisdiction may grant a variance from the specified requirements for a building only if the local jurisdiction determines, in accordance with a cost-effectiveness test developed by MDL, that the incremental cost of constructing the building to comply with the requirements would be greater than the social cost of the GHGs that would be reduced by complying with the specified requirements. The cost-effectiveness test developed by MDL must (1) for the purpose of calculating the social cost of GHGs, use either the rate adopted by MDE or the rate adopted by EPA, whichever is greater, and (2) account for the projected utility cost rates and emissions rates based on the most recent final GHG emissions reduction plan adopted by MDE pursuant to current law. A building that

receives a variance in accordance with the cost-effectiveness test must still be required to comply with electric-ready standards, as specified.

A local jurisdiction may adopt any law, rule, or ordinance to impose penalties for noncompliance with any of the specified requirements, and the amount of any penalty may not exceed the alternative compliance fee established by MDE under the bill.

### **Current Law:**

#### *Maryland Building Performance Standards*

MDL is required to adopt, as MBPS, the most recent version of the International Building Code (IBC), including IECC, along with applicable modifications authorized in Title 12 of the Public Safety Article. Within 18 months of the release of each new version of IBC, MDL is required to review the new version, consider modifications, and adopt specified modifications related to energy conservation and efficiency. MDL is prohibited from adopting any modification that is more stringent than IBC, except that an energy conservation requirement may be more stringent than IECC. MDL and local governments may also adopt by regulation IGCC.

Each local jurisdiction must implement and enforce the most current version of MPBS and any local amendments to MPBS. In addition, any modification to MBPS adopted by the State after December 31, 2009, must be implemented and enforced by a local jurisdiction no later than 12 months after the modifications are adopted by the State.

#### *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 must further reduce 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.

#### *The Maryland Green Building Council*

The Maryland Green Building Council (MGBC), which is staffed by the Department of General Services (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 – 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 the 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 IGCC 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.

### *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 Fiscal Effect:**

#### *Maryland Department of the Environment*

MDE anticipates establishing a new unit to develop the required building emissions standards for covered buildings, which includes developing a standard and method for

affected entities to pay an alternative compliance fee. MDE also likely needs contractual services to support the task force. MDE estimates that its administrative costs resulting from the bill total nearly \$1.2 million in fiscal 2023, with ongoing costs of at least \$1.5 million annually. The Department of Legislative Services (DLS) cannot independently verify these estimates at this time; however, the bill establishes significant new responsibilities for MDE, and DLS advises that MDE likely incurs significant costs to hire staff and consultants.

The extent to which the alternative compliance fee established by MDE under the bill generates State revenues is unknown and is therefore not reflected in this analysis.

#### *Maryland Department of Labor*

MDL estimates that it needs to hire staff to address the additional workload anticipated from the bill, primarily resulting from the bill's requirements relating to adopting new standards as part of MBPS and developing the cost-effectiveness test to be used to evaluate requests for variances from the new standards. MDL estimates its costs total approximately \$234,200 in fiscal 2023, increasing to \$302,500 by fiscal 2027. While DLS concurs that the bill increases MDL's workload and likely necessitates additional staff, a reliable estimate of any increase in MDL's costs cannot be made at this time.

#### *Other Potential Costs*

DGS advises that the bill's provisions regarding commercial properties could result in State properties (managed by DGS) falling under the bill's provisions, requiring the department to hire two administrators to track and report GHG emissions, increasing general fund expenditures by approximately \$180,000 annually beginning in fiscal 2023. DLS notes that, with respect to the emissions standards, the bill does not specify if "covered buildings" include State-owned properties. To the extent State-owned buildings are required to retrofit to meet the bill's emissions standards, State expenditures (multiple fund types) likely increase significantly. State expenditures (multiple fund types) may also increase significantly to meet the updated building standards.

The Department of Housing and Community Development advises that the bill's provisions regarding emissions standards for commercial properties may affect larger commercial structures in which the department is a financing partner. However, an estimate of those costs is not available.

Except for MDE, State agencies that are designated members of the task force can participate with existing resources.

**Local Fiscal Effect:** The bill's new residential and commercial building standards may result in an increase in costs for local governments. For example, beginning in fiscal 2024, local governments may incur additional costs to (1) meet the updated MBPS under the bill (which must require that all new buildings meet water and space heating demands without the use of fossil fuels, unless a variance is granted) and electric-ready standards adopted by MDL for new buildings; (2) review building permit applications; (3) conduct cost-effectiveness tests; (4) review variance applications for new residential and commercial buildings; and (5) approve variances, among other things. Local jurisdictions likely need to hire staff to handle the additional requirements. Further, for locally owned buildings that meet the definition of covered building, costs may increase to retrofit existing buildings to meet the emissions standards that MDE must develop. These impacts are more likely to be felt in the out-years, since the emissions standards must begin achieving reductions in net GHG emissions beginning January 1, 2030.

**Small Business Effect:** Any small business that owns a covered building experiences costs, likely significant, to meet the bill's requirements. Some costs may be offset by financial incentives developed by the task force, but any estimate of those costs is not available at this time. Small businesses involved in the provision, installation, and maintenance of fossil-fueled water and space heating equipment are significantly affected by the bill's changes to MBPS and IGCC for new residential and commercial buildings. In addition, small businesses involved in construction or home rehabilitation (*e.g.*, architects, engineers, general contractors) could benefit from an increase in the demand for their services as a result of the bill.

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### **Additional Information**

**Prior Introductions:** None.

**Designated Cross File:** None.

**Information Source(s):** Anne Arundel, Charles, Frederick, and Somerset counties; cities of Frederick and Havre de Grace; Maryland Department of the Environment; Department of General Services; Department of Housing and Community Development; Maryland Department of Labor; Public Service Commission; Department of Legislative Services

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