

Department of Legislative Services
 Maryland General Assembly
 2024 Session

FISCAL AND POLICY NOTE
First Reader

Senate Bill 1023 (Senator Brooks, *et al.*)
 Education, Energy, and the Environment

Maryland Building Performance Standards – Fossil Fuel Use, Energy Conservation, and Electric– and Solar–Ready Standards (Better Buildings Act of 2024)

This bill requires the Maryland Department of Labor (MDL) by October 1, 2025, to adopt, as part of the Maryland Building Performance Standards (MBPS), specified fossil fuel use, electric- and solar-ready, and electric vehicle (EV) charging infrastructure requirements for new buildings that apply to building permits submitted and received by local jurisdictions on or after October 1, 2026. Local jurisdictions may, in limited circumstances, grant a waiver from the fossil fuel use standard, subject to specified requirements. The bill also requires MDL to adopt, as part of MBPS, regulations establishing energy conservation requirements for “covered buildings”. Local jurisdictions may adopt requirements more stringent than the bill’s requirements.

Fiscal Summary

State Effect: General fund expenditures increase by \$153,300 in FY 2025 and by \$88,900 in FY 2026 for MDL to hire temporary contractual staff. No effect on total capital spending, which is established annually through the capital budget process, but to the extent that project costs increase – potentially significantly – to comply with the bill, fewer projects are likely funded each year, as discussed below. Revenues are not affected.

(in dollars)	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	153,300	88,900	0	0	0
Net Effect	(\$153,300)	(\$88,900)	\$0	\$0	\$0

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

Local Effect: Potential significant increase in local expenditures, as discussed below. Local revenues are not directly affected. **This bill imposes a mandate on a unit of local government.**

Small Business Effect: Meaningful.

Analysis

Bill Summary:

Fossil Fuel Use, Electric- and Solar-ready, and Electric Vehicle Charging Infrastructure, Requirements for New Buildings

By October 1, 2025, as part of MBPS, MDL must adopt:

- a requirement that new buildings meet all water and space heating demands of the building without the use of fossil fuels;
- an electric-ready standard for new buildings that receive a waiver under the bill (discussed below);
- a requirement that new buildings be solar-ready (as defined by the bill) if (1) the building will have 20,000 square feet or more of continuous roof space, excluding the parking area and (2) will be 20 stories or less in height above grade plane; and
- a requirement that new buildings meet EV charging infrastructure requirements, as specified.

A building permit application submitted and received by a local jurisdiction on or after October 1, 2026, must meet the above requirements.

Waivers: A local jurisdiction may grant a waiver from the requirement for a building to meet all water and space heating demands without the use of fossil fuels for (1) emergency back-up power systems for new buildings and (2) new buildings, significant improvements, and additions specifically designed for occupancy by a commercial food establishment, laboratory, laundromat, hospital, or crematorium. A waiver granted under this provision must be limited to building systems and areas that cannot feasibly use energy generated from a source other than fossil fuels; financial considerations are not a sufficient basis for determining feasibility.

A building that is granted a waiver must (1) seek to minimize emissions from its fossil fuel use; (2) maximize health, safety, and fire protection; and (3) be required to comply with the electric-ready standards adopted under the bill. To ensure a waiver granted under the bill is still necessary, the waiver must be reviewed (1) each time MBPS are modified by MDL and (2) by the local jurisdiction that granted the waiver each time the local jurisdiction modifies its local amendments to MBPS in accordance with current law.

Regulations adopted under these provisions may authorize a local jurisdiction to waive the solar-ready requirements for a building on a specific finding that (1) incident solar radiation at the building site is less than 75% of incident solar radiation at an open site or (2) shadow studies indicate that 25% of a building's roof area will be in shadow.

Local Authority: These provisions may not be construed to prohibit a local jurisdiction from prohibiting the use of fossil fuels in buildings or adopting energy conservation and solar energy requirements for buildings that are more stringent than the requirements established by MDL under the bill.

Energy Conservation Requirements for New Construction of "Covered Buildings"

"Covered building" means a commercial or residential building with a gross floor area of 25,000 square feet or more, excluding the parking garage area.

For new construction only, MDL must adopt, as part of MBPS, regulations establishing energy conservation requirements for covered buildings. MDL may adopt regulations for periods after September 30, 2029, concurrent with updates to MBPS as required under current law. In developing the regulations, MDL must meet specified requirements that relate to estimating site energy use intensity achievement and calculating and adopting energy efficiency credits and performance thresholds.

The regulations must require *new residential buildings* less than four stories above grade plane to achieve, on average, specified site energy use intensity for building permit applications received from October 1, 2026, through September 30, 2035, and a net-zero energy balance for building permit applications received on or after October 1, 2035.

In addition, the regulations must require *all buildings* to achieve, on average, specified site energy use intensity for building permit applications received from October 1, 2026, through September 30, 2035, and a net-zero energy balance for building permit applications received on or after October 1, 2035.

A local jurisdiction may adopt energy conservation requirements for buildings that are more stringent than the requirements established by MDL under these provisions. If the local jurisdiction where a covered building will be located has adopted energy conservation requirements more stringent than these requirements, the building must be required to meet the more stringent requirements.

If the version of MBPS in effect at the time of a building permit application is received require the building to meet energy conservation requirements that are more stringent than the requirements established under these provisions, the building must be required to meet the more stringent standards.

Current Law:

Maryland Building Performance Standards

MDL currently incorporates by reference the International Building Code (2021 Edition), including the International Energy Conservation Code (IECC) (2021 Edition), with modifications, as MBPS. In general, the standards apply to all buildings and structures within the State for which a building permit application is received by a local government. Chapter 38 of 2022 (the Climate Solutions Now Act) required MDL to adopt IECC (2018 Edition) by January 1, 2023, and to adopt each subsequent version of IECC within 18 months after it is issued.

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.

Energy Conservation Building Standards

The Energy Conservation Building Standards under Title 7, Subtitle 4 of the Public Utilities Article generally require a builder of any building that is constructed after July 1, 1982, to certify under oath that the building is in compliance with the latest edition of the Energy Code. If a builder fails to comply with the energy conservation standards required for certification, the builder is liable to the first purchaser who either occupies or rents the building for an amount up to \$2,000 and for the cost of bringing the building into compliance with the energy conservation standards.

Electric Vehicle Parking Spaces in Newly Constructed Housing

If the construction of a new housing unit includes a separate garage, carport, or driveway for each residential unit, the construction of a new housing unit must include in or on the garage, carport, or driveway (1) one electric vehicle supply equipment (EVSE)-installed parking space capable of providing at least Level 2 charging or (2) one EV-ready parking space. Notwithstanding any other law, a county or municipality may require the construction of housing units to include a greater number of EVSE-installed parking spaces or EV-ready parking spaces than required under these provisions.

Study on Electric Vehicle Parking Spaces and Related Costs

Chapter 582 of 2023, among other things, required the Maryland Energy Administration (MEA) to study (1) the cost of requiring multifamily residential buildings to include EV-ready and EVSE-installed parking spaces; (2) the appropriate ratio of EVSE-installed

parking spaces to dwelling units in a multifamily residential building to support the State's greenhouse gas (GHG) emissions reduction goals; and (3) different options for paying for charging an EV at an EVSE-installed parking space at multifamily residential buildings, as specified. Chapter 582 also required MEA to include, in consultation with the Maryland Department of the Environment, estimates of the number of electric vehicles that will be on the road in the State in each year from 2024 through 2050, inclusive, after the State adopts the California Advanced Clean Cars II regulations. The report submitted as a result of that study may be read [here](#).

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 the Department of General Services (DGS).

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

- meets or exceeds the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) certification criteria for a silver rating;
- achieves a comparable numeric rating according to a nationally recognized, accepted, and appropriate standard approved by DBM and DGS; or
- complies with a nationally recognized and accepted green building code, guideline, or standard reviewed and recommended by Maryland Green Building Council (MGBC) and approved by DBM and DGS.

Based on a unanimous recommendation from MGBC, in 2017, DGS and DBM approved the use of the Green Globes rating system developed by the Green Building Initiative as an alternative to LEED silver.

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. Also, community college capital projects must be constructed or renovated as high-performance buildings.

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, SB 1023/ Page 5

respectively, by 2015 from a 2007 baseline. Legislation in 2017 extended the program through its 2018 through 2020 and 2021 through 2023 program cycles and established a new annual energy savings goal of 2.0% per year, based on each electric company's 2016 sales. That legislation also required the Public Service Commission (PSC) to conduct a related study by July 1, 2022. The Climate Solutions Now Act further increased the goal to 2.25% per year in 2025 and 2026 and to 2.5% annually thereafter. The Act also specified that the core objective of the reductions must include development and implementation of a portfolio of mutually reinforcing goals, including GHG emissions reduction, energy savings, net customer benefits, and reaching underserved customers. The Act included related administrative requirements in uncodified language.

Greenhouse Gas Emissions Reduction Targets and the Climate Solutions Now Act

The Climate Solutions Now Act made broad changes to the State's approach to reducing statewide GHG emissions and addressing climate change. Among other things, the Act accelerated previous statewide GHG emissions reductions targets originally established under the Greenhouse Gas Emissions Reduction Act by requiring the State to develop plans, adopt regulations, and implement programs to (1) reduce GHG emissions by 60% from 2006 levels by 2031 and (2) achieve net-zero statewide GHG emissions by 2045. The Act also established new and altered existing energy conservation requirements for buildings and increased and extended the EmPOWER Maryland program, as described above.

The Climate Solutions Now Act also requires MDL's Building Codes Administration to (1) develop recommendations for an all-electric building code for the State, including exemptions for particular industries (including life sciences, as specified), local conditions, and sectors deemed critical infrastructure vital to the interest of national security, as specified; (2) develop recommendations for the fastest and most cost-efficient methods to decarbonize buildings and other sectors in the State; (3) assess the availability of technology and equipment that will be needed to construct all-electric buildings in the State; (4) assess the impact of building electrification on workforce shortages; (5) develop recommendations regarding efficient cost-effectiveness measures for the electrification of new and existing buildings; (6) by January 1, 2023, report to PSC on the projected annual and peak summer and winter gas and electric loading impacts of electrification, as specified; and (7) consider recommendations for the inclusion of renewable, low-carbon biofuels, including biodiesel, during the State's transition to an all-electric building code, including an analysis of the impact on electric and gas rates, market availability, and environmental impact. By January 1, 2023, the Building Codes Administration was required to make an interim report of its findings to the Legislative Policy Committee (LPC). A final report of its findings and recommendations was due by December 1, 2023.

MDL submitted one report to satisfy the reporting requirement to PSC and the interim reporting requirement to LPC. That report can be read [here](#). MDL’s final report was submitted in February 2024 and can be read [here](#).

State Expenditures:

Maryland Department of Labor

MDL advises that it does not have the technical expertise to develop the new requirements for MBPS, particularly with respect to the requirements relating to estimating site energy use intensity and calculating and adopting energy efficiency credits and performance thresholds across all fuel types. MDL advises that two regular full-time positions are needed to implement the bill and to oversee the adoption of subsequent updates to MBPS every three years. However, the Department of Legislative Services advises that the additional workload resulting from the bill is most burdensome in the first few years as MDL adopts the new requirements for MBPS. Moreover, pursuant to current law, MDL must already adopt subsequent updates to MBPS every three years. Accordingly, the additional responsibilities under the bill can be performed by contractual employees instead.

Thus, general fund expenditures for MDL increase by \$153,294 in fiscal 2025, which accounts for the bill’s October 1, 2024 effective date. This estimate reflects the cost of hiring (1) one contractual regulatory and compliance engineer to perform research and evaluations and assist with the technical aspects of adopting the regulations and (2) one assistant Attorney General to support the regulatory process, hold public hearings, and seek stakeholder input. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses, including rent.

Contractual Positions	2.0
Salaries and Fringe Benefits	\$134,327
Operating Expenses	<u>18,967</u>
Total FY 2025 MDL Expenditures	\$153,294

Fiscal 2026 expenditures – which total \$88,942 – reflect (1) full salaries with annual increases and employee turnover; (2) ongoing operating expenses, adjusted for inflation; and (3) the termination of the contractual employees in mid-fiscal 2026, following the completion of the necessary changes to MBPS.

This estimate does not include any health insurance costs that could be incurred for specified contractual employees under the State’s implementation of the federal Patient Protection and Affordable Care Act.

State Building Construction

DGS advises that, as a result of Chapter 38, it created a policy that all new buildings and major renovations be designed and constructed to meet the energy demands of the buildings without the use of fossil fuels. As such, DGS advises that newly constructed State buildings already comply with the bill's electrification requirements (including the requirements relating to EV-charging infrastructure). However, DGS advises that its policy does not include "solar-ready" provisions, so any new State building must comply with the bill's solar-ready requirements.

Thus, the bill could result in an increase in project costs for new State-funded building construction projects to comply with the new MBPS standards and requirements to the extent they are not covered under DGS's existing policy (generally, the solar-readiness requirements). However, the bill has no effect on total spending under the capital budget, which is determined annually by the Governor and General Assembly through the capital budget process subject to debt affordability limits. As total capital spending is fixed each year, any increase in individual project costs – which could be significant – means that fewer projects receive funding.

Local Expenditures: The bill's requirements that new buildings (1) meet all energy demands without the use of fossil fuels (or meet electric-ready standards, as specified); (2) be solar-ready; (3) meet EV-charging infrastructure requirements; and (4) satisfy energy conservation requirements may result in a significant increase in costs for local governments. Specifically, beginning in fiscal 2026, local expenditures may increase to (1) meet the updated MBPS for the construction of new local government buildings; (2) enforce the updated MBPS for new buildings in the local jurisdiction; (3) grant waivers; and (4) and review past waivers each time amendments to MBPS are made. A reliable estimate of the increase in local expenditures is not feasible, as it depends on the number of future building construction projects, applications for waivers, and other unknown variables; however, the increase in local expenditures is likely significant.

Small Business Effect: Any small businesses involved in the provision, installation, and maintenance of heating, cooling, electrical, and solar systems for buildings are significantly affected by the bill's changes to MBPS for new buildings. In addition, any small businesses involved in construction (*e.g.*, architects, engineers, and general contractors) must comply with the new standards and requirements.

Additional Information

Recent Prior Introductions: Similar legislation has not been introduced within the last three years.

Designated Cross File: HB 1279 (Delegate Boafo, *et al.*) - Environment and Transportation.

Information Source(s): Howard and Prince George's counties; Maryland Association of Counties; Maryland Municipal League; University System of Maryland; Morgan State University; Interagency Commission on School Construction; Maryland Department of the Environment; Department of General Services; Maryland Department of Labor; Maryland Department of Transportation; Public Service Commission; Maryland Stadium Authority; Department of Legislative Services

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Analysis by: Thomas S. Elder

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