



P.O. Box 278
Riverdale, MD 20738

Committee: Education, Energy, and the Environment

Testimony on: SB 1023 “Maryland Building Performance Standards – Fossil Fuel Use, Energy Conservation, and Electric– and Solar–Ready Standards (Better Buildings Act of 2024)”

Position: Support

Hearing Date: March 4, 2024

The Maryland Chapter of the Sierra Club urges a favorable report for SB 1023, the Better Buildings Act of 2024 (BBA). SB 1023 would make a significant contribution to achieving Maryland’s 2045 climate goals of net zero emissions. This bill requires that, beginning in October 2026, all newly constructed buildings meet all of their heating and hot water demands without burning fossil fuels. There would be partial waivers, granted by local jurisdictions, for backup power in all buildings as well as full exceptions for commercial food establishments, laboratories, laundromats, hospitals, and crematoriums. If the building has parking it would need to be provide or be ready to electric vehicle (EV) charging. Buildings with over 20,000 square feet of roof area would, in most circumstances, need to be solar ready unless granted a waiver by local jurisdictions. New buildings over 25,000 square feet would also need to be highly energy efficient, with efficiency standards increasing over time. Local jurisdictions could adopt more stringent regulations. The Sierra Club strongly supports building electrification as a key way to meet our climate goals and urges a favorable report.

Nothing in the bill would require existing buildings to replace their fossil fuel burning furnace or water heater. Restaurants could continue to burn gas.

Additional Opportunities to Strengthen the Bill

As currently written, the BBA applies only to hot water and heating appliances. We would support an amendment to apply the BBA to all fossil fuel energy use in new buildings, including cooking and laundry equipment. We also suggest that the legislation apply not only to new buildings but also to buildings with significant improvements.¹

Building Electrification is Essential for Meeting Maryland’s Climate Goals

Fuel burned in buildings accounts for approximately 16% of greenhouse gas (GHG) emissions in Maryland. The electricity used in buildings accounts for an additional contribution to GHG pollution; however, this will decline over time as Maryland’s energy production becomes increasingly renewable-based. As Maryland works to achieve its climate goals to reduce GHG emissions by 60% (from 2006 levels) by 2031 and reach net-zero by 2045, the BBA will play a crucial role in meeting those targets.

¹ Significant improvement is defined in the bill to mean “any repair, reconstruction, rehabilitation, alteration, addition, or other improvement of a building or structure, the cost of which equals or exceeds 50% of the replacement cost of the structure before the improvement or repair is started.”

Maryland has already demonstrated significant interest in reducing GHG emissions in the buildings sector through building electrification. In its Climate Pollution Reduction Plan, released last December, the Maryland Department of the Environment called for a “zero-emission construction standard, to be implemented in 2027,” which would “[cover] all new residential and commercial buildings, increasing electrification of the building sector.” The legislature now has the opportunity with the BBA to establish a pathway to building electrification by eliminating fossil fuel consumption for heat and hot water in new buildings.

Building electrification of new homes, as mandated through the BBA, would have significant public health benefits. Currently close to half of homes in Maryland burn natural gas. Indoor gas leaks can increase levels of nitrous oxides, benzene, and particulates inside buildings, all of which generate health risk. The health risks from burning gas are most severe for underserved and overburdened communities. Inside our homes, gas leaks increase the likelihood that children will develop asthma. One study showed that children in homes with gas stoves have a 42% higher risk of asthma. Benzene is a known carcinogen.

Requiring proactive building electrification for new construction also makes economic sense. In the absence of BBA, new buildings built between 2026 and 2045 would continue to rely on fossil fuel infrastructure.² For Maryland to reach its statutorily-required climate goals, these buildings would then need to be retrofitted with new electric appliances before the fossil fuel burning appliances reach the end of their lives, at significant expense. The BBA provides us with a roadmap for how to avoid these additional retrofit expenses. Research shows that new buildings can be constructed without burning fossil fuels at roughly the same cost (+0%-2%) as buildings that use fossil fuels.³

The BBA Act Would Facilitate EV and Solar Deployment

SB 1023 would also support Maryland in achieving its transportation and clean energy climate goals through the provisions on EV charging and solar-ready roofs. As Maryland has adopted a mandate for 100% of light duty vehicle sales to be EVs by 2035, the EV charger-related requirements will help Maryland achieve its goals for EV deployment. The BBA’s provisions that certain larger new buildings would need to be solar ready⁴ will support additional solar deployment in line with Maryland’s statutory target of achieving 14.5% of the state’s electricity consumption from solar generation by 2030 and Governor Moore’s commitment to achieving 100% clean energy by 2035.

The BBA Will Reduce Pressure on the Electric Grid and Reduce Energy Bills

Maryland must also pursue increasing energy efficiency, in addition to building electrification, to reach its climate goals. The bill calls for increasing energy efficiency standards over time for

² New residences add 0.7% to total Maryland residences each year. Between 2026 and 2045, newly constructed homes would likely account for almost 11-15% of Maryland’s homes.

³ An Assessment of Electrification Impacts on the Maryland Electric Grid, Brattle Group, December 29, 2023, page 3, <https://www.psc.state.md.us/wp-content/uploads/MD-PSC-Electrification-Study-Report.pdf>

⁴ The solar-ready roof provisions would apply to larger new buildings with at least 20,000 feet of roof space, a height of less than 20 stories, and appropriate roof angle to receive solar.

new buildings of greater than 25,000 square feet. Buildings over 25,000 square feet permitted on or after October 1, 2026 would have lower energy bills than residences burning fossil fuels. New residential buildings permitted in 2032 would need to be twice as efficient as buildings permitted in 2026. This will reduce the load on the electric grid and reduce residential energy bills.

In summary, SB 1023, the BBA, will contribute to achieving Maryland's climate goals by:

- 1) Reducing GHG emissions in new buildings through building electrification;
- 2) Ensuring that owners of new buildings would not need to replace fossil fuel burning equipment before the end of its life to meet the state's climate goals;
- 3) Facilitating the deployment of EVs by providing charging capabilities;
- 4) Helping Maryland reduce the climate impact of its electric system by enabling the deployment of additional solar; and
- 5) Increasing energy efficiency over time in new buildings over 25,000 square feet.

The Sierra Club Maryland urges approval of this legislation.

Christopher T. Stix
Clean Energy Legislative Team
Stixchris@gmail.com

Mariah L. Shriner
Climate Campaign Representative
Mariah.Shriner@MDSierra.org

Josh Tulkin
Chapter Director
Josh.Tulkin@MDSierra.org