



SIERRA CLUB

MARYLAND CHAPTER

P.O. Box 278
Riverdale, MD 20738

Committee: Environment and Transportation

Testimony on: HB 0973, Maryland Building Performance Standards – Fossil Fuel Use, Energy Conservation, and Electric- and Solar-Ready Standards (Better Buildings Act of 2025)

Position: Support

Hearing Date: February 26, 2025

The Maryland Chapter of the Sierra Club strongly supports building electrification as a key pathway to meeting the State's climate goals and protecting the health of Marylanders and in turn strongly urges a favorable report on HB 973, the Better Buildings Act (BBA). The bill requires that:

- Newly constructed buildings and buildings with significant improvements meet all of their space heating, hot water, and laundry demands without burning fossil fuels.
- New buildings or significant improvements with over 20,000 square feet of continuous roof area generally be solar ready unless granted a waiver by local jurisdictions.
- New buildings under 35,000 square feet meet increasingly stringent energy efficiency standards.

Local jurisdictions could adopt additional regulations. The bill also provides waivers for special circumstances.

BBA Can Help Meet Maryland's Climate Goals and Protect Marylanders' Health

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 non-emitting. 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.

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 gas for appliances. Use of indoor gas appliances can increase levels of nitrous oxides, benzene, and particulates inside buildings through regular use or gas leaks, all of which generate health risk. Benzene is a known carcinogen. Inside our homes, gas appliances 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.

BBA is Aligned with Other Maryland Policies and Makes Economic Sense

Maryland has already demonstrated support for reducing GHG emissions in the buildings sector through building electrification. The Maryland Department of the Environment (MDE) has implemented Building Energy Performance Standards (BEPS), which require increasing

electrification and energy efficiency in buildings over 35,000 square feet. As called for in the December 2023 Climate Pollution Reduction Plan and Governor Moore's June 2024 Executive Order¹, MDE is developing Zero Emissions Heating Equipment Standards and Clean Heat Standards that will reduce emissions from residential and commercial buildings as space and water heating equipment is replaced at the end of its useful life. The legislature now has the opportunity with the BBA to establish an additional pathway to building electrification by eliminating fossil fuel consumption for heat and hot water in all new buildings and buildings with significant improvements².

Requiring building electrification for new construction makes economic sense. In the absence of BBA, some new buildings built between 2026 and 2045 would rely on fossil fuel infrastructure.³ For Maryland to reach its statutorily-required climate goals, these buildings would, in all likelihood, 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 would set Maryland on a path that avoids these retrofit expenses. Research shows that new buildings can be constructed without burning fossil fuels at roughly the same or lower cost (+0%-5%) as buildings that use fossil fuels.⁴

The BBA Act Would Facilitate Solar Deployment

HB 973 would also support Maryland in achieving its clean energy goals through the provisions which require that roofs on larger new buildings be solar ready.⁵ This provision will spur 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's Efficiency Requirements Will Also Reduce Energy Use

Maryland must also pursue increasing energy *efficiency* for new buildings, in addition to electrification, to reach its climate goals. HB 973 would increase energy efficiency standards over time for new buildings built between 2027 and 2045. Buildings under 35,000 square feet permitted on or after March 1, 2027 would need to deliver increased energy efficiency, lowering ongoing energy costs to consumers and businesses. New residential buildings permitted on and after March 2033 would need to be close to three times as efficient as buildings permitted in

¹ 01.01.2024.19, Leadership by State Government: Implementing Maryland's Climate Pollution Reduction Plan

² 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."

³ 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.

⁴ In a nine-city study, RMI found lower upfront costs for electrification in new construction when the upfront cost of gas line connection is included: <https://rmi.org/insight/the-economics-of-electrifying-buildings-residential-new-construction/>. The Maryland Building Decarbonization Study early results (July 2021) also found that all-electric new construction was cheaper than mixed-fuel construction for residential homes in Maryland.

https://mde.maryland.gov/programs/air/ClimateChange/MCCC/Documents/MWG_Buildings%20Ad%20Hoc%20Group/Maryland%20Buildings%20Analysis%20Early%20Results%20E3%20Presentation%2007132021.pdf

⁵ The solar-ready roof provisions would apply to larger new buildings with at least 20,000 feet of continuous roof space, a height of less than 20 stories, and appropriate roof angle to receive solar.

2026. These efficiency levels are economic and practical today and will reduce both the load on the grid and energy bills.

Additional Opportunities to Strengthen the Bill

As currently written, the BBA applies only to laundry, hot water, and space heating appliances. We would support an amendment to apply the BBA to all fossil fuel energy use in new buildings, including cooking equipment.

Conclusion

In summary, HB 973 will contribute to achieving Maryland's climate goals by:

- Reducing GHG emissions in new buildings;
- Ensuring that owners of new buildings would not face costly retrofit costs in the future to meet the state's climate goals;
- Facilitating the deployment of rooftop solar with a solar-ready standard for large new buildings;
- Increasing energy efficiency in new buildings under 35,000 square feet.

The Sierra Club Maryland strongly urges approval of this legislation.

Chris Stix
Clean Energy Legislative Team
StixChris@gmail.com

Josh Tulkin
Chapter Director
Josh.Tulkin@MDSierra.org