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Committee: Education, Energy & the Environment Committee

Testimony on: SB1023, "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

Members of the Committee,

RMI is a nonpartisan, nonprofit organization working to transform global energy systems and secure a clean, prosperous, zero-carbon future for all. RMI supports SB1023/HB1279, the Better Buildings Act, and requests a favorable report from the committee.

Passing this bill will help Maryland to achieve its climate goals and advance other key outcomes, including improved health, lower energy bills, and increased resiliency. As described further below, this bill will advance and align with the following factors:

- 1. Maryland's ambitious climate goals and the public interest
- 2. The state's current and future budgetary realities
- 3. A feasible energy transition for the electric grid
- 4. Maryland's Building Energy Performance Standards (BEPS)
- 5. The expertise and authority of the Building Codes Administration (BCA)

First: The BBA aligns with Maryland policy goals and the well-being of Marylanders. Through the Climate Solutions Now Act of 2022, Maryland has committed to a 60% reduction in emissions by 2031 and a net-zero economy by 2045. Maryland's Climate Pathway Report outlines how to achieve these goals, including through an additional reduction of 1.6 MMTCO2e from buildings by 2031. The least-cost, easiest step to decarbonize new construction is to stop meeting energy needs with methane, whether fossil or biogenic. The Maryland Building Decarbonization Study of 2021 found that across all three scenarios analyzed, all-electric construction would be the least-cost option for new single-family home decarbonization. RMI analysis of the Maryland construction landscape suggests that all-electric new homes are already less costly to build than homes with gas infrastructure. Maryland policy roadmaps, including the Pathway Report and the Maryland Commission on Climate Change's 2021 Building Energy Transition Plan, reflect these findings. The BBA would take a major step toward fulfilling a key recommendation from these roadmaps: an all-electric, or zero-emission, construction code.

The benefits do not end with fulfillment of Maryland climate goals. Strong energy codes are a win across the board: they reduce bills, protect our health, keep people safe in extreme weather, and improve equity in outcomes.

- Reducing bills: <u>Decades of analysis</u> from the US Department of Energy (DOE) and National
 Laboratories shows that energy codes cost-effectively reduce energy bills. According to the <u>US</u>
 <u>Energy Information Administration</u>, more than 1 in 4 Americans—and nearly 1 in 2 low-income
 Americans—struggle to pay their energy bills, and 1 in 5 Americans forego basic necessities like
 food or medicine to pay their energy bills.
- Protecting health: Burning fossil fuels creates pollution that harms human health. Outdoor air
 pollution from combustion inside buildings <u>led to the early deaths of over 600 Marylanders and
 over \$7 billion in statewide health impacts</u> in 2017 alone. Communities of color bear an alarming
 and disproportionate share of the health and pollution burdens from fossil fuels in buildings. A
 recent study found that <u>people of color in Maryland are exposed to 60% more outdoor PM_{2.5}</u>
 pollution from residential gas combustion as white people.
- Keeping people safe in extreme weather: There is a growing body of evidence that efficient, low-emission buildings are not only critical climate solutions: they also increase resilience to current and future climate change-fueled extreme weather. A joint study of US DOE and three National Laboratories found that more efficient buildings extend how long people can remain safely inside buildings during extreme heat and cold. Energy efficiency literally saves lives thanks to this benefit. National Ocean and Atmospheric Administration data shows that Maryland's average temperatures have already increased about 2°C or nearly 4°F from pre-industrial temperatures. The frequency and danger of heat waves has also increased across the US. Highefficiency buildings will protect Marylanders from these escalating risks in coming decades.
- Improving equity: In addition to reducing the inequitable outcomes described above, energy codes differ from voluntary programs such as LEED certification, utility rebates, and tax incentives because they set requirements applying to *all* new construction—including buildings in disadvantaged communities and affordable housing. The benefits of energy efficiency should be ensured for all Marylanders, not reserved for a lucky or privileged few.

Second: The BBA would deliver these benefits while posing **no or minimal direct costs to the state government and avoiding larger mid- to long-term costs**. While

Should the BCA require additional resources to implement BBA's later efficiency targets or its requirement for efficiency levels to be unbiased with respect to fuel type, two federal funding streams collectively worth over \$1.2 billion are available for large grants: the Resilient and Efficient Codes Implementation program under the Infrastructure Investment and Jobs Act and the Technical Assistance for the Adoption of Energy Codes program under the Inflation Reduction Act. Additionally, in-kind assistance is available through the US DOE's Energy Codes Technical Assistance Network and the National Energy Codes Collaborative.

Third: The BBA would keep a lid on both infrastructure costs for utilities and energy bills for Maryland ratepayers because, as report prepared for the Maryland Public Service Commission and General Assembly recently found, efficient all-electric new construction will result in **lower peak electricity demand** than business-as-usual new construction. High peak demand can cause utilities to maintain or build new "peaker plants," often methane gas-fired rapid-cycling power plants that are particularly costly to ratepayers. Peak demand is a key factor driving the structure and function of Maryland's economy, and reducing it produces win-win-wins for utilities, developers, and ratepayers. If new construction were highly efficient, utilities would be less likely to become a bottleneck to project

timelines due to difficulties building infrastructure to support large new loads. In turn, new developments would be more likely to be built on time and fixed charges on ratepayer bills would be lower.

Fourth: The BBA aligns with the proposed **Building Energy Performance Standard (BEPS)** rule. Building owners deserve clear guidance on how to align new buildings with BEPS. In current law and rule, there is no relationship between BEPS and Maryland's energy code, so an owner runs the risk of purchasing a brand-new building that will need costly retrofits to comply with BEPS in just a handful of years. The BBA would help buildings permitted in 2026 comply with the 2040 final standards of BEPS from day one. Not only would the BBA ensure new buildings do not emit greenhouse gas emissions: it would also ensure that energy codes require site energy use intensity (site EUI) outcomes in line with BEPS starting in 2026. RMI would be happy to provide a memorandum detailing how the BBA is aligned with and supports BEPS upon request.

Fifth: The BBA aligns with **the mandate and authority of the Building Codes Administration:** it sets requirements for new construction. Site energy use intensity, or EUI, is a commonly used metric for setting efficiency goals and its meaning is simple: it is the annual energy used per square foot in a building. In other words, regulating site EUI is regulating efficiency: it is what state and federal law expressly authorize the BCA to do. By following the mandates of the Maryland Public Safety article and case law relevant to Maryland, BCA can exercise its authority to implement the BBA lawfully and in alignment with Maryland policy goals.

All told, the BBA is necessary, commonsense policy to keep Marylanders safe, healthy, and comfortable in their homes and workplaces while addressing the immediate threat of climate change. RMI looks forward to the bill's passage and swift implementation, and requests a favorable report from the committee.

Signed,

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