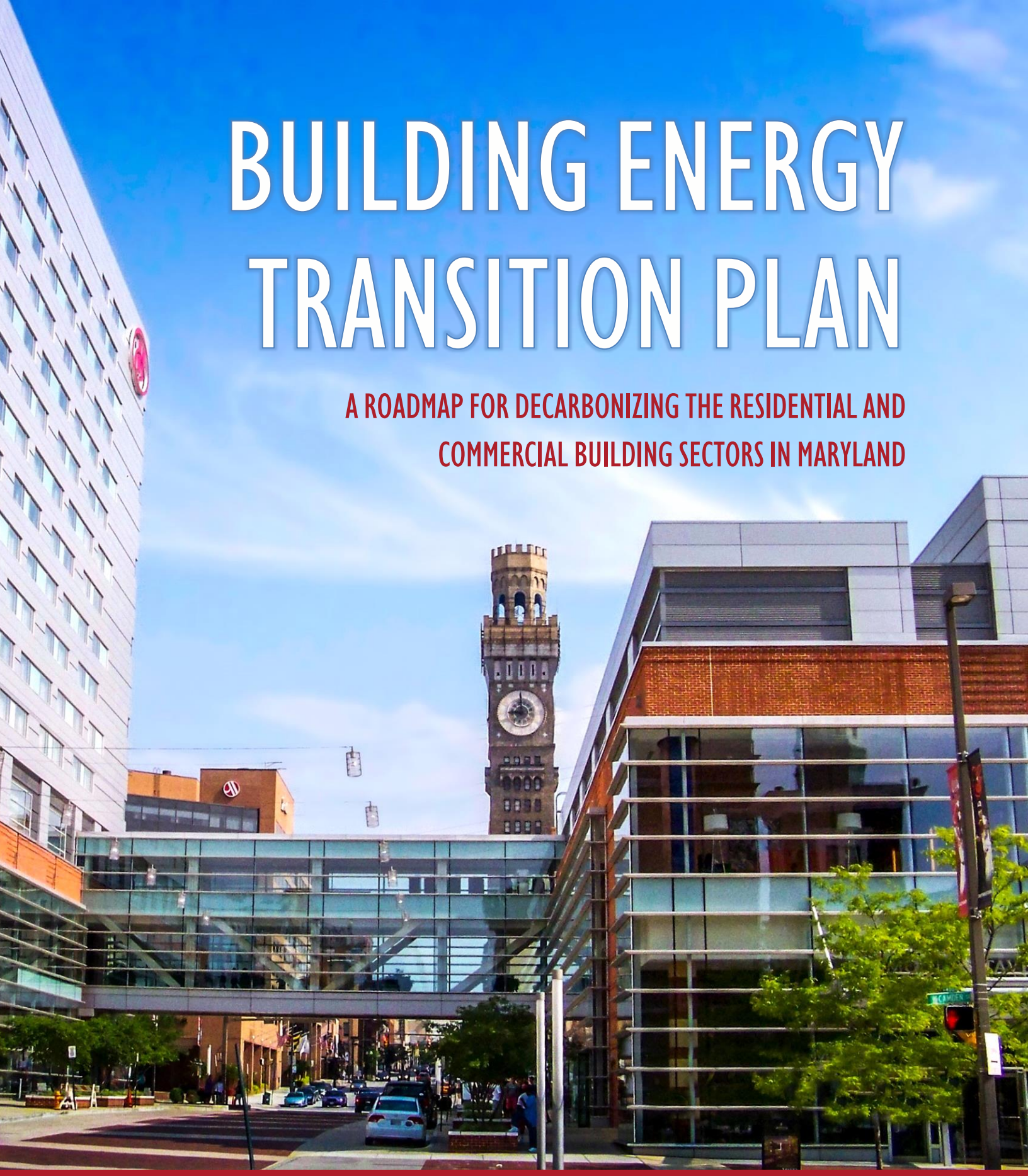

BUILDING ENERGY TRANSITION PLAN

A ROADMAP FOR DECARBONIZING THE RESIDENTIAL AND COMMERCIAL BUILDING SECTORS IN MARYLAND

MARYLAND COMMISSION on **CLIMATE CHANGE**

Ben Grumbles, Chair

Core Recommendations

Each of the Core Recommendations correspond with a critical component of the Building Decarbonization Roadmap for Maryland (above), which presents a suite of policies that would collectively guide Maryland's residential and commercial building sectors to nearly achieve net-zero emissions by 2045.

1. Adopt an All-Electric Construction Code

The General Assembly should require the Maryland Building Code Administration to adopt a code that ensures that new buildings meet all water and space heating demand without the use of fossil fuels (allowing for the use of electric heat pumps, solar thermal, and other existing and potential clean energy solutions) and are ready for solar, electric vehicle charging, and building-grid interaction. This code shall apply to all new residential, commercial, and state-funded buildings beginning as early as possible but no later than 2024. Legislation should ensure that the Building Code Administration or appropriate local jurisdictions have authority, resources, and direction to effectively enforce compliance with the code. The Building Code Administration shall also develop and implement training courses on the benefits and challenges of all-electric and electric-ready buildings for building developers, realtors, real estate appraisers, and lenders.

The Building Code Administration shall allow exemptions for building types for which compliance with these requirements is not feasible. The Building Code Administration shall also develop a cost-effectiveness test to allow building projects to seek variances to code requirements while maintaining electric-ready standards. The cost-effectiveness test shall include the federal Social Cost of Carbon. If a new commercial building receives a variance and produces greenhouse gas emissions on-site, then it would participate in the Building Emissions Standard (proposed herein) and follow its own tailored plan for reaching net-zero emissions.

Discussion: A recommendation to adopt an all-electric construction code was supported by the MWG in 2020 but the MCCC wanted to receive this Building Energy Transition Plan before voting on the measure. Studies including E3's Maryland Buildings Decarbonization Study and RMI's The New Economics of Electrifying Buildings add to a body of work demonstrating that all-electric new homes have lower construction and energy costs than mixed-fuel homes. This means that all-electric new homes help improve housing affordability and local air quality while reducing greenhouse gas emissions in Maryland.

For commercial construction, all-electric design can increase construction and/or energy costs, which is why a test is proposed to help commercial building developers identify cost-effective clean energy solutions or receive a variance from the all-electric code. Residential building projects would also be able to seek variances using the cost-effectiveness test.