

12 February 2024

Delegate Marc Korman Chair, Environment and Transportation Committee Room 251 House Office Building Annapolis, Maryland 21401

Re: Recommendations for House Bill 0210

Maryland Building Performance Standards – Fossil Fuel Use and 3 Electric–Ready Standards

Dear Chairman, Korman and members of the Environment and Transportation Committee:

On behalf of AIA Maryland and the nearly 2,000 Architects we represent, we as an organization support the HB0210 moving the requirement for all new buildings to move toward all electric-ready standards. To make good on the goals set by the Climate Solutions Now Act set in 2022, we cannot get to the point of reducing carbon emissions by 60 percent of 2006 levels by 2031 and down to net zero emissions by 2045 without a move toward electrification of buildings in a way this bill has established. The Climate Solutions bill passed in 2022 set a size threshold of 35,000 sf to require electrification, this legislation simple dials the building size down to be more inclusive.

In most commercial and residential structures, the choice of a building heating/cooling system is one that is a 20 year or longer commitment, making the right choice now, allows us to make progress toward achieving our climate solutions goals and reduce greenhouse gas emissions from a sector that accounts for about 13% of Maryland's emissions. In some instances, main pieces of mechanical equipment can be in place for 40+ years with good maintenance and a bit of luck. If choices are made today to design for a system that relies on a carbon-based fuel, a building owner would likely need to replace their equipment before the end of its anticipated useful life, To move their building toward net zero emissions by 2045. An owner's choice to proceed with fossil fuel-based equipment today would make it very challenging to meet the 2031 climate change target of 60% emissions reduction from buildings. Most commercial water heaters have a shorter lifecycle of 10-15 years, which is still beyond the first target of the Climate Solutions legislation and heat pump water heaters. We do not think it is wise to ask owners to replace equipment before it's useful life, so this legislation sets them on a path that drives that decision to be at the right time in planning a new building. Setting clear expectations as established in this legislation provides objectives that will drive owner decisions that enable them to reach emission reduction goals in a fashion that aligns with new construction or replacement of aging existing equipment.

The efficiency of equipment, including air-source and ground-source heat pumps has improved significantly to reduce power required to operate the equipment. Additionally, the efficiency of the equipment to operate in low temperatures has also expanded. In the past 4 years, well more than 50,000 air-source heat pumps have been installed in residential properties in Massachusetts. The extreme cold temperatures the 2022 winter in the

Boston area were below temperatures ever recorded in Maryland and almost all residents in Massachusetts indicated that they were able to maintain their comfortable indoor temperatures despite the cold.

This legislation sets energy and carbon reduction goals where they need to be. There are exceptions outlined that enable unique uses and other exceptions to continue to use carbon-based fuel sources, however there should be a continued focus on reducing carbon emissions from the fossil fuel sources. Let's help Maryland achieve its climate goals. We ask for your support of HB 0210 to help us meet our state climate goals and to help owners make choices that align with those goals at the right time.

Sincerely,

Chris Parts, AIA

AIA Maryland, Director, and Past President