

6 March 2023

Delegate Kumar Barve
Chair, Environment and Transportation Committee
Room 251
House Office Building
Annapolis, Maryland 21401

Re: Letter of Support for HB 1134
Maryland Building Performance Standards – Fossil Fuel Use and Electric-Ready Standards

Dear Chairman Barve 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 House Bill 1134 moving the requirement for all new buildings to move toward all electric-ready standards. In order 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 last year set a size threshold of 35,000 sf to require electrification, this legislation simply dials the building size down to be more inclusive.

In most commercial and even residential structures, the choice of a building heating/cooling system is one that is a 25 year or longer commitment, making the right choice now, allows us to make progress toward achieving our climate solutions goals. 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, in order to move their building toward net zero emissions by 2045. 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.

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 3 years, 50,000 or more air-source heat pumps have been installed in residential properties in Massachusetts. The extreme cold temperatures this past 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.

We believe this legislation sets energy and carbon 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. We ask for your support of HB 1134 to help us meet our state climate goals and to help owners make choices that align with those goals at the right time.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Parts', with a long horizontal line extending to the right.

Chris Parts, AIA, LEED AP
Director and Past President