

September 20, 2021

Patrick Woodcock, Commissioner
Massachusetts Department of Energy Resources
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Dear Commissioner Woodcock and members of the Energy Efficiency Advisory Council,

We are disappointed that the PAs have not yet submitted their revised Draft 3-Year Plan. We see the 9/22 meeting agenda includes discussion of Key Programmatic Updates and Goals and Budgets, but we don't see any supporting documents posted. We need to see this revised draft before we can make meaningful comments and it feels as if time is running short. We are very concerned that this revised Draft 3- Year Plan will not include adequately funded Deep Energy Retrofit programs. We are convinced that two very ambitious retrofit programs are necessary to meet the goals of the Draft CECP.

The Draft CECP calls for 20% of the state's building stock to receive deep energy retrofits (DERs) by 2030. Prorated over 8 years from 2022-2030, that is 50,000 buildings per year! This will not be possible without aggressive and generous Mass Save programs to kick-start the market transformation required. We have proposed DER programs funding up to \$35,000/unit for certified Passive House DER's. This should be rolled out as a Pilot Program to incentivize property owners to take on the challenges involved in Passive House retrofits. The PAs should look at the NYSERDA Retrofit Program as an example.

The Draft CECP also calls for the installation of heat pumps in approximately 1M households and 300-400 million SF of commercial real estate. It says that "it will be very advantageous to simultaneously perform a deep energy efficiency upgrade to the building envelope – its windows, siding insulation and roofing." We agree but would add air sealing to the list of envelope improvements and substitute "critical" in place of "advantageous". "Critical" because, without these envelope improvements, heat pump conversions in most existing buildings will result in marginal performance and increased annual heating costs and very unhappy homeowners. This is also a serious equity issue: we cannot burden low income customers with increased heating bills as we strive to decarbonize our existing building stock.

The "deep energy efficiency upgrade to the building envelope" is not well defined but it clearly goes beyond the typical Mass Save weatherization programs. How much less might it cost to complete this type of upgrade as compared to a Passive House DER? We have so little experience with these types of retrofits that it is hard to say, but we need to figure it out quickly. The PAs should develop a building envelope efficiency upgrade pilot program and fund it at a minimum of \$15,000 per unit to incentivize property owners to take on the challenge of serious envelope upgrades in conjunction with the installation of heat pumps.

Without such incentive programs, the goals of the CECP will simply not be met. We urge the EEAC to direct the PAs to create these two types of retrofit programs. This 3-Year Plan takes us to 2025, halfway to the 2030 goals of the CECP – we must make significant progress even if it requires that we dramatically depart from past programs and cost effectiveness tests.

Thank you

Hank Keating, AIA President, Passive House Massachusetts