July 13th, 2021

Patrick Woodcock, Commissioner  
Massachusetts Department of Energy Resources  
100 Cambridge Street, Suite 1020  
Boston, MA 02114  
ma-ceac@mass.gov

Re: Deep Energy Retrofit Market Transformation Program

Dear Commissioner Woodcock and members of the Energy Efficiency Advisory Council:

Mass Save is a critical resource for affordable housing owners who operate in highly resource-constrained environments. Thanks to the hugely successful Mass Save Passive House New Construction Program, the multifamily housing sector has taken significant steps toward high-performance, low-carbon new construction projects. More specifically, the Passive House Incentive Program has propelled over 100 projects consisting of 8,000 units toward superior energy savings. While tremendous progress has been made to reduce emissions from new construction projects, retrofitting existing buildings to super low-carbon levels of performance is not currently happening. Deep energy retrofits in existing buildings are very challenging - existing conditions vary widely, the building science can be complex, most will require occupied building retrofits, electrification presents energy cost savings challenges, and current installation costs are high. As such, these projects are not currently happening. And in the absence of new incentive programs, existing building owners will be unable to make the type of low-carbon investments needed for the State to achieve its decarbonization goals. To complement the successful Passive House Incentive Program for new construction, we need a new, aggressive retrofit program for multifamily housing, including both 1-4 family and 5+ unit market rate, mixed income, and low-income communities.

Now is the time for us to transform existing buildings toward a decarbonized future. As a member of the multifamily housing industry, I am writing to strongly urge the EEAC and PAs to build on the success of the Passive House New Construction Program through the creation of a new Deep Energy Retrofit ("DER") market transformation program for multifamily housing. The DER Program will be essential for transforming our existing buildings into healthy, durable, comfortable, and energy efficient communities.

Deep Energy Retrofit (DER) Market Transformation Program:

We recommend the DER Program include the following:

- Meet Passive House certification standards OR not exceed a site Energy Use Intensity (EUI) of 30 kBtu/ft²/year and an air tightness of 2.0 ACH50;
- Utilize heat pump-based technology for space heating and cooling;
- Utilize energy or heat recovery ventilation technology;
- Fully electrify domestic hot water systems;
- Include serious consideration of material decisions related to embodied carbon.

The new DER Program should mirror the Passive House New Construction Program, but the incentive amounts per unit must be substantially higher as suggested below:
• Update the 2011 Residential and Low-Income Non-Energy Impacts Evaluation Report⁴ to reflect results of the *Low-Income Multifamily Health- and Safety-Related NEIs Study (TXC 50) Preliminary Findings Report* that was completed by NMR Group and Three³, Inc. on 10/15/2018.

• Update the Massachusetts Technical Reference Manual (TRM)⁵ to reflect the full estimated useful life (EUL) of all eligible measures – many 30 or 50 years – in multifamily housing. Specifically, we believe the following measures should be revisited:
  o Measure Code IE-BS-I, Building Shell – Insulation – IE Multi-Family (25 years)
  o Measure Code IE-BS-AS-MF, Building Shell – Air Sealing – IE Multi-Family (15 years)
  o Measure Code IE-BS-W, Building Shell – Weatherization (20 years)

Kickstarting deep energy retrofits across a diverse multifamily housing sector is the single most important effort that Mass Save can undertake to set the stage for the work needed to retrofit tens of thousands of units across the Commonwealth over the next 10 to 20 years. In short, it is critical to the State’s ability to meet the 50% reductions of greenhouse gas emissions legally required by the Climate Bill by 2030.

Thank you for your consideration,

Sincerely,

Jeanne DuBois
Executive Director
Southwest Boston CDC