

11/16/20

To: Mass EEAC

From: Christina McPike & Darien Crimmin, WinnCompanies

Re: EEAC Three-Year Plan 2022-2024 Comments & Testimony, Effective decarbonization strategies for low-income multifamily housing

WinnCompanies ("Winn") is a 50-year-old multifamily property owner, developer, and manager headquartered in Boston. WinnCompanies owns or manages over 200 properties, consisting of more than 18,000 mixed income apartments, across the Commonwealth of Massachusetts. Over the past decade, Winn has worked closely with ABCD and Action Inc. on numerous energy efficiency retrofit projects made possible with funding from the LEAN Program (the "Program"). Thanks to LEAN, Winn's affordable housing portfolio, including multifamily apartment buildings owned by more than a dozen non-profit owners and resident cooperatives, have benefited from more efficient lighting, high efficiency heating and hot water systems, weatherization improvements, and ENERGY STAR refrigerators. These energy efficiency projects have reduced energy use and cost, while improving performance, aesthetics, and comfort for our residents.

As a partner to and advocate for the LEAN Program, it is imperative that the Program make certain strategic changes in the next three year plan in order to ensure a pipeline of projects that more meaningfully address carbon emissions across the affordable multifamily sector. In order to achieve the aggressive emissions reductions required by the Global Warming Solutions Act, along with new and evolving local carbon emissions mandates in cities like Boston and Cambridge, where much of the State's low income multifamily housing is concentrated, the Income Eligible Programs must incorporate deeper, more invasive, and inevitably more costly whole building solutions. These next-generation energy retrofit scopes of work include multi-measure solutions, addressing exterior envelope thermal performance and air infiltration, as well as the thoughtful electrification of building systems.

Over the past year, Winn has been working closely with the US Department of Energy to evaluate replicable, scalable, deep energy retrofit solutions for midrise and high-rise multifamily buildings. These deep energy retrofits should be implemented simultaneously with comprehensive renovation and capital planning projects in order to take advantage of traditional housing subsidy programs and limit incremental costs between today's standard "business as usual" approach and decarbonization. Based on research completed for a specific case study project in Boston, Eva White Apartments, and experience with NYSERDA's RetrofitNY Program, these zero energy ready, all-electric deep energy retrofit projects will cost between \$30,000-\$50,000 per unit to implement today. With early pilot projects, further research and development, proof of concepts, and contractor training, these costs can and must be reduced over time. Like solar PV and LED lighting, improved technology coupled with proven demand in the market will contribute to cost compression. Until that occurs, significant incentives and creative energy financing mechanisms will be necessary to implement pilot projects across the state.

Specific energy saving measures are expected to include:

- Roof Insulation increased to R-40 minimum;
- Exterior wall insulation increased to > R-25;



- Windows must be air-tight with $< U-0.25$;
- Air infiltration must be reduced to Passive House levels;
- Full electrification of heating, cooling, and domestic hot water systems;
- Balanced ventilation with energy recovery;
- Controls and demand management.

Deep energy retrofits with electrification will reduce energy consumption and carbon emissions in existing multifamily housing by 50% - 75% depending on the existing baseline conditions. Given electricity rates are 3-5 times higher than natural gas rates, existing natural gas customers are disincentivized to electrify their buildings. This disconnect between energy and cost savings is an insurmountable burden for affordable housing, exacerbated without any dramatic building envelope improvements. In order to implement deep energy retrofits coupled with electrification of building systems in affordable housing, the EEAC should consider the following for its next three year plan:

- Commit new or greater funds to LEAN Program for custom projects that achieve at least 50% total energy savings with electrification. Refer to NYSERDA's "RetrofitNY" Program, which incentivized \$40,000 per unit as part of whole building solution.
- Establish a value for carbon savings in addition to energy (kWh, BTUs) in cost benefit analysis to better support costlier projects, while aligning with state and local emissions mandates;
- Incentivize performance based savings regardless of measures performed, considering a Pre- and Post-retrofit payment structure based on modeled savings (Pre-retrofit) and actual savings (Post-retrofit) following measurement & verification;
- Permit greater cost-share mechanisms/options, whether mortgage financing, on bill financing, PACE, or out-of-pocket. Consider sizing incentives to 3-5 year payback period thresholds (not to exceed a certain buy down threshold). Refer to PSE&G Residential Multifamily Housing Program which sizes incentives to lesser of either i) 3 year SPP or ii) 6 year payback buy down.
- Allow incentive payments to be made to building developers, general contractors, and/or subcontractors/vendors depending upon scope, complexity, and larger transaction needs, allowing for greater leveraged funds. Refer to Energize CT Programs.
- Provide for rapid installation of 100% funded smart electric meters with real time electric demand data to affordable housing properties, including common area and all residential meters, to allow for greater opportunities to control and value energy, and participate in demand response programs. Such programs should expand beyond demand savings from smart thermostats to encourage building owners, occupants, and 3rd party facilitators to monetize demand management and time of use savings for apartment communities. Refer to ConEd GridRewards program in NY.
- Expand LEAN eligibility to more types of affordable, mixed income, and workforce housing multifamily communities.

WinnCompanies strongly encourages the EEAC to consider these changes and strategies to allow for deep energy retrofit projects. Winn is confident the LEAN Program can continue to make meaningful impacts across the state's affordable housing sector. Deep energy retrofit projects will phase out fossil fuels without increasing operating costs for low-income rate payers, improve resiliency for vulnerable communities, and put the State on the right trajectory toward decarbonization.

Thank you for the opportunity to comment on the next Three Year Plan. We applaud EEAC's leadership and strongly encourage its continued support for affordable housing.

Sincerely,

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