To: The Massachusetts Energy Efficiency Advisory Council  
From: A Better City and Health Care Without Harm submitting comments on behalf of the Boston Green Ribbon Commission Commercial Real Estate and Health Care Working Groups  
Re: Opportunities and Recommendations for Consideration in the 2022-2024 Three-Year Plan

The Boston Green Ribbon Commission (GRC) is a group of business, institutional, and civic leaders in Boston working to develop shared strategies for fighting climate change in coordination with the City’s Climate Action Plan. The GRC’s membership constitutes many of the large commercial and industrial (C&I) utility accounts within Eversource and National Grid’s territory. These comments are submitted on behalf of the Commercial Real Estate and Health Care Working Groups, led respectively by A Better City and Health Care Without Harm. Our comments represent the Working Groups’ initial feedback for the three-year planning process. We expect to submit additional detailed comments upon release of the draft Three-Year Plans in 2021.

We would like to thank the EEAC for the opportunity to submit written comments and participate in public listening sessions. We acknowledge the challenges the Program Administrators and Councilors have encountered throughout this difficult year to maintain program momentum and roll out new initiatives in accordance with the 2019-2021 Three-Year Plan. There are several areas of focus we would like to see included within Three-Year Planning considerations for the C&I sector, particularly as the City of Boston and Commonwealth are in the process of developing more ambitious policies for achieving deeper energy and emissions reductions in existing buildings that will have significant impacts on this sector:

1. **Enhance communication and coordination across and within key C&I segments.** With progress towards achieving C&I savings targets lagging behind the necessary pace to meet the 2019-2021 Three-Year Plan goals, we consider establishing stronger channels for engagement with key C&I market actors to be critical to future efforts. Reflecting comments submitted to the EEAC in July and October of 2019:
   a. We strongly recommend establishing C&I working group(s) to increase access and engagement between PAs and key C&I market segments. This could include establishing a formal or informal C&I Working Group as well as establishing channel partner programs by market segment (e.g. healthcare, higher education, commercial real estate). We recommend, in particular, that the process of establishing the former be managed by DOER.
   b. These working groups would facilitate more frequent engagement between the PAs and key stakeholders and institutional organizations, enabling more targeted and effective outreach; facilitating the refinement of strategies for market engagement; and providing deeper understanding of and opportunities to engage with key Mass Save program offerings, particularly for small- and mid-sized organizations.
   c. Additionally, we acknowledge the greatly increased efforts from the PAs to provide ongoing reporting across programs and key performance indicators in 2019 and 2020 but think that delivering biannual
progress reports for program participation and progress by segment to these working groups will increase PA accountability and transparency. These progress reports would also provide greater visibility to opportunities and needs for working groups, and would be valuable for facilitating ongoing dialogue between the PAs and market actors.

2. **Develop enhanced retrofit offerings for pursuing deeper energy reductions and electrification.** With the City of Boston developing a building emissions performance standard and the state developing a roadmap for net zero emissions by 2050 and a Clean Energy and Climate Plan for 2030, it is imperative that future Three-Year Plan offerings support building owners in achieving the deeper energy and emissions reductions that will be necessary to meet these emerging standards and set the C&I sector on a path to achieve long-term decarbonization goals.
   a. Programs should be structured to ensure that short-term energy efficiency measures contribute to—and do not undermine—the pursuit of deeper energy retrofits that have the potential to provide greater long-term energy, emissions, and resiliency benefits to C&I buildings.
   b. While we welcome the increased emphasis on achieving HVAC savings from the previous Three-Year Plan, stronger measures are necessary to capture the limited opportunities between now and 2050 for building owners to replace HVAC systems.
   c. While the C&I energy optimization incentives for electrification have been rolled out in Q3 of 2020 for light commercial equipment, more robust programs targeting electrification of large C&I buildings have not yet emerged.
   d. We recommend that the upcoming Three-Year Plan strengthen these efforts, with increased incentives for electrification of thermal loads in buildings and early retirement of HVAC systems as part of incentivizing deeper energy retrofits. With regards to the electrification of thermal loads, we are particularly interested in the potential for expanded support for variable refrigerant flow (VRF) systems in combination with dedicated outdoor air systems and energy recovery ventilation as discussed in the October EEAC meeting.

3. **Continue to expand equitable training and workforce development efforts through Mass Save and streamline the application processes.** We acknowledge the efforts made by the PAs in 2019 and 2020 to greatly increase the number of trainings provided to building operators. We recommend that:
   a. These efforts be increased to ensure that facilities managers and building operators can meet and exceed expected energy performance in buildings, with expanded training in Building Operator Certifications, new trainings in HVAC controls, explaining what’s in the Technical Resource Manual, and additional trainings that enable customers to fully leverage Mass Save’s offerings, particularly new programs like Equipment & Systems Performance Optimization (ESPO).
   b. As programs are expanded for training and workforce development, we also encourage the emphasis on equitable workforce development in underserved and environmental justice communities.
   c. More streamlined application processes for these programs will also encourage key individuals to participate in these programs, particularly for small- and mid-sized customers.
   d. Additionally, we are increasingly concerned about widespread retirements of staff and declines in facilities and energy workforce levels in the near-term, resulting in the loss of institutional knowledge and capacity to continue meeting building performance expectations. We recommend that the PAs develop strategies and plans for addressing this near-term challenge, including in partnerships with higher education and technical training schools.
4. **Study the incorporation of resilience considerations and additional non-energy benefits into efficiency programs.** Across the state, enhancing the resiliency of buildings in conjunction with energy efficiency has become a key topic of interest for City leaders and building owners.
   a. Enhanced building resiliency can reduce the need for some of the most expensive utility repairs, support passive survivability and business continuity during and after disruptive events, and can be integrated with other energy efficiency efforts. No commitment was made to integrating discussions of resiliency and efficiency in the 2019-2021 Three-Year Plan. As in the previous planning process, we urge the Council to direct the 2022-2024 Three-Year Plan to include a study of the potential benefits of integrating energy efficiency with improved resiliency in building retrofits, with the goal of establishing potential programs for implement in the second and third years of the 2022-2024 plan.
   b. To support deeper energy efficiency for both C&I and residential energy efficiency programs, we recommend finding ways to better integrate updated valuations of avoided health impacts and health cost containment benefits from energy efficiency, in line with US EPA’s updates to AVERT, their 2019 study *Estimating the Health Benefits per-Kilowatt Hour of Energy Efficiency and Renewable Energy*, the Regulatory Assistance Project’s “Layer cake of Benefits,” and the Energy Health Impact Calculator. Without adjusting for inequity in impacts, newer health valuations of energy efficiency for the Northeast range from 1.65-5.07 cents/kWh, at 3% discount rate. As such, we are leaving kWh and Btus on the table to the detriment of meeting three-year plan goals, the state budget’s Mass Health program burden, and reimbursement rate shortfalls for health care providers.
   c. We also urge the updated health benefits and avoided health care costs addressed above be further developed to quantify energy efficiency and peak shaving’s disproportionate positive impacts on priority populations and geographies. We urge the 2022-24 plan include studies and implementation pathways to quantify, monetize and integrate energy efficiency savings for key populations and geographies.

5. **Develop an incentive structure for electric vehicles and micro mobility vehicles.** At both a city and state level, the C&I sector is being required to meet increasingly stringent GHG emissions reduction goals. Many are looking to reduce scope 3 emissions, specifically how their employees get to work and move around the city during the day.
   a. We urge the EEAC to develop a program to incentivize electric vehicle (EV) infrastructure - charging stations and dedicated EV parking spaces within existing and new construction. Incentives should also be provided for EV-ready infrastructure in situations when implementation is not possible immediately.
   b. We recommend that this incentives program include the purchase of, and infrastructure for, electric bicycles and other micro mobility vehicles

6. **Explore greater alignment of EEAC and GWSA priorities.** While the state has made great progress towards achieving the interim 2020 GWSA emissions reduction target, substantial work remains in order to achieve the 2050 targets of the GWSA (and the expected 2030 target of the Clean Energy and Climate Plan). With the 2050 Decarbonization Roadmap study expected to be released in December 2020, it is critical to ensure that the priorities outlined in the Commonwealth’s roadmap are aligned with the priorities of the EEAC for the upcoming and future Three-Year Plans.
   a. We strongly encourage EEAC to assess the deep decarbonization pathways that will be outlined in the Roadmap, as well as the key priority actions recommended by GWSA Working Groups for inclusion in the 2030 Clean Energy and Climate Plan, and explore how best to align both near-and long-term priorities for Mass Save with these pathways. For the buildings sector these include:
      i. Setting mandatory GHG emissions reduction limits on the building sector statewide by 2025;
ii. Realigning three-year energy efficiency programs and Mass Save cost-effectiveness fully with Global Warming Solutions Act (GWSA) mandate;

iii. Setting a mandatory threshold for the percentage of space heating and cooling and water heating statewide from renewable and highly efficient clean electric source;

iv. Establishing a large-scale statewide financing program or climate bank for building sector decarbonization (non-fossil fuel) by 2025;

v. Adopting a net zero stretch code pathway by 2022; and

vi. Setting rigorous annually increasing targets for serving populations traditionally underserved by Mass Save,