April 30, 2022

Secretary Kathleen Theoharides, Undersecretary Judy Chang, and Undersecretary Beth Card
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900 Boston, MA 02114

RE: A Better City's Comments on the 2025/2030 Clean Energy and Climate Plan

Dear Secretary Theoharides, Undersecretary Chang, and Undersecretary Card:

On behalf of our 130 member businesses and institutions, thank you for your leadership in developing the 2025/2030 Clean Energy and Climate Plan (CECP). A Better City appreciates the Baker Administration's commitment to identifying cost-effective and equitable strategies to ensure that Massachusetts meets or exceeds its ambitious climate goals.

A Better City is honored to sit on the Global Warming Solutions Act Implementation Advisory Committee (IAC) and to serve on both the Transportation Working Group and Buildings Sector Working Group. A Better City appreciated the opportunity to review the publicly available CECP presentation, as well as the more detailed sector-specific policy description slides that were shared with IAC members on the evening of April 26th. The public comment process would have been more meaningful and robust if additional detail were provided with adequate time for review. The enclosed comments focus primarily on the CECP transportation and buildings sector strategies and include additional comments for consideration regarding natural and working lands, electricity, and climate justice. All comments are informed by A Better City's participation on the IAC and ongoing collaboration with the business community.

A Better City recognizes the many improvements made to the interim CECP and encourages EEA to further refine the proposed policies to address two key shortcomings: 1) the CECP transportation sector policies fail to prioritize investment in public transit, instead focusing almost exclusively on the promotion of zero emission vehicles (ZEVs)—this strategy contradicts Governor Baker's own Commission on the Future of Transportation report and represents a missed opportunity to maximize co-benefits that will create a more vibrant, equitable, and connected Commonwealth for all, and 2) the CECP building sector policies do not adequately address some of the major hurdles that must be overcome to electrify systems in existing commercial, industrial, and institutional building stock, including the scale of existing building retrofits that must be prioritized, technical and financial constraints, and access to clean, reliable, and affordable electricity.

In summary, A Better City offers the following recommendations to strengthen the CECP as the Baker Administration considers final changes before the end of June deadline:

- **Transportation Sector Policies**: A Better City urges EEA to revise the CECP to include a new standalone strategy to modernize, expand, and improve public transit throughout the Commonwealth and to decarbonize passenger train and bus fleets. More specifically, this policy should include commitments to fully fund and expedite the MBTA Bus Modernization Plan; advance Regional Rail as endorsed by the MBTA Fiscal Control and Management Board in November 2019, including electrification of the commuter rail network, frequent all-day service, and accessible stations with high-level platforms; establish a new MBTA low-income fare program to increase ridership; and launch an integrated workforce development program to train existing MBTA/RTA employees and to build the skilled labor force of the future. Beyond prioritizing investment in public transit, the CECP should provide point of sale incentives to support a more comprehensive category of LEVs (not just e-bikes); support Transportation Management Association (TMA)-led transportation demand management (TDM) strategies as well as the development of active transportation infrastructure; advance smart roadway pricing strategies; consider offering incentives for the purchase of select used ZEVs and LEVs for both individual and businesses; support the electrification of commercial and government fleets; and prioritize the build out of fast, adaptable charging infrastructure at MBTA-owned parking lots, including commuter rail lots, in addition to other state and municipal government facilities.

- **Buildings Sector Policies**: To further improve the CECP, A Better City recommends enhancing the proposed buildings sector policies to include: prioritizing deep building weatherization—both passive efficiency and digital technologies, which are currently not addressed in the CECP; continuing the discussion of advancing hybrid heating solutions for unique, hard-to-decarbonize commercial and industrial buildings; including comments made during the update to the Massachusetts Stretch Energy Code and development of the Municipal Opt-In Specialized Stretch Energy Code considering the use of source energy for building performance calculations and an update to the Straw Proposal's data modelling to account for COVID-19 impacts; working with Boston and Cambridge to develop a streamlined state reporting structure that is aligned with existing building energy and emissions reporting mechanisms within municipalities; clarifying how energy scorecards at point of lease/sale are anticipated to work within commercial buildings; and conducting a building electrification sequencing study to understand the optimal timing of building electrification as a key step in a comprehensive and strategic energy transition. A Better City also supports: the development of a climate finance mechanism pilot to support the equitable decarbonization of the built environment; the management of energy price impacts and reduced electricity rates for heating; the development of GHG accounting for biofuels, biogas, and green hydrogen; and the expansion of workforce development, with a recommendation that career training and job placement for residents of historically excluded and environmental justice communities be prioritized.

- **Other Policies:** A Better City has also enclosed comments to improve the Natural and Working Lands (NWL), Electricity, and Climate Justice recommendations of the CECP. Primary points for NWL include: incorporating carbon sequestration data into the Massachusetts Greenhouse Gas Inventory; including targets for reduction of methane emissions from agriculture; tracking tree canopy coverage on public and privately owned lands and partnering with institutional landholders on implementation; engaging construction companies, engineering firms, and developers in scaling up

MA Timber; prioritizing environmental justice communities across all NWL strategies; encouraging community and climate resilience co-benefits alongside decarbonization, and; considering the recommendations of A Better City's June 2021 caron offsets report for carbon removal best practices. Primary points for the electricity sector include: initiating a grid decarbonization planning process, including a timeline and strategy for new clean energy procurement, as well as sequencing for grid, transmission, and interconnection capacity upgrades; including grid resiliency through the expansion of district-based microgrids, storage, and peak demand management, and; including financial subsidies to transition to a decarbonized future, with a carve out for lower income and environmental justice communities. Finally, primary recommendations for enhanced CECP climate justice include: considering the cross-sector recommendations from the IAC Climate Justice Working Group as well as including sector-specific commitments to climate justice in the CECP; establishing a Massachusetts Climate Bank to help leverage public-private partnerships, regional initiatives, and multi-year climate solutions to help equitably fund the critical infrastructure needed to achieve our statutory climate commitments, and; establishing the state-level Environmental Justice Council, as statutorily mandated by the Climate Act of 2021.

The Commonwealth must take bold action now to achieve our climate goals and to create the clean economy of the future, and the business community remains ready and committed to helping achieve these goals. Thank you again for your leadership, and for your time and consideration.

Sincerely,

Richard A. Dimino
President and CEO

Enclosures: 5

cc:

Jamey Tesler, Secretary and CEO, Massachusetts Department of Transportation
Steve Poftak, General Manager, MBTA
Patrick Woodcock, Commissioner, Department of Energy Resources
Michelle Wu, Mayor, City of Boston
Jascha Franklin-Hodge, Chief of Streets, City of Boston
Rev. Chief Mariama White-Hammond, Chief of Environment, Energy, & Open Space, City of Boston
Alison Brizius, Commissioner of Environment Department, City of Boston

ATTACHMENT A: DETAILED COMMENTS ON PROPOSED TRANSPORTATION SECTOR POLICIES

Summary

Overall, the CECP transportation sector policies fail to prioritize investment in public transit, instead focusing almost exclusively on the promotion of zero emission vehicles (ZEVs). This short-sighted, one-dimensional focus on ZEVs contradicts Governor Baker's own Commission on the Future of Transportation report, which stated that "high-frequency, high-capacity public transit is the most efficient and sustainable way to move large numbers of people as they go about their daily lives. This is true today and will be true in 2040." The current approach does not adequately encourage near-term vehicle miles traveled (VMT) reduction to reduce crippling roadway congestion and represents a missed opportunity to maximize co-benefits that will create a more vibrant, equitable, and connected Commonwealth for all.

While we recognize and appreciate the inclusion of the MBTA Communities & Housing Choice Program and commitment to fully implement the MBTA Bus Modernization Plan, the CECP's ZEV-focused approach still falls short. A Better City urges the EEA to revise the CECP to include a new standalone strategy to modernize, expand, and improve public transit throughout the Commonwealth and to rapidly decarbonize train and bus fleets, including the MBTA's commuter rail and bus systems and Regional Transit Authority (RTA) fleets. More specifically, this policy should include commitments to fully fund and expedite the MBTA Bus Modernization Plan; advance Regional Rail as endorsed by the MBTA Fiscal Control and Management Board in November 2019, including electrification of the commuter rail network, frequent all-day service, and accessible stations with high-level platforms; establish a new MBTA low-income fare program to increase ridership; and launch an integrated workforce development program to train existing MBTA/RTA employees and to build the skilled labor force of the future.

Beyond prioritizing investment in public transit, the CECP should provide point of sale incentives to support a more comprehensive category of LEVs (not just e-bikes); support Transportation Management Association (TMA)-led transportation demand management (TDM) strategies as well as the development of active transportation infrastructure; advance smart roadway pricing strategies; consider offering incentives for the purchase of select used ZEVs and LEVs for both individual and businesses; support the electrification of commercial and government fleets; and prioritize the build out of fast, adaptable charging infrastructure at MBTA-owned parking lots, including commuter rail lots, in addition to other state and municipal government facilities.

New Policy: Modernize, Expand, and Improve Public Transit Operations Throughout the Commonwealth and Decarbonize Trains and Bus Fleets

- A Better City urges the Commonwealth to set a clear goal for modernizing, expanding, and improving public transit—this should be a standalone strategy and the objective should also be woven into the other existing strategies, as appropriate.
- The final CECP should declare that additional resources for the MBTA are necessary in the short and long-term. The CECP presentation classifies the goal to "fully fund the MBTA Bus Modernization Program" as an ongoing effort. Unfortunately, in the current 5-year capital investment plan of the MBTA, which addresses years FY23-FY27, the MBTA will not be able to achieve this CECP goal, at least in the short-term. The effort to modernize the bus fleet and maintenance facilities is estimated to cost $4.5 billion over the next 15 years. There is some progress in the next five years and $450 million planned for bus facility modernization, with most of this amount going to build one new bus maintenance facility in North Quincy. This amount is not sufficient funding to keep pace of delivering a

new bus maintenance facility every two - three years. By way of example, the MBTA's second new bus maintenance facility is to be built at Arborway in Boston's Jamaica Plan neighborhood. Although the MBTA says it will construct this new facility by 2007, its latest investment plan provides zero funds for the construction of it.

- The CECP should include the critical foundational investments to needed for the MBTA to advance Regional Rail as endorsed by the Fiscal Control and Management Board (FMCB) in November 2019, including electrification of the commuter rail network, frequent all-day service, and accessible stations with high-level platforms. Full transformation of this mode could result an 150% increase in daily commuter rail boardings (+122,400 new transit trips), thus fewer vehicle hours and miles traveled and reduced congestion, reduced GHG emissions, and positive benefits to environmental justice communities in terms of accessibility, mobility, and environmental quality. Delaying transition to a fully electric commuter rail system, including procurement of EMUS, will prevent the Commonwealth from achieving its statewide decarbonization goals, but this investment plan is essentially ignored in the current MBTA capital plans. See A Better City's recent report, *Keeping the MBTA on Track: Review of Prior Commitments*, which provides status updates on key FMCB initiatives and offers recommendations for making continued progress toward implementing some of the FMCB's most consequential commitments.
- The CECP should include the establishment of and MTBA low-income fare program to encourage ridership, support low-income communities, and encourage equitable economic growth. A low-income fare policy enjoys broad public support across the state.
- Especially considering current operations and maintenance staffing shortages, the CECP should stablish an integrated workforce development program to train existing MBTA/RTA employees and to build the skilled labor force of the future.

T1: Promote Alternatives to Personal Vehicles

- **Clarifying support for the MBTA Bus Modernization Plan:** As discussed in more detail above, investment in the modernization, expansion, improvement, and decarbonization of the Commonwealth's transit infrastructure should be the foundation of the State's transportation climate policies. Prioritizing mode-shift to a decarbonized transit system will also help the Commonwealth achieve some of its equity and climate justice objectives by providing environmental justice communities with clean, reliable, affordability transit service. Nonetheless, the inclusion of the MBTA Communities & Housing Choice Program and MBTA Bus Modernization Plan are important initiatives that the CECP should clarify and expand upon.
    - A Better City recommends clarifying the specifics of the MBTA bus modernization plan, especially the timeline for transitioning to all Battery Electric Busses (BEBs) and exploiting opportunities to expedite that timeline. In addition to full funding for the MBTA's Bus Modernization Plan, A Better City suggest that the CECP provide new regulatory and financial incentives for the MBTA and RTAs, including: (a) reducing, if not eliminating, peak-load and peak-demand utility charges to public transit agencies for power used to fuel battery electric buses (BEB) vehicles and fleets; (b) taking necessary steps to immediately provide for off-peak utility pricing to public transit agencies for power used to fuel BEB vehicles and fleets; (c) requiring that all new public transit bus maintenance facilities be designed and constructed with all electrical substation and conduits to enable direct current fast charging (DCFC) access for each BEB vehicle to be housed at any such new facility; (d) providing immediate and substantial direct financial incentives to the MBTA and RTAs to encourage purchase of BEB vehicles and fleets and install complimentary DCFC infrastructure as needed. See A Better City's August 2019 report *New MBTA Bus Maintenance Facilities & Evolving Battery Electric Bus Technology, Case*

Study: Albany Street Garage for additional context and recommendations.

- **Enhancing incentives:** Incentives for Light Electric Vehicles (LEVs), including e-bikes, e-cargo delivery bikes, e-cargo family bikes, and e-mopeds, should be an important part of the CECP's strategy to encourage mode-shift from single occupancy vehicles. Additionally, enabling legislation may be needed to clarify the definition and classification of e-bikes and additional study may be needed to fully quantify the potential impact of investment in this sector.
    - **A Better City recommends expanding the incentive program to include a more comprehensive category of LEVs (not just e-bikes); providing incentives at the point of sale instead of rebates; advancing legislation to clarify the definition and classification of e-bikes; and performing a comprehensive LEV survey to understand the current and potential impact of these vehicles on GHG and VMT reduction targets.**

- **Enhancing employer-focused efforts and complete/shared streets programs:** Employer-led efforts to encourage alternatives to single occupancy commutes should be a key component of the CECP, but these efforts should not be limited to the encouragement of remote or hybrid work policies, which are only applicable to certain sectors and may have widespread impacts on the economic vibrancy of our downtowns. Transportation Management Associations (TMA) are well-positioned to lead transportation demand management (TDM) strategies as well as the development of active transportation infrastructure.
    - **A Better City recommends reinstituting state funding for Transportation Management Associations (TMAs), which are uniquely positioned to advance employer-led efforts to coordinate the use of private shuttles and ferries to complement public transit and to encourage commuter transit use and active transportation.**

- **Advancing smart roadway pricing strategies:** Massachusetts must move toward roadway pricing as a stable source of transportation revenue to maintain and create modern and safe transportation infrastructure, while encouraging mode-shift. Pricing strategies should be rooted in robust stakeholder engagement and provide exemptions and/or rebates for low-income families. Additionally, revenue investments should prioritize transit enhancements that service environmental justice communities and transit-dependent communities.
    - **A Better City urges the Commonwealth to develop and implement a smart roadway pricing/toll equity strategy to more accurately price the use of roads and bridges through smarter roadway pricing/tolling to create a regionally equitable road pricing network, raise new revenue for public transit, reduce GHG emissions, and improve air quality, especially for environmental justice population.**

T2: Implement Vehicle Emission Standards

- **Implementing California vehicle emission standards:** A Better City appreciates the Commonwealth's leadership in pursuing the implementation of California vehicle emission standards, which have the potential to transform market for market for clean vehicles.
    - **A Better City supports the implementation of the California Advanced Clean Cars II Standard and California Advanced Clean Trucks rule.**

T3: Improve Electric Vehicle Incentives

- **Enhancing MOR-EV and MOR-EV Truck:** A Better City appreciates the commitment to improve EV incentives to be more equitable and cost-effective by providing incentives at the point of sale for

individual and commercial purchases alike. Additionally, as referenced above, A Better City recognizes the state's effort to extend point of sale incentives to e-bikes.

- **To further enhance these programs, A Better City recommends considering the needs of low-income, not just moderate-coming consumers, and assessing the feasibility of offering incentives for select used ZEVs and LEVs for both individual and businesses.**

T4: Electrify Markets with Critical Health and Equity Implications

- **Including commercial and government fleets, as well as transit:** A Better City recognizes the importance of electrifying school busses, vehicles for hire, and delivery trucks. However, if the objective it to electrify markets with critical health and equity implications, then the primary focus should be on the electrification of transit, including the MBTA's commuter rail and bus system, as well as RTA fleets across the Commonwealth. Additionally, electrification efforts should also support business and government fleets.
    - **A Better City again encourages the Commonwealth to prioritize the decarbonization of MBTA and RTA transit systems. Additionally, A Better City suggests providing additional incentives and pilots to expedite both government and commercial fleet conversion across the commercial, industrial, and institutional sectors. Delivery sector opportunities should also include strategies to encourage the use of LEV delivery vehicles like e-bikes and e-trikes.**

T5: Build Charging Infrastructure and Encourage Smart Charging

- **Expanding charging infrastructure:** A Better City appreciates the intent of the proposed actions to build out the charging infrastructure needed to facilitate a widespread transition to ZEVs, including the opportunity to leverage federal funding, building codes, and climate finance strategies. Charging infrastructure should be designed to accommodate multiple forms of electric vehicles, including smaller-scale Light Electric Vehicles (LEVs), including e-bikes, e-cargo delivery bikes, e-cargo family bikes, and e-mopeds, rather than favor a single form-factor.
    - **A Better City recommends prioritizing the build out of fast, adaptable charging infrastructure at MBTA-owned parking lots, including commuter rail lots, in addition to other state and municipal government facilities. Additionally, A Better City suggests further exploring opportunities for public private partnerships to deploy charging infrastructure more rapidly. Infrastructure should be designed to accommodate both EVs and LEVs and prioritize equitable access to charging infrastructure, including in environmental justice communities.**

T6: Support Outreach and Education

- **Enhancing outreach and education:** A Better City supports the intent of the proposed policies to expand fleet advisory services and broader outreach and education efforts. Robust engagement will be needed to facilitate larger fleet conversions and individual LEV and ZEV purchases alike, and the CECP should focus on supporting the needs of low-income and environmental justice communities. Additionally, outreach and education efforts should include TDM and TMA-led strategies to reduce single occupancy vehicle trips and to encourage the use of transit and active transportation.
    - **A Better City recommends enhancing outreach and education efforts to catalyze rapid commercial fleet conversion and to prioritize the needs of low-income and environmental justice communities. Additionally, A Better City suggests expanding outreach and education efforts to include TDM and TMA-led strategies to reduce single occupancy vehicle trips and to encourage the use of transit and active transportation.**

ATTACHMENT B: DETAILED COMMENTS ON PROPOSED BUILDINGS SECTOR POLICIES

Summary

A Better City's comments on the buildings sectors policies are specifically relevant to commercial, industrial, and institutional buildings, although in many cases, can be applied to residential buildings as well.

The CECP strategies for reducing building emissions by 2025 and 2030 have been enhanced to include some of A Better City's recommendations from the interim CECP in March 2021 including: developing a climate finance mechanism; expanding workforce development opportunities; planning for electric distribution upgrades; managing energy price impacts including specialized electricity rates especially for low-income consumers; evaluating alternative natural gas options including biofuels, biogas and green hydrogen; and expanding the definition of electric space heating to include hybrid heating solutions.

To further improve the CECP, A Better City recommends enhancing the proposed policies to include: prioritizing deep building weatherization—both passive efficiency and digital technologies, neither of which are currently addressed; advancing hybrid heating solutions for hard to decarbonize buildings; including comments made during the update to the Massachusetts Stretch Energy Code and development of the Municipal Opt-In Specialized Stretch Energy Code; working with Boston and Cambridge to develop a streamlined state reporting structure that is aligned with existing reporting at the municipal level; clarifying how energy scorecards at point of lease/sale are anticipated to work within commercial buildings; and conducting a building electrification sequencing study to understand the optimal timing of building electrification as a key step in a comprehensive energy transition. A Better City also supports: the development of a climate finance mechanism pilot; the management of energy price impacts and reduced electricity rates for heating; the development of GHG accounting for biofuels, biogas, and green hydrogen; and the expansion of workforce development with a recommendation that career training and job placement for residents of historically excluded and environmental justice communities be prioritized.

New Policy: Enable Deep Weatherization

- We are concerned that deep weatherization, also referred to as deep energy retrofits, is not featured prominently in the CECP, as it will be the most important transformation within the buildings sector to ensure electrification is successful and climate goals are met. Traditionally, we think of deep weatherization as passive efficiency measures that include upgrades to the building envelope (walls, windows, roofs, and floors), as well as improvements to the performance of HVAC systems and lighting. These practices reduce the amount of energy demand within buildings, but the return on investment (ROI) is often more than 15 years, well beyond the ROI currently required by most commercial building owners. What is not discussed in the CECP is the role of digital technologies to complement deep weatherization. Digital technologies, like Building Automation Systems, provide greater flexibility in building operations by developing setpoints and optimizing for energy efficiency by space and occupancy at different times of the day. Recent studies have found ROIs for such digital technologies averaging 8 years.
- A Better City recommends that deep weatherization be prioritized within the CECP and include both passive efficiency and digital technologies like building automation systems, so these complementary approaches ensure the greatest energy efficiencies in the operation of our buildings.

B1: Clean Heat Cap

- **Advancing hybrid heating solutions for hard to decarbonize buildings:** A Better City is eagerly awaiting the outcomes of the Clean Heat Commission recommendations that will include residential and commercial sublimits for 2025 and 2030. We were grateful that the buildings sector key targets and metrics for 2030 have expanded the definition of electric space heating to include hybrid heating solutions that allow back-up fossil fuel systems. This is especially important for the limited commercial and industrial market segments (e.g., healthcare, manufacturing) that can still benefit from emissions reductions associated with Combined Heat and Power's (CHP) energy and non-energy benefits in the near term, while alternative technologies and fuels that can meet their unique needs are developed and scaled up.
    - **A Better City supports the allowance of hybrid heating solutions that allow back-up fossil fuel systems for hard to decarbonize buildings.**

B2: Performance Benchmarks & Standards

- **Considering improvements to the Stretch Energy Code and Municipal Opt-In Specialized Stretch Energy Code:** A Better City provided substantive comments to the Straw Proposal drafted to update the Massachusetts Stretch Energy Code and to develop the Municipal Opt-In Specialized Stretch Energy Code. We encouraged consideration of the following recommendations to: 1) address grid reliability, capacity, resiliency, and affordability (addressed in electricity sector below); 2) consider using source energy for building performance calculations; 3) share and consider updates to the Straw Proposal's data modelling to account for COVID-19 impacts; 4) fill the Board of Building Regulations and Standards' Commercial & Industrial expert seat vacancy; 5) prioritize equitable workforce development opportunities; and 6) reassess requirements in light of supply chain constraints.
    - **Please see the enclosed comments from A Better City.**

- **Developing a streamlined state reporting structure:** A Better City supports the development of a state reporting structure to gather building performance data on large buildings. Most of A Better City's member buildings in Boston report to the Building Emissions Reduction and Disclosure Ordinance (BERDO 2.0). We have worked closely with the City of Boston to ensure the updated Ordinance is workable for all parties involved.
    - **A Better City recommends working closely with the City of Boston and City of Cambridge in the development of the reporting structure so that it aligns with the BERDO and BEUDO reporting structures to alleviate the need for "double" reporting for those building owners with portfolios across municipalities.**

- **Clarifying energy scorecards at point of lease/sale:** A Better City would like to understand how the program for energy scorecards at point of lease/sale is anticipated to work within commercial buildings. Commercial buildings work with tenants at the beginning of a lease to develop a tenant-specific contract that often lasts 10-15 years. To begin to discuss the tenant/owner split incentive in commercial buildings, A Better City published a report on Green Leasing in 2014 as an effective strategy for energy efficiency.
    - **A Better City recommends clarifying how the energy scorecard would work within commercial buildings.**

B3: Delivering Results at Scale

- **Conducting a building electrification sequencing study:** A Better City supports the development of a comprehensive energy transition approach and suggests this start with a study to understand the phasing of large existing buildings electrification and whether our grid can support this kind of transformation. A recent report on powering New York City's buildings with electricity, *Grid Ready: Powering NYC's All-Electric Buildings*, looks at exactly this question of electrification sequencing. The report provides an excellent model to understand the sequencing of the electrification of our economy, as it investigates how power is delivered to NYC, how building electrification will increase electricity demand, and therefore, how electrification can be sequenced to ensure the increasing demand is safely and strategically managed. Included with the report is a *Grid Ready Mapping Tool* that shows the capacity for electrification by network area with the current grid and allows forecasting to plan infrastructure updates for the future. By adopting a similar approach, the Commonwealth could understand the current capacity of the ISO-NE electricity grid by load zone, model the increased demand from the electrification of the building, transportation, and other sectors, and then be able to effectively sequence this transition safely and cost-effectively over time. We see this as a key part of a comprehensive energy transition.
    - **A Better City recommends the 2030 CECP include a study of the current capacity of the ISO-NE electricity grid by load zone, detailing the anticipated increased demand on these zones with the electrification of the building and transportation sectors of the economy, and the recommended sequencing of the state's electrification process considering the increase in electricity capacity and transmission that will be required.**

- **Establishing a climate finance mechanism pilot:** Scaling up building sector decarbonization will require a comprehensive funding and financing strategy to support deep weatherization, equitable workforce development, renewable energy generation and accessibility, and clean heating, cooling, and ventilation. As this kind of building upgrade happens infrequently, a dedicated funding source beyond Mass Save incentives should be established to advance this work.
    - **A Better City supports the development of a climate finance mechanism pilot, which could be explored through the creation of a Massachusetts Climate Bank, as also referenced in the natural and working lands and climate justice recommendations included below.**

- **Expanding workforce development:** Career training and job placement for residents of historically excluded and environmental justice communities should be elevated through existing and developing programs at vocational schools, community colleges, technical institutes, high schools, and within a municipality's equitable workforce development programs.
    - **A Better City supports workforce development expansion to meet the growing needs of deep building weatherization, the installation of heat pump technologies, and the increasingly digital operation of buildings to ensure maximum efficiency (as discussed under the deep weatherization section above).**

B4: Infrastructure Planning & Utility Oversight

- **Managing energy price impacts and specialized electricity rates:** Ensuring the cost of transitioning to a decarbonized economy is managed equitably across fuels and populations is essential to all ratepayers, including residential and commercial customers alike. As stated in more detail in our Climate Justice comments below, we support the development of a funding mechanism like a Massachusetts Climate Bank to help leverage public-private partnerships, regional initiatives, and multi-year climate solutions

to uplift all communities but to prioritize solutions in environmental justice, low-income, and historically disinvested communities.

  - **A Better City supports the management of energy price impacts and the development and implementation of reduced electricity rates for heating, especially for low-income consumers.**

- **Developing GHG accounting:** For large commercial and institutional building types that operate 24/7, require extensive emergency backups, and/or are more difficult and expensive to electrify, it is important to understand how low-and-zero carbon fuels can support building decarbonization. It is also important to understand the optimal application for these low-and-zero carbon fuels within these hard to decarbonize buildings.
  - **A Better City supports the development of GHG accounting for biofuels, biogas, and green hydrogen.**

ATTACHMENT C: COMMENTS ON PROPOSED NATURAL & WORKING LANDS POLICIES

Summary

A Better City's comments and recommendations for the Natural and Working Lands (NWL) sector's policies, sublimits, and key targets and metrics focus on the inclusion of carbon sequestration data in the Massachusetts Greenhouse Gas Inventory, tracking tree canopy coverage data, incorporating methane emissions, ensuring climate and community resilience co-benefits, prioritizing environmental justice and historically disinvested communities in our nature-based solutions, scaling up suppliers and distributors of durable wood in the construction and building industry, and clarifying and defining best practices for carbon removals and carbon sequestration accounting.

L1: Protect Natural & Working Lands/Keep Natural & Working Lands As Natural & Working Lands

- **Including carbon sequestration data in the Massachusetts Greenhouse Gas Inventory**: A Better City supports the intent to protect and expand NWL for community benefit, ecosystem benefits, carbon sequestration, and carbon storage opportunities. As detailed below, we recommend the inclusion of carbon sequestration data in the Massachusetts Greenhouse Gas Inventory (MA GHG Inventory) to support the protection of existing NWL, and to help prevent land conversion. We also support the watershed-scale conservation of existing NWL, as this will help to encourage regional climate resilient solutions and benefits that operate across jurisdictional boundaries in Massachusetts.
    - **A Better City recommends incorporating carbon sequestration and carbon removals data into the Massachusetts Greenhouse Gas Inventory (MA GHG Inventory).**

L2: Manage Natural & Working Lands

- **Tracking tree canopy coverage data**: A Better City supports and appreciates the commitments to expanding new tree canopy coverage in 2025 and 2030 and commitments to climate-smart forestry, but we are concerned that there is no intent to track carbon sequestration or carbon removals associated with baseline tree canopy and/or expanded tree canopy in NWL over time. In addition, we are curious how the NWL sector targets and metrics for tree canopy expansion will relate to privately owned land, particularly institutional land. Given the large amount of tree canopy found on higher education and other institutional land in Boston, for example (and the lack of data that Boston's 20-Year Urban Forest Plan has on tree canopy located on privately owned land), it would be helpful to find solutions that partner with large institutional private landowners across the state.
    - **A Better City recommends that the 2030 CECP track tree canopy coverage data over time on both public and privately owned land and include carbon removal and carbon sequestration data as inputs into the Massachusetts Greenhouse Gas Inventory (MA GHG Inventory), as mentioned above. In establishing baseline and ongoing data for tree canopy coverage, we recommend partnering with private institutional landholders on data collection, implementation, and ongoing financing required for tree canopy expansion.**

- **Incorporating methane emissions**: While we support the 2030 CECP's focus on heathy soil management best practices for achieving peak carbon sequestration potential on NWL, we are concerned at the lack of consideration or strategy for reducing methane emissions from agriculture. Given the higher global warming potential of methane vs. carbon, and the recent report from the National Oceanographic and Atmospheric Administration showing that atmospheric methane levels in 2021 were the highest on record, we suggest that the 2030 CECP also consider including methane emissions in tracking progress in

the NWL sector, and/or incorporating agricultural methane emissions data through carbon dioxide equivalent metrics in the MA GHG Inventory.

- **A Better City recommends including methane emissions reduction targets and priorities within the natural and working lands sector of the CECP as they relate to agricultural emissions.**

- **Ensuring climate and community resilience co-benefits**: Beyond the CECP's focus on climate-smart forestry practices that benefit decarbonization and resilience, A Better City recommends prioritizing nature-based solutions that enhance community and climate-resilience co-benefits whenever possible across the strategies of the NWL sector. Given the opportunity for nature-based solutions to provide co-benefits that can help to address extreme heat, extreme precipitation and storm damage, coastal and inland flooding, sea level rise, storm surge, and other severe climate impacts, we believe that ensuring co-benefits across community and climate resilience in this sector will be vital to achieving our climate goals and protecting our communities in as cost-effective a manner as possible. While we appreciate the reference to the Municipal Vulnerability Preparedness program in strategy L3 to increase carbon sequestration and lessen heat islands, and the mention of climate resilience co-benefits in climate smart forestry in strategy L2, we recommend expanding the prioritization of community and climate resilience initiatives across all CECP strategies in the NWL sector.
    - **A Better City supports the CECP including the consideration of community and climate resilience co-benefits in climate-smart forestry, and we recommend prioritizing such co-benefits in environmental justice and historically disinvested communities in particular, across all strategies in the NWL sector. We also recommend encouraging regional community and climate resilience co-benefits to ensure nature-based solutions that work across jurisdictional boundaries and benefit multiple communities.**

L3: Restore Natural & Working Lands

- **Prioritizing environmental justice and historically disinvested communities in our nature-based solutions:** We appreciate the commitments included to add at least 5,000 new acres of tree cover by 2025 and at least 16,100 acres of new tree cover by 2030, and the intent to increase tree planting funding for the Greening Gateway Cities Program. Beyond the Greening Gateway Cities Program, we also believe that it will be vitally important to prioritize retaining and expanding tree canopy in environmental justice populations that have disproportionately high risks of asthma and other negative health impacts from air pollution, high heat exposure during heat waves, and disproportionately low tree canopy coverage. In the example of Boston, we support the 20-Year Urban Forest Plan's effort to prioritize historically disinvested and environmental justice communities in expanding urban tree canopy coverage. We also appreciate Boston's emphasis on equity and climate justice in the recommendations of the recently released *Heat Resilience Solutions for Boston* report. At a state-level, both in urban and rural areas, it will be important to prioritize new tree cover in areas like Springfield, with some of the highest rates of asthma in the country, as well as in areas that are heat islands during heat wave events, within historically excluded and disinvested communities.
    - **A Better City recommends that the suggested targets for tree canopy coverage expansion explicitly prioritize environmental justice and historically disinvested communities whenever possible and emphasize co-benefits across tree canopy coverage and heat resilience solutions. We recommend following the 20-Year Urban Forest Plan model currently under development in Boston, as well as the *Heat Resilience Solutions for Boston* report. We also recommend prioritizing Municipal Vulnerability Preparedness grants that operate at a regional scale whenever possible.**

L4: Incentivize Durable Wood Products

- **Scaling up suppliers and distributors of durable wood in the construction and building industry:** In order to effectively scale up the use of durable wood products that store carbon in our new construction and major renovations across the Commonwealth, it will be important to incorporate the perspective of construction companies, engineering firms, and developers in the design and implementation of durable wood product incentive programs and the expansion of MA Timber usage.
    - **A Better City recommends including the expertise of construction companies, engineering firms, and developers in the design and implementation of durable wood product incentive programs to ensure the scaling up of MA Timber in new construction and major renovations.**

L5: Develop Accounting and Market Frameworks by 2025 for Achieving Net Zero with Sequestration Beyond our Natural & Working Lands

- **Clarifying and defining best practices for carbon removals and carbon sequestration accounting**: We appreciate the ongoing efforts to include carbon sequestration accounting, measurement, and market frameworks in the Commonwealth's climate solutions in the NWL sector. However, we are concerned that there are no targets or metrics for carbon sequestration included in the CECP, nor are there any recommendations for the ongoing governance and stakeholder engagement needed for effective, transparent, and equitable carbon removals in Massachusetts. As mentioned previously, as a first step, A Better City recommends including a mechanism for the accounting of carbon sequestration within the Massachusetts Greenhouse Gas Inventory to help establish an accurate baseline and track progress of carbon removals over time. Such data within the GHG Inventory will help the Commonwealth to better track net emissions reductions in real time, and to also provide the evidence for why carbon storage in existing natural and working lands must be prioritized over land conversion when possible. Additionally, A Better City suggests including the suggested targets and metrics for carbon sequestration from the 2050 Decarbonization Roadmap Study within the CECP itself, as well as the establishment of a Carbon Sequestration Task Force to leverage carbon sequestration and carbon removal expertise. Finally, A Better City recommends referring to our June 2021 report *Establishing a Regional Offsetting Program for Emissions Reduction Compliance in Massachusetts: Challenges and Opportunities* and its associated recommendations for effective, transparent, and equitable carbon removal best practices in the Commonwealth. A Better City members like Novartis, Boston Properties, Mass General Brigham, and Boston University all have substantial expertise in the purchase, verification, and selling of verified carbon credits and their associated carbon removals. We suggest inclusion of A Better City member experts on carbon removals in the recommended Carbon Sequestration Task Force.
    - **A Better City recommends including suggested targets for carbon sequestration from the 2050 Roadmap Study into the 2030 CECP and establishing the suggested Carbon Sequestration Task Force to help with carbon sequestration implementation, governance, and monitoring over time. We strongly recommend clarifying best practices for effective, transparent, and equitable carbon removals in Massachusetts as detailed in A Better City's June 2021 carbon offsets report.**

ATTACHMENT D: COMMENTS ON PROPOSED ELECTRICITY SECTOR POLICIES

A Better City offers general comments and recommendations for the 2025-2030 electricity sector's policies, sublimits, and key targets and metrics, with a focus on grid cleaning, capacity and reliability, resiliency, and affordability to ensure a just and equitable transition to a decarbonized economy.

- **Greening the grid:** The interim CECP for 2030 listed key metrics and targets as 7GW of new capacity (solar, hydro, and offshore wind), and a project pipeline of 8GW of additional clean energy projects for 2030 in planning. Combined, this totals 15GW of new clean energy capacity. However, the new CECP key metrics and targets listed for 2030 are 2.8GW of offshore wind operational by 2030. We understand that the status of the Hydro-Quebec project has had a major impact on the state's ability to expand reliable clean energy capacity as quickly as anticipated, but we are concerned that this significant decrease in clean energy electric capacity will impede decarbonization actions within the building and transportation sectors. For example, if the electricity grid's cleanliness isn't keeping pace with the Commonwealth's statutory climate commitments, then building policies like the emissions reduction standards for existing buildings in Boston and Cambridge (BERDO 2.0 and BEUDO, respectively) will result in building owners being penalized for non-compliance.
    - **A Better City recommends including a planning process for the cleaning and greening of the ISO-NE grid and existing district-based operators in the 2030 CECP, detailing a recommended timeline and strategy for new clean energy procurement, to ensure that existing and developing building and transportation policies can realistically meet required emission reduction goals.**

- **Ensuring grid capacity and reliability:** The Energy Pathways to Deep Decarbonization report states that electricity demand will double by 2050 because of the electrification of our economy. A WBUR interview last week with ISO-NE CEO and President, Gordon van Welie, also said the ISO-NE electricity demand will double in the next 25 years or so, and winter peak loads will triple in the same period. Increases in electricity demand will increase the need for transmission infrastructure, site-specific capacity upgrades within buildings and transportation hubs, and interconnection capacity (a long-standing barrier to clean energy deployment). All these factors will also impact grid reliability. Particularly with the failure of the Quebec-Hydro project moving ahead to provide reliable, clean energy to Massachusetts, there is a substantial gap in ensuring a reliable and safe transition to renewable energy economy.
    - **A Better City recommends a planning process, including a timeline, be undertaken to increase grid, transmission, and interconnection capacity. Such a process would ensure that buildings, transportation, and other sectors of the economy can reliably transition to electricity for all their energy needs, and upgrade site infrastructure to carry increased electrical loads in a timely manner. We understand this may be a step-by-step process and recommend as a first step – as referenced above within buildings – a planning process similar to *Grid Ready, Powering NYC's All-Electric Buildings* that includes a *mapping tool*. This step would allow us to understand the current grid, transmission, and interconnection capacity within each load zone, and the anticipated demand within each load zone, including anticipated changes from a summer to winter peak in demand, and therefore, how long each load zone can meet increased electricity demand before capacity is reached. Such strategic planning is essential to understanding which zones can handle increased electrical loads now, and which will need additional infrastructure to meet the increased demand.**

- **Improving grid resiliency:** With the anticipated increase in electricity demand, the resilience of our electricity supply is also essential for a safe transition to a decarbonized economy. We are concerned that the current plan does not directly address grid resiliency alongside decarbonization. Some key elements we would like to see supported and incentivized include district-based microgrids, expanded energy storage, and peak demand management to ensure the grid's peak demands are reduced as much as possible. In addition, it will be important for critical grid infrastructure to be resilient to the impacts of climate change, like extreme heat, extreme precipitation and storm damage, sea level rise, storm surge, and both coastal and inland flooding.
    - **A Better City recommends the Plan include strategies and incentives for programs like microgrids, storage, and peak demand management to ensure grid resiliency. We also recommend ensuring that the 2030 CECP encourage critical electric grid infrastructure upgrades to be resilient to the impacts of climate change, including extreme heat.**

- **Ensuring grid affordability:** As electricity demand is expected to double in the next 25 years, costs associated with this increase in capacity like upgrading the distribution and transmissions systems and renewable energy and storage infrastructure, will be borne by ratepayers. In addition, upgrades will need to be made onsite, e.g., within a building, to handle the increase in electricity load. For large commercial buildings, these upgrades will come at a significant cost, especially when these will be added to the costs of new distribution systems. In addition, we are concerned that as wealthier, more resourced communities are likely to move towards electrification more quickly than others, that lower income rate payers and environmental justice communities will be left behind with higher energy burdens and fossil fuel infrastructure costs as stranded rate payers. Currently, there is nothing in the Plan to subsidize and finance the transition to a decarbonized economy, especially for lower income and environmental justice communities.
    - **A Better City recommends the Plan include financial subsidies to transition to a decarbonized future with a carve out for lower income and environmental justice communities. This could potentially be done through the establishment of a Massachusetts Climate Bank, as mentioned in several recommendations throughout this document.**

ATTACHMENT E: OTHER COMMENTS

- **Climate Justice & Ensuring an Equitable Transition to a Decarbonized Economy**: We are concerned that there was little to no inclusion of the cross-sector climate justice priorities put forward by the Implementation Advisory Committee's Climate Justice Working Group in the 2030 CECP. In addition to considering these cross-sector priorities for climate justice across all components of the CECP for 2030, we also recommend including climate justice commitments in each sector detailed in the CECP. Without committing to such targets upfront, we risk leaving behind our most vulnerable and historically disinvested communities as we transition to a decarbonized economy, and risk perpetuating ongoing harms in our climate policy. We also recommend including overarching CECP recommendations on the equitable funding and financing of a transition to a decarbonized economy. In particular, we recommend establishing a Massachusetts Climate Bank to help leverage public-private partnerships, regional initiatives, and multi-year climate solutions to help fund the critical infrastructure needed to achieve our statutory climate commitments. Such a climate or green bank should specifically uplift and prioritize solutions in environmental justice, low-income, and historically disinvested communities, to ensure that we have a truly equitable transition to a decarbonized economy and are not leaving communities behind to achieve our climate commitments. Finally, we suggest the CECP consider equitable climate governance commitments that can help govern, implement, and finance our climate solutions over time. We strongly recommend the overdue establishment of a state-level Environmental Justice Council as mandated by the Climate Act of 2021. Specifying and affirming equitable climate governance, implementation, and financing commitments in the 2030 CECP will help to hold the Commonwealth accountable in ensuring that no one is left behind as we transition to a decarbonized economy.
    - **A Better City suggests considering the cross-sector CECP recommendations from the IAC Climate Justice Working Group, as well as including sector-specific climate justice commitments in the CECP. We also recommend establishing a Massachusetts Climate Bank to help fund and finance an equitable transition to a decarbonized economy. Finally, we recommend the overdue establishment of an Environmental Justice Council in Massachusetts.**