Mayor Martin J. Walsh
Boston City Hall
Boston, MA 02201

July 12, 2018

Dear Mayor Walsh,

As academics, clean energy experts, and leaders of organizations representing thousands of Boston residents, we ask you to develop an ambitious climate action plan to achieve zero carbon emissions and 100 percent renewable energy for the City of Boston.

As this winter's storms have shown, Boston is especially vulnerable to the effects of climate change. While we should take steps to protect our neighborhoods from damage caused by climate change, "adaptation" is not sufficient. We must also move rapidly to reduce the carbon emissions contributing to global warming.

If we fail to accelerate our progress in cutting carbon emissions, sea levels could rise by 7 to 10 feet in Boston Harbor by the end of this century, while residents could experience 90 days each year with temperatures above 90 degrees Fahrenheit. To avoid these impacts, we must transition away from fossil fuels to a future powered entirely by clean, renewable energy like solar and wind.

Transitioning to renewable energy will bring many other benefits to our city, including reducing harmful forms of air pollution that contribute to asthma, cardiovascular disease, and other health problems. Renewable energy can also help residents and businesses stabilize their energy bills, while contributing to local economic development.

While Boston cannot solve this problem alone, our city has an important role to play as a leader on the national and international levels. Boston has taken many important steps to reduce carbon pollution and expand renewable energy. Now, with a federal administration moving as fast as possible in the wrong direction, Boston must step up and lead the way forward. That is why we were pleased to see you announce the City's commitment to achieve net zero carbon emissions by 2050.

While modeling is a useful exercise to inform future policy decisions, it is an inexact science, especially when it comes to predicting the impact of technological innovation and the rapidly declining costs of clean energy. We shouldn't allow modeling to stand in the way of necessary action. There are many policies and programs we can implement today to reduce our carbon pollution and accelerate the growth of renewable energy.

As the Carbon Free Boston study moves ahead, we urge you to develop a climate plan that incorporates the following key principles:

- **Boston should achieve zero carbon emissions and 100 percent renewable energy across all sectors as quickly as possible.** While Boston must reach this target no later than 2050, we should plan to get there even sooner.

- **We should prioritize additional and local sources of renewable energy**, in order to maximize the benefits for our health, for our economy, for job growth, and for the electric grid.
- **While state and federal action is needed, Boston can't rely on other levels of government to achieve the necessary transition to renewable energy.** Instead, Boston should be a leader in pursuing ambitious policies at the local level and developing creative ways to address limits on municipal powers.

In particular, we encourage the City to adopt the following strategies in order to achieve zero carbon emissions and 100 percent renewable energy across all sectors. While modeling may identify additional actions that Boston must take to achieve zero carbon emissions, we are confident that these measures will form the cornerstone of any successful climate plan.

Net zero buildings: Buildings account for 75 percent of Boston's carbon emissions.[1] Boston should implement a policy requiring all new buildings to be built to net zero carbon standards by 2030, and create a roadmap to retrofit existing buildings to be net zero carbon by mid-century. This roadmap should include:

- Maximizing on-site renewable energy generation by requiring all new buildings with suitable solar exposure to be built with rooftop solar panels installed, and by doubling down on efforts to install solar panels on existing residential, commercial, and institutional rooftops and parking lots.
- Creating a city-wide program to make it easier for residents and small businesses to switch to renewable heating technologies like air source heat pumps, similar to successful HeatSmart and Solarize programs in Boston and elsewhere.
- Stopping the expansion of gas distribution infrastructure, and exploring opportunities to facilitate neighborhood-scale conversions to renewable heating technologies rather than rebuilding existing gas pipelines.
- Building all new municipal facilities to net zero carbon standards immediately, and creating a plan to retrofit existing municipal buildings to be net zero carbon.

Renewable electricity supply: We have abundant clean energy resources in Massachusetts. To eliminate our carbon emissions economy-wide, we must transition to an electric grid powered by 100 percent renewable energy. Boston can accelerate the move to 100 percent renewable electricity by:

- Implementing a community choice energy program immediately with at least 5–10 percent additional Class 1 renewable energy, ramping up to 100 percent renewable electricity over time.
- Using the Boston Buying Power program to supply 100 percent renewable electricity for participating businesses and nonprofits.
- Encouraging institutions and large businesses to enter into power purchase agreements for 100 percent renewable, local power.
- Implementing community-based microgrids, such as the proposed microgrid project in Chinatown, to increase the deployment of renewable energy while expanding access to its benefits.
- Working with utility companies to modernize the electric grid, in order to accommodate increased renewable energy generation and the electrification of heating and transportation.
- Powering municipal buildings with 100 percent renewable, local electricity.

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[1] "City of Boston Greenhouse Gas Emissions Inventory, 2005-2015," February 8, 2018, <https://www.boston.gov/sites/default/files/boston_ghg_inventory_2005-2015.pdf>.

Zero-carbon transportation: As we transition to a zero-carbon transportation system, we can reduce congestion and increase mobility and quality of life for residents of all of Boston's neighborhoods. While electric vehicles will play an important role in achieving a clean transportation system, we should prioritize expanding opportunities for transit, walking, and biking. Boston should accelerate the transition to zero-carbon transportation by:

- Improving bus service through measures such as dedicated bus lanes, traffic signal priority, and the implementation of bus rapid transit service along key corridors.
- Working with the MBTA to convert the public transit bus fleet to electric buses, prioritizing replacement of the fleet's oldest and most polluting buses, and those traveling routes through environmental justice communities.
- Working with the MBTA to improve the frequency of service along subway lines, implement subway-like service along the Fairmount Line, and transition to more frequent urban service in our commuter rail system.
- Reviving Boston's Complete Streets program, and fully implementing the bicycle and pedestrian projects identified in Go Boston 2030.
- Requiring the installation of electric vehicle (EV) charging stations in parking garages and facilitating EV charger installation along public streets.
- Converting the city fleet to EVs, including larger vehicles like garbage trucks and school buses.
- Charging for residential parking permits to make parking easier in neighborhoods and to generate revenue for greener transportation options.
- Working with MassDOT to explore variable tolls at high-traffic times of day to manage demand and ease trips.

Waste: Moving Boston to zero waste gives us the opportunity to be a nationwide leader in economic development and public health, while reducing the global warming emissions associated with solid waste. Boston should move toward zero waste by:

- Setting strong goals for decreased disposal, including 50% reduction by 2025, 75% by 2030, and at least 90% by 2040.
- Requiring the installation of recycling and composting bins alongside all trash bins, including in residential, commercial, industrial, and institutional facilities.
- Prioritizing the highest and best use of waste materials so that resources are conserved and recovered and greenhouse gas emissions are minimized, through practices like recycling, composting, and anaerobic digestion.
- Including job standards in city contracting and procurement procedures.

We believe that the strategies outlined above will move Boston toward a zero-carbon future, while showing the way for other cities to accomplish this goal.

In conclusion, we look forward to working with your administration to achieve zero carbon emissions and 100 percent renewable energy for Boston. By adopting an ambitious climate action plan, you will help protect public health today while ensuring a safe, livable, thriving Boston for future generations.

Sincerely,

Organizations

Environment Massachusetts
MASSPIRG
Mothers Out Front Boston
LivableStreets Alliance
Clean Water Action
350 Mass for a Better Future
Massachusetts Sierra Club
Back Bay Green
Massachusetts Climate Action Network

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