

**REPORT OF THE COMMITTEE ON ENVIRONMENTAL JUSTICE, RESILIENCY,  
AND PARKS**

**BOSTON RISING: BUILDING A RESILIENT CITY  
ON A HILL THROUGH LOCAL CLIMATE ACTION**



**Report to Members of the Boston City Council  
January 8th, 2025**

**Presented for the Committee by Gabriela Coletta Zapata, Chair**

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# BOSTON CITY COUNCIL

Committee on Environmental Justice, Resiliency, and Parks  
Gabriela Coletta Zapata, Chair

January 8, 2025

Dear Colleagues,

As we enter 2025 and the second year of our legislative calendar, the urgency of addressing environmental justice and climate change in Boston has never been more critical. Climate change is the greatest threat humanity faces today, as confirmed by scientific consensus from leading global organizations such as the World Health Organization (WHO) to the Vatican's Pontifical Academy of Sciences under the auspices of the Holy See. Its far-reaching effects—extreme weather events, rising sea levels, and disruptions to food security—pose serious risks to our health, our ecosystems, and the stability of communities worldwide. This challenge demands nothing less than bold, immediate action to protect our future.

As a vibrant, large metropolitan city, Boston must stand firm in its commitment to climate action, especially in the face of potential federal rollbacks of protections for polluting industries and the loss of vital funding for climate resilience projects. In these uncertain times, we must redouble our efforts to advance a climate agenda rooted in equity—one that empowers innovation and builds a strong local workforce to lead the charge. We cannot afford to wait for others to act; Boston must lead the way with solutions that put our communities first.

I want to express gratitude to Mayor Michelle Wu, who in her tenure as both Mayor and Councilor-At-Large, has demonstrated strong leadership in advancing Boston's climate resilience and environmental justice goals. Through various initiatives that include the establishment of the Green New Deal for Boston, she has worked tirelessly to address climate impacts while focusing on improving the city's livability now and for future generations.

I am deeply grateful for the invaluable contributions of our city-wide partners—foundations, non-profits, urban farms, volunteer groups, and youth organizations—who have been instrumental in tackling the environmental challenges facing our neighborhoods. Through countless discussions with leaders in these fields, we've crafted the strategies in this report. Their dedication and expertise illuminate the path forward, guiding us toward a more resilient and sustainable future. Together, we are shaping the next chapter of our city's climate action with shared commitment and passion.

The Committee on Environmental Justice, Resiliency, and Parks is unwavering in its commitment to ensuring Boston's climate policies are swift, effective, and equitable. We are determined to dismantle the inequitable systems that perpetuate environmental harm, especially in our most vulnerable communities. Our goal is clear: to keep Boston on a path toward achieving its ambitious climate goals while ensuring that every voice is heard and every community benefits from the transformation ahead. With equity at the heart of our mission, we will continue to work relentlessly, advancing innovative solutions and fostering a workforce that is equipped to build a greener, more sustainable city for future generations. Together, we will rise to this moment and meet the challenges of the climate crisis head-on.

Sincerely,

Gabriela Coletta Zapata, Chair  
Committee on Environmental Justice, Resiliency, and Parks

## **I. INTRODUCTION**

The Boston City Council, consisting of fifteen standing committees, includes the Committee on Environmental Justice, Resiliency, and Parks, which is dedicated to addressing critical environmental issues in the city. In 2024, the Committee led efforts to propose and pass legislation aimed at reducing pollution, improving sustainability, and increasing resilience to climate change.

This report highlights the city's key environmental challenges and the municipal policies in place to tackle them, with a particular focus on recent advancements through action taken by the Administration and the Council. This document provides an in-depth overview of Boston's climate resilience initiatives, key strategic breakthroughs, and ongoing projects across various sectors.

These include efforts such as the creation of the Office of Climate Resilience, food recovery programs, and the standardization of climate science and environmental justice in Boston Public Schools. Additionally, the report presents forward-looking recommendations, such as establishing a Municipal Climate Bank, promoting a just energy transition inclusive of unions, and considering the implications of state and federal policy changes on the city's environmental future.

## **II. COMMITTEE OVERSIGHT**

One of the key tasks of the Boston City Council Committee on Environmental Justice, Resiliency is overseeing, scrutinizing, and passing federal, state, and local grants that fund the City of Boston Environment, Energy and Open Space Cabinet (EEOS). Additionally, the Boston City Council Committee on Environmental Justice, Resiliency reviewed, examined, and passed various proposals submitted by her honor the Mayor and the Boston City Council body. These include, but are not limited to, the following:

- Order for a hearing regarding implementing coastal resilience strategies for Boston's waterfront. This hearing was sponsored by Councilor Gabriela Coletta Zapata and co-sponsored by Councilor John FitzGerald.
- Order for a hearing to discuss Boston's Walking City Trail, an urban hiking route connecting 27 miles of Boston parks, gardens, urban forests, and streets through 17 Boston neighborhoods. This hearing was sponsored by Councilor Henry Santana and co-sponsored by Councilors Gabriela Coletta Zapata and Benjamin Weber.
- Order for a hearing to discuss ways to equitably fight climate displacement in District Seven. This hearing was sponsored by Councilor Tania Fernandes Anderson.
- Order authorizing the Parks and Recreation Commission, on behalf of the City of Boston, to acquire by an eminent domain taking a parcel at 0 Dale Street in Hyde Park adjacent to the Sherrin Woods urban wild, as permanently protected parkland to be managed in coordination with Sherrin Woods, and to use Community Preservation Fund monies appropriated to the Parks and Recreation Department to award damages as determined by the Commission. This order was sponsored by her honor the Mayor Michelle Wu.
- Eleven Million Four Hundred Six Thousand Seven Hundred Sixty-Two Dollar (\$11,406,762.00) grant from the USDA Forest Service Urban and Community Forestry for the creation of an accessible, inclusive and resilient urban forest in Boston and reduce technical and financial barriers to accessing and preserving trees.

- One Million Dollars (\$1,000,000.00) from the United States Department of the Interior under the Land and Water Conservation Fund (LWCF) to make capital improvements to the Mary Ellen Welch Greenway in East Boston. The grant will fund improvements to the Greenway, including newly paved pathways, enhanced entrances, new site furnishings, and drainage improvements to address chronic site flooding.
- Two Million Dollar (\$2,000,000.00) grant from the United States Department of the Treasury to fund the Clougherty Pool replacement and bathhouse renovation project.
- One Hundred Thousand Dollar (\$100,000.00) grant, from Executive Office of Energy and Environmental Affairs to fund investment in local programs including recycling equipment, organics diversion, outreach and education, pilot programs, school recycling, toxic reduction, and more.
- Five Million Dollar (\$5,000,000.00) grant from the United States Department of the Treasury to fund the repairs and maintenance of aquatic facilities.
- Six Hundred Fifty-Nine Thousand Nine Hundred Ninety Dollar (\$659,990.00) grant from the United States Department of Energy to fund State and Local Governments and Tribes, in implementing strategies to reduce energy use, to reduce fossil fuel emissions and to improve energy efficiency.
- Ten Million Dollar (\$10,000,000.00) grant to promote energy efficiency and energy savings to various public buildings and infrastructure projects.
- One Million Dollars (\$1,000,000.00) grant from the United States Environmental Protection Agency, to fund resident education on electric cooking and its environmental and health benefits.
- Forty-Five Thousand Dollar (\$45,000.00) grant to fund the acceleration of climate resilience in Boston through the “Building Resilience Through Immersive Education and Training” project.
- One Million Nine Hundred Eighty-Three Thousand Eight Hundred Seventy-Two Dollar (\$1,983,872.00) grant from the United States Department of Transportation to fund the Digitizing of Boston’s Curbs via Machine Learning: Promoting Transparency, Workforce Development, and Equitable Green Policy Project.

### **III. EXISTING REPORTS AND EFFORTS**

Boston is facing escalating impacts of climate change. As an urban, coastal city, Boston encounters unique challenges that require a strategic and equitable approach to safeguard its residents and infrastructure. The City of Boston has already taken initial steps of releasing the following reports to address the worsening impacts of climate change, including but not limited to:

- Climate Ready Boston - An initiative designed to prepare Boston for the impacts of climate change, including sea-level rise, extreme heat, and storms. It emphasizes neighborhood-specific strategies for flood protection, climate adaptation, and community resilience, aligning with broader citywide climate goals. Published in 2016 and updated in 2019 as part of an ongoing effort to improve the city’s climate resilience strategies.
- GoBoston 2030 - Boston’s long-term mobility plan that focuses on creating safe, equitable, and sustainable transportation options. The plan includes ambitious goals such as reducing

greenhouse gas emissions from transportation by 50% and increasing access to reliable public transit, biking, and walking. Published in 2017.

- Imagine Boston 2030 - Boston's first citywide master plan in over 50 years, designed to guide growth and development while addressing equity, climate resilience, and housing. It identifies priority areas for investment, including creating resilient waterfronts, enhancing neighborhoods, and fostering innovation districts. Published in 2017.
- 2019 Climate Action Plan - An update to Boston's comprehensive strategy for reducing greenhouse gas emissions and preparing for climate change. It highlights initiatives to achieve carbon neutrality by 2050, improve energy efficiency, expand renewable energy, and increase community engagement in climate solutions. Published in 2019.
- Climate Resilient Design Standards & Guidelines for Engineers and Designers - A technical framework for integrating climate resilience into the design of buildings and infrastructure. It provides tools and standards to ensure new developments can withstand projected climate impacts, such as flooding and extreme weather events, in Boston. Published in 2019.
- Urban Forest Plan - A comprehensive strategy to expand and maintain Boston's tree canopy to improve air quality, reduce heat, and enhance climate resilience. It includes goals for equitable tree distribution across neighborhoods, preserving existing trees, and increasing urban greenery by 2030. Published in 2019.
- Zero Waste Boston toolkits - A set of resources and strategies aimed at reducing waste generation, increasing recycling, and improving composting rates. It includes guidance for residents, businesses, and institutions to support Boston's goal of achieving zero waste by 2050, while fostering a circular economy. Published in 2020.
- Heat Resilience Solutions for Boston - A focused plan to mitigate the impacts of extreme heat in Boston through urban cooling strategies such as expanding green infrastructure, planting more trees, and enhancing public awareness. It emphasizes equitable solutions to protect vulnerable communities most affected by heat waves. Published in 2020.

The City has made significant strides in addressing climate change and enhancing environmental resilience through key legislative initiatives, programmatic efforts, and strategic partnerships, all guided by an equity lens. These actions include but are not limited to:

- Boston Community Choice Electricity Program - This program provides residents and businesses with a cleaner, more sustainable electricity option by allowing them to automatically opt into a community electricity aggregation program. It aims to lower carbon emissions by offering electricity sourced from renewable sources, while also providing residents with savings on their electricity bills.
- Building Energy Reporting and Disclosure Ordinance (BERDO) 2.0 - BERDO 2.0 is an updated ordinance improving the energy performance of buildings. The new version includes stricter energy use and carbon emissions reduction targets for large buildings. It mandates building owners to report energy use data and take steps to achieve greater energy efficiency, helping to drive Boston toward its carbon neutrality goals.
- Climate Ready Boston and Army Corps Partnership - The partnership between the City of Boston and the U.S. Army Corps of Engineers focuses on assessing coastal storm risks through the Coastal Storm Risk Management Feasibility Study. Building on the Climate Ready Boston initiative, the study evaluates flood risks and explores strategies to manage coastal flooding, particularly for Boston's forty-seven-mile coastline. It aims to align city, state, and federal efforts to enhance resilience against storm surges and sea-level rise, with potential federal investment. The study is expected to be completed by 2028.
- Coastal Resilience Project Tracker - The Coastal Resilience Project Tracker is an online tool designed to monitor and track the city's efforts to mitigate the impacts of sea-level rise and

coastal flooding. The tracker helps to coordinate projects focused on improving coastal resilience, ensuring that progress is made in strengthening Boston's waterfront areas against climate risks.

- Community First Partnership - This initiative focuses on promoting environmental justice by ensuring that all communities, especially those disproportionately impacted by climate change, have a seat at the table in decision-making processes. The partnership works to uplift communities in need by providing resources and advocating for equitable climate policies.
- Green Infrastructure Policy Standards - These standards are part of Boston's strategy to use natural systems, such as trees, wetlands, and permeable surfaces, to manage stormwater and reduce the urban heat island effect. The policy supports the installation of green infrastructure, such as rain gardens and green roofs, to improve the city's environmental quality and climate resilience.
- Modernizing the Development Review Process (Article 80) - The City is updating the development review process under Article 80 to ensure that new projects meet environmental sustainability standards. This includes evaluating how projects will impact climate resilience, carbon emissions, and energy efficiency, helping to ensure that Boston's urban development aligns with its sustainability goals.
- PowerCorps - PowerCorps is a workforce development initiative that provides young people with training in green infrastructure, energy efficiency, and environmental stewardship. The program is designed to help empower local youth, especially in underrepresented communities, to gain valuable skills in the growing green economy while simultaneously contributing to Boston's climate action efforts.
- Public-Private Partnerships for Coastal Resilience - The city announced the launch of a project to strengthen coastal resilience in East Boston, focusing on the central Border Street waterfront. This initiative, the first to address coastal flooding across private properties in Boston, will involve designing solutions using both green and gray infrastructure. The project aims to reduce flood risks, improve stormwater management, and enhance waterfront access while prioritizing community engagement and environmental justice. The city has also secured a \$330,500 grant to advance these efforts.
- Tree Protection Ordinance - Boston's new public tree protection ordinance, signed by Mayor Wu, strengthens efforts to preserve the city's urban forest, following recommendations from the Urban Forest Plan. The ordinance mandates the protection of public trees on city-owned properties, including parks, libraries, and schools. It requires a survey of trees before construction and ensures healthy trees are only removed with community involvement. The goal is to improve the urban canopy, enhance resilience to climate change, and promote environmental equity across neighborhoods.
- Wetlands Protection Ordinance - Enacted in January 2020, this ordinance grants the city enhanced authority to safeguard its wetlands and related water resources. These areas are vital for controlling flooding, filtering stormwater runoff, producing oxygen, and mitigating the urban heat island effect. The ordinance empowers the Boston Conservation Commission to regulate activities that may impact wetlands, including removal, filling, dredging, or alteration. It also establishes new Coastal and Inland Flood Resilience Zones, providing additional protections to areas susceptible to flooding.

Boston has restructured various city cabinets and created new climate-related departments, commissions, and positions to effectively carry out its bold climate goals. These efforts are designed to foster collaboration across all levels of government and the private sector, ensuring a holistic approach to sustainability. These include but are not limited to the following:

- Green New Deal Director: Leads efforts to implement Boston's Green New Deal, focusing on sustainability, climate resilience, and economic opportunities in the green sector.

- Chief Resilience Officer: Formerly the Chief of Energy, Environment, and Open Space, this reimagined cabinet position leads on climate action across city departments, fostering community engagement, and ensuring environmental justice, aiming to make Boston more sustainable, equitable, and resilient to climate impacts.
- Conservation Commission: Manages Boston's natural resources, ensuring their protection and sustainable use.
- Office of Food Justice: Focuses on ensuring equitable access to nutritious, affordable food, particularly in communities facing food insecurity.
- GrowBoston: A program supporting urban agriculture and local food production in Boston, aiming to increase food resilience and sustainability.
- Urban Forest Plan and Forestry Division: Focuses on enhancing and maintaining Boston's tree canopy, improving air quality, reducing heat, and addressing environmental equity through more green spaces in underserved neighborhoods.
- Executive Director for Youth Green Jobs: Leads programs designed to provide young people with green jobs and environmental career opportunities, ensuring the next generation plays a pivotal role in addressing the climate crisis.

These advancements showcase Boston's dedication to tackling the escalating climate crisis. This commitment is reflected in the city's adoption of bold, collaborative policies, focused and intentional implementation efforts, and strategic investments in impactful programs. Additionally, expanding the city's staff capacity further strengthens its ability to meet climate challenges head-on.

#### **IV. RECENT STRATEGIC BREAKTHROUGHS**

##### The Office of Climate Resilience

During my tenure as Chair, I have championed the need for urgent action to fortify all forty-seven miles of Boston's coastline and protect Boston from the threat of rising seas due to climate change. The Committee held several hearings and working sessions on this topic with robust participation from colleagues, cabinet members, as well as dozens of waterfront affinity organizations from across the City and academia.

During the discussions, updates were provided on the ongoing Climate Ready Boston initiative, coastal resilience projects, and strategies for accelerating their implementation. The sessions highlighted the importance of collaboration across city departments, state and federal agencies, private landowners, and community groups to develop equitable and sustainable waterfront planning. A key recommendation was to establish a dedicated office or a similar cabinet-level position to oversee coastal resilience projects, coordinate efforts across multiple departments, and liaise with external partners.

In a major win, Boston launched the Office of Climate Resilience in August 2024 with a primary focus on enhancing Boston's resilience to climate-related challenges, including flooding, extreme heat, and rising sea levels, particularly in coastal and vulnerable areas. The office is led by a Director who will coordinate efforts across various city departments, work with local communities, businesses, and experts to implement critical climate resilience projects and safeguard Boston's future. This office is part of a broader commitment to climate action and environmental justice, aiming to make the city more resilient, equitable, and sustainable.

Boston plays a vital role in ensuring the resilience of our coastline. As Chair, my focus is to move beyond a parcel-by-parcel approach, which is inadequate in addressing the urgent threat of coastal flooding. I will continue to work closely with the Office of Climate Resilience to implement nature-based solutions that incorporate both passive and active permeable landscapes. Our next challenge is transitioning from the



assessment phase to active implementation through strategic investments and partnerships. We must collaborate to secure the financial resources needed and engage private, public, and philanthropic partners to fund these initiatives.

#### Food Access, Recovery, and Acquisition of Food Hub

Climate change profoundly impacts food security, which encompasses the availability, access, utilization, and stability of food for all people. It affects each of these components in various ways, leading to both direct and indirect consequences. This is particularly concerning for environmental justice communities where food insecurity continues to grow despite the tireless efforts of community partners to provide food to residents.

Recently, the Office of Food Justice (OFJ) evolved from the former Office of Food Access to reflect a broader commitment to equity, sustainability, and systemic change in the city's food system. Its new focus is to ensure equitable access to nutritious, affordable, and culturally appropriate food for all residents. It works to address food insecurity through initiatives that support urban agriculture, improve food distribution networks, and strengthen local food systems. OFJ's additional focus is to reduce food waste while fostering resilience against food inequities across Boston neighborhoods.

As Chair, I've introduced an ordinance codifying the Office of Food Justice into Boston's Municipal Code and a potential program addressing food insecurity through a food recovery program. This program would require businesses to donate surplus edible food to community organizations and improve access to healthy food across the city. The Committee held multiple hearings and working sessions on this topic and others that seek to reduce food waste, enhance food security, and promote environmental sustainability while addressing disparities in access to nutritious food.

During these discussions, we learned of various operational barriers for food access organizations largely run on volunteers who feed thousands of Boston residents per week. A major barrier included the need for refrigerated storage space for the dozens of food access organizations and businesses across the City. Lack of access to refrigeration leads to additional food waste and shortens the amount of time inventory is safe to consume for those they serve.

I am extremely proud that Council and OFJ worked together to repurpose federal funding received through the American Rescue Plan Act (ARPA) to acquire a brand new, 27,000 square-foot centralized food distribution hub in Roxbury. This facility, a collaboration with Mass General Brigham and YMCA, will increase the availability of fresh produce and pantry goods to residents in need across the City. The hub features 5,500 square feet of cold storage space, enabling the YMCA and other community organizations to distribute food more efficiently and effectively. This initiative not only addresses immediate food insecurity but also supports local farmers and reduces food waste, aligning with our broader goals of sustainability and resilience.

These initiatives are key to building more resilient, sustainable food systems that can withstand future challenges while improving access to fresh, local produce. It is a priority to create a satellite food hub in East Boston, a federally recognized food desert, with a similar model that provides storage for local organizations while also providing nutritious and affordable foods for residents. My office continues to collaborate with local partners and advocates to ensure that Boston remains at the forefront of food sustainability and environmental justice.

#### Environmental Justice & Climate Change Curricula in Boston Public Schools

The urgency of climate change underscores the need to prepare Boston's children for the challenges and opportunities they will face. Despite the absence of climate change topics in Boston Public Schools (BPS) learning standards, promising strides are underway. A hearing order sponsored through this Committee has initiated efforts to develop metrics and resources—including curriculum, professional development, and partnerships—to better equip students and teachers. BPS Superintendent Skipper has committed to piloting a program using the Civic Action Project standards, aligning climate education with civics and advocacy. By investing in students' understanding of environmental science and justice, Boston can cultivate future leaders prepared for careers in the green and blue economies.

Currently, BPS has a mix of curricula, such as Full Option Science System (FOSS) and Amplify, with varying implementation rates across grade levels. However, significant gaps remain, particularly at the high school level, where only 43.75% of schools are using district-endorsed materials. Efforts to close these gaps include integrating environmental justice into Science Technology Engineering and Math (STEM) curricula and using local resources like outdoor classrooms funded through Elementary and Secondary School Emergency Relief (ESSER). These initiatives not only foster hands-on learning but also help students connect global challenges to their immediate environment. Collaboration with local nonprofits, such as Eastie Farm, Boston Nature Center and Youth Build, enhances these efforts while addressing the racial and social inequities often central to environmental justice. Moving forward, the focus is on standardizing high-quality climate science education across all grades. This includes leveraging partnerships, updating outdated state frameworks, and providing equitable resources.

#### Green and Blue Economy Workforce Development:

Boston must expand its workforce development programs focused on decarbonization and marine industry jobs. The success of PowerCorpsBOS, a pilot program in this area, demonstrates the potential for further expansion. In addition, the City should establish workforce development initiatives targeting the "New Blue Economy," which includes jobs in aquaculture, fishing, offshore wind, maritime transportation, tourism, marine biotech, environmental protection, marine education, and research.

The recent announcement of Boston's Workforce Climate Resilience Task Force signals the City's commitment to advancing these efforts. This program should specifically target Boston Public School students, equipping them with the skills necessary to meet the growing demand for trained climate workers, particularly those with expertise in STEM, technology, climate science, and marine sciences. Integrating an environmental justice and climate change curriculum into BPS is crucial to ensuring our students are prepared to become the next stewards of the Earth. By doing so, we can ensure that they have access to well-paying green and blue jobs in the future, driving both environmental and economic resilience for Boston.

#### BERDO 2.0 and the Equitable Emissions Investment Fund:

As Chair of the Committee on Environment, Resiliency, and Parks, I have a dedicated seat on Boston's Building Emissions Reduction and Disclosure Ordinance (BERDO) Review Board, which works to ensure the equitable implementation of BERDO—Boston's initiative to bring large buildings to net-zero emissions by 2050. BERDO mandates that large existing buildings report their energy usage and carbon emissions while setting targets to reduce emissions over time. These zoning reforms will incentivize the use of renewable energy sources, energy-efficient systems, and low-carbon materials in construction, helping to significantly reduce the city's carbon emissions.

It is critical to ensure that all building owners, especially those with properties that narrowly exceed the threshold for being classified as large residential buildings, have access to the technical assistance they need to comply with BERDO. This support is essential to dismantling barriers and achieving our climate

goals. By integrating zoning provisions that complement BERDO's objectives, we can create an environment where energy-efficient and sustainable building practices are not just encouraged, but made more accessible, promoting long-term sustainability across the city.

Additionally, payments into the Equitable Emissions Investment Fund will prove essential amidst potential loss of federal or state funding for decarbonization efforts. The fund supports projects that reduce greenhouse gas emissions while prioritizing equity and benefiting environmental justice communities. The fund reinvests proceeds from building emissions standards and focuses on initiatives like renewable energy, energy efficiency, and green infrastructure. More importantly, it emphasizes collaboration with local organizations to ensure benefits for historically burdened populations and environmental justice communities.

## **V. POLICY RECOMMENDATIONS**

As a coastal city on the frontlines of climate change, Boston must act boldly to safeguard its future. This means generating revenue for capital resilience projects through tools like a climate bank or green bonds and holding our largest carbon polluters accountable. A just transition must prioritize clean energy solutions like electrification and geothermal systems while collaborating with labor leaders to secure green jobs. Embedding additional climate action in zoning regulations and integrating climate goals with sustainable mobility will further reduce emissions and enhance resilience. These steps are vital to protect residents, advance equity, and position Boston as a leader in combating the climate crisis. The Committee respectfully recommends the following policy priorities for Council and administration consideration.

### Municipal Climate Bank and Green Bonds

In 2024, I introduced a hearing order recommending the exploration of a municipal climate bank to mobilize resources for climate resilience and sustainability projects. A municipal climate bank would serve as a financial institution dedicated to funding initiatives such as renewable energy, green infrastructure, energy efficiency upgrades, and sustainable transportation, all while prioritizing equity and community involvement. By leveraging public and private investments, the bank would attract additional funding from federal grants, private investors, and philanthropic organizations, stimulating local economies and creating green jobs.

Estimates suggest it will cost Boston over \$4 billion to fortify its forty-seven-mile coastline against sea-level rise and storm surge through a mix of nature-based and traditional infrastructure solutions. A municipal climate bank would play a critical role in addressing these challenges by mobilizing resources, fostering sustainable development, and combating climate change effectively. The climate bank would provide funding through grants, loans, or investment opportunities for projects aimed at reducing greenhouse gas emissions, enhancing resilience to climate impacts, and promoting renewable energy. It would prioritize equitable access to funding, ensuring marginalized communities benefit from climate initiatives and have a voice in decision-making processes.

To secure sustainable financing for these initiatives, Boston could also utilize mechanisms like green bonds, which would attract dedicated capital for large-scale climate projects while offering investors opportunities to support environmentally sustainable development. Additionally, robust governance and oversight frameworks would ensure accountability and alignment with the city's broader climate action and sustainability goals. By advancing this initiative, Boston can address the urgent \$4 billion challenge of climate resilience, promote economic growth, and emerge as a leader in equitable climate action. This approach aligns with the city's commitment to protecting its coastline, fostering economic opportunity, and achieving environmental sustainability.

### Just Transition to Clean Energy

Massachusetts has a mandate to achieve net-zero emissions by 2050, which requires significant reductions in carbon emissions from buildings, responsible for one-third of all climate-damaging emissions. A critical component of this transition is moving away from carbon-based combustible fuels, such as natural gas, which is 95% methane. While this shift is necessary to meet our climate goals, it is equally important for Boston to ensure that gas industry workers are included in this process, so they are not left behind as we transition to clean energy.

The "Just Transition" framework is key to this process, ensuring that those who have been employed in the fossil fuel industry are not left behind but are supported through retraining, workforce development programs, and the creation of sustainable, well-paying green jobs. By engaging workers in this transition, we can ensure that the shift to clean energy is equitable, inclusive, and just. It is essential that we include these workers at every stage of the process—whether in policy discussions, job retraining initiatives, or the creation of new job pathways—so that the future of Boston’s energy economy is one that benefits both the environment and our working communities.

At the state level, there is pending legislation that aims to ensure that gas workers are not displaced but instead have access to new opportunities as the fossil fuel industry contracts and is replaced by green jobs. Boston, as a union city, must prioritize the inclusion of workers in these decisions, providing them with the necessary training, support, and job opportunities to ensure they can successfully transition into the green economy.

### Advancing Electrification and Geothermal

Boston has made substantial progress in reducing fossil fuel dependence, advancing electrification, and exploring innovative energy solutions like geothermal systems, all vital steps toward its goal of achieving carbon neutrality by 2050. The city is also piloting geothermal micro-districts, leveraging underground heat for sustainable heating and cooling to reduce reliance on natural gas. Updated zoning policies and stricter energy codes are further aligning new developments with climate goals, encouraging the use of renewable energy systems and energy-efficient designs. By combining these efforts with investments in renewable energy infrastructure and community-focused programs, Boston is paving the way for a cleaner, more sustainable future.

To build on this foundation and meet its 2050 carbon neutrality goals, Boston must scale electrification across all sectors, expand geothermal energy projects, and retrofit older buildings for energy efficiency. Leveraging federal and state funding, such as through the Inflation Reduction Act, can provide the resources needed to accelerate these efforts. Equally important is engaging with communities to ensure equity in the transition and prioritize marginalized groups, ensuring that Boston remains a leader in combating climate change while fostering environmental and economic resilience.

### Additional Resilient Zoning Standards and Mitigation

Prioritizing sustainability, incorporating green building standards, and enhancing climate resilience measures in Boston’s zoning regulations are critical to fostering environmentally responsible development and ensuring long-term resilience to climate change.

In 2021, the Coastal Flood Resilience Overlay District (CFROD), or Article 25, was adopted and aims to protect people and structures from the effects of climate change, such as sea level rise and storm surge. The CFROD's goals include promoting flood-resilient design, preventing flood damage, elevating the occupiable space of buildings, and floodproofing areas below flood elevations. Recent efforts by Harbor Towers I and II have illuminated the administrative and legal barriers in the city's approvals process.

Urgent action to retrofit properties to withstand sea-level rise has been met with long periods of review and bureaucratic delays. As Chair, I will work to streamline the approval process for property owners and propose changes that would simplify the permitting process for climate resilience measures, such as flood barriers, green roofs, and permeable surfaces, empowering property owners to proactively protect their buildings from the impacts of flooding and climate change.

One example of how Boston is already fostering climate resilience is the growing trend of rooftop farms. These green roofs not only provide sustainable, local produce but also serve as vital tools for stormwater absorption, reducing the burden on our drainage systems and mitigating the urban heat island effect. I've worked with GrowBoston to advocate for the installation of green roofs or urban greening practices during the development review process, which help reduce carbon emissions, absorb rainwater, and promote biodiversity in the city. In addition, I've supported prioritizing permeable surfaces in developments to help manage stormwater runoff, as well as preserving trees on private properties and encouraging new plantings along public sidewalks to meet our tree canopy goals.

Beyond these strategies, it's crucial to incentivize and provide small grants for retrofits that improve accessibility in flood-prone areas, particularly in Coastal Flood Overlay Districts. It's also essential to standardize and quantify what constitutes proper climate mitigation, as this is a cornerstone of the new Planning Department's efforts. In a recent letter to the Boston Planning and Development Agency (BPDA) on development review reform, I emphasized that retrofitting buildings to incorporate green infrastructure can often be more expensive and challenging than integrating these elements from the start. To ensure Boston remains both affordable and resilient, we must prioritize the inclusion of sustainability and climate resilience in building design from the outset, ensuring these features are a standard part of new developments before they are approved by the City.

#### Reducing Polystyrene Use and Plastic Waste

To advance Boston's commitment to sustainability, we must prioritize a citywide reduction or ban on polystyrene (commonly known as Styrofoam) products. This initiative builds on Boston's successful 2018 ban on single-use plastic bags and aligns with efforts by other towns, states, and nations to combat plastic pollution. Polystyrene is a non-recyclable material that takes over 500 years to decompose, often breaking down into microplastics that infiltrate our ecosystems and bodies. Beyond its environmental toll, polystyrene poses significant health risks, as it can release carcinogenic particles when used to package food and beverages. A ban would signal Boston's leadership in reducing plastic waste and safeguarding public health.

A polystyrene ban also addresses environmental justice concerns. Low-income neighborhoods in Boston are disproportionately affected by the widespread use of this toxic material, as businesses in these areas often rely on inexpensive packaging options. These communities already face higher exposure to pollution, making the elimination of polystyrene a crucial step toward equitable environmental reform. By introducing a ban and providing resources to businesses for transitioning to sustainable alternatives, Boston can mitigate these disparities, reduce pollution, and set an example as a city that prioritizes the health of its residents and the planet. Thank you to Girl Scout Troop 68277 in Dorchester for their advocacy on this important topic including Eleanor P. (17), Calida B. (17), Clare A. (17), Ita B. (16), Gretchen C. (16), and Sabine B. (14).

#### Integrating Climate Goals with Sustainable Mobility

Linking climate and mobility goals is essential in reducing carbon emissions and creating a sustainable, livable city. Transportation is one of the largest contributors to greenhouse gas emissions, with cars being a major source of pollution. By promoting multi-modal accessibility—where walking, biking, public transit, and other sustainable transportation options are seamlessly integrated—cities can decrease

reliance on cars and reduce their carbon footprint. Investing in accessible and safe infrastructure not only improves mobility but also enhances the quality of life for residents and reduces harmful emissions, which is critical for meeting climate goals.

Boston is already recognized as one of the most walkable cities in the United States, thanks to its compact size, rich history, and well-designed urban infrastructure. Since 2022, I have co-sponsored a hearing supporting the creation of a Boston Walking City Trail. This proposed 27-mile urban hiking route would connect 17 neighborhoods, stretching from the Neponset River Reservation to the Bunker Hill Monument, passing through some of the city's most scenic parks, urban wilds, and residential areas. Along with other transportation options like electric scooters and bikes, this trail could significantly reduce the city's carbon footprint.

However, while Boston has made strides in improving biking and public transit—through initiatives like Go Boston 2030—there is a lack of comprehensive data and plans focused on making the city fully walkable. While Boston has the potential to become a pedestrian-friendly city, many areas remain unsafe or inaccessible for walkers. The City of Boston needs to conduct further research and develop a clear plan to ensure that all streets, particularly in the Downtown region, are fully walkable, ADA-compliant, and safe for pedestrians. This effort would align mobility and climate goals while fostering a healthier, more sustainable urban environment.

#### Waterfront Business Improvement District

A Business Improvement District (BID) is a privately-led, publicly-sanctioned organization that provides additional services to a defined geographic area. My office has explored this tool as a potential means of securing funding for capital projects to protect both private and public assets from coastal storm surges. BIDs are established at the municipal level and governed by state legislation. Property owners within the district vote to initiate, manage, and finance the BID. This proposed BID would bring together a range of stakeholders, including home and business owners, as well as public entities such as the City of Boston, MassPort, and other city, state, and federal agencies, to support resiliency along our waterfront.

Earlier this year, my office partnered with Northeastern's Policy Capstone to assess property values along District 1's waterfront, develop a property owner presentation, and draft legislation to establish a Boston Waterfront BID. BIDs generate revenue through assessments, or common area fees, levied on property owners and businesses within the district. These funds would be used to implement resilience measures, including both gray infrastructure—such as flood barriers— and green infrastructure— like permeable landscapes —to protect the Boston Harbor.

Flooding and coastal storm surges will impact critical infrastructure and some of our most valuable assets, including schools, businesses, police stations, and emergency service facilities. Proactively protecting these assets is an economic investment, saving millions in potential repair costs and damages. The Waterfront BID would allow Boston to collaborate with both public and private landowners to establish a funding mechanism that supports proactive protection and mitigation efforts against coastal flooding.

## **VI. LOCAL CONSIDERATIONS FOLLOWING PASSAGE OF THE MASSACHUSETTS CLIMATE BILL**

In November 2024, Governor Maura Healey signed into law Massachusetts Bill S.2967, or *An Act promoting a clean energy grid, advancing equity, and protecting ratepayers*. This historic piece of legislation provides municipalities with a valuable framework for advancing clean energy initiatives that can drive local environmental, economic, and equity goals. This legislation aims to promote the

development of clean energy solutions, making energy more affordable, accessible, and sustainable for communities across the state. By leveraging the bill's provisions, municipalities can facilitate the transition away from gas-based heating, expand electric vehicle infrastructure, and create jobs, particularly in the growing green energy sector.

One of the key aspects of the bill is that it also has a strong focus on equity. It mandates an analysis of environmental burdens on low-income and historically marginalized communities when citing new energy infrastructure. Furthermore, the bill places a strong emphasis on workforce development, enabling local governments to build job opportunities in the clean energy sector. This will help foster economic growth while providing workers with the skills and support needed for a successful transition to a green economy.

Municipalities now have a powerful tool in Bill S.2967 to accelerate the adoption of clean energy, promote energy equity, reduce reliance on fossil fuels, and ensure a just transition for all communities. This is particularly important for communities that have historically been burdened by environmental and energy inequities. While this legislation alone cannot address the full scope of challenges posed by the climate crisis, it represents a significant step toward environmental progress across the Commonwealth.

In Boston, we will leverage the provisions of this bill to further our environmental goals, ensuring that our city continues to lead in clean energy development and workforce equity. The successful passage of this bill is a testament to the tireless work of advocates who have fought for years to make clean energy solutions more accessible and equitable. It is a major milestone in our collective journey toward a more sustainable and just future.

## **VII. LOCAL CONSIDERATIONS UNDER THE INCOMING FEDERAL ADMINISTRATION**

In light of the incoming presidential administration's commitment to reducing funding for environmental organizations and their affiliated grant programs, it is more crucial than ever for municipalities to take the lead in combating the climate crisis. As federal support diminishes, local and state-level actions will be key to ensuring that critical environmental efforts continue. We must remain resolute in our dedication to tackling climate challenges, fostering innovation, and securing alternative funding to drive sustainability. This will require strategic planning, proactive advocacy, and the identification of new financial resources. Here are key strategies that municipalities and states can adopt to keep the momentum going in the fight against climate change.

### Foundation and Grant Funding

In the event of federal funding cuts, local foundations and grant-making organizations in Boston will play an essential role in supporting the city's environmental, sustainability, and parks initiatives. Local partners, such as the Boston Foundation, the Barr Foundation, and other regional environmental nonprofits, offer crucial funding opportunities for projects addressing climate change, green infrastructure, biodiversity, and public green spaces. By tapping into these local resources, Boston can continue to advance its environmental goals, strengthen its sustainability efforts, and enhance its parks and public spaces, all while fostering collaboration with well-established regional networks dedicated to a healthier and more resilient city.

### Legislative Advocacy

Advocacy remains a cornerstone of effective climate action. By engaging with state and federal lawmakers, municipalities can push for the reinstatement or redirection of funding to essential environmental programs. The Healey-Driscoll Administration has already demonstrated a strong commitment to addressing the climate crisis. Boston must work extensively with the first statewide

Climate Chief, the newly-created Office of Climate Innovation and Resilience, align with the statewide coastal resiliency strategy, and consider utilizing the Community Climate Bank. Additionally, building strong coalitions and rallying public support will help municipalities influence legislative decisions, demonstrating the long-term economic, public health, and environmental benefits of maintaining strong environmental protections.

#### Public-Private Partnerships (PPP)

Collaboration between local governments, private businesses, nonprofits, and philanthropic organizations offers immense potential for progress. In Boston, home to a thriving biotech sector and a growing ecosystem of climate-focused industries, there is a unique opportunity to harness innovation and expertise to advance sustainability goals. Many private entities in these sectors are increasingly committed to sustainability and are eager to invest in green technologies, infrastructure, and community programs. By fostering public-private partnerships, Boston can leverage private sector expertise, technology, and funding to further its environmental goals. These partnerships enable the city to maximize its resources and expand its capacity for transformative change

#### Leveraging Alternative Federal Programs

In the event of rollbacks on climate or environmental agencies, Boston can pivot to alternative federal programs and partnerships to sustain and advance its climate action goals. By strategically tapping into funding streams and technical expertise from non-environmental federal agencies, Boston can bolster its resilience and maintain momentum on key initiatives. Federal programs to target include the Department of Transportation (DOT), Federal Emergency Management Agency (FEMA), or Department of Energy (DOE), or the Department of Housing and Urban Development (HUD). It is essential that we align local initiatives with federal agency missions to ensure eligibility for diverse funding streams. For instance, climate-related infrastructure upgrades could be framed as public safety or economic revitalization projects to qualify for broader federal support.

#### Regional Collaboration

Collaboration among municipalities and states within a region can amplify the impact of environmental projects. By pooling resources and developing joint initiatives, local governments can lower costs, share expertise, and apply for collective funding opportunities. Regional approaches also foster collective responsibility, ensuring that the most pressing environmental challenges are addressed in a coordinated and efficient manner. It will be essential to collaborate with all congressional leaders to advocate for earmarked funds and competitive grant applications targeting local climate priorities. Additionally, building multi-agency coalitions with surrounding municipalities will strengthen regional funding applications and increase competitiveness for large-scale grants.

By embracing these strategies, municipalities and states can continue to champion critical environmental protection initiatives, even when federal support may be limited. The power of local leadership, combined with state-level action and cross-jurisdictional partnerships, will ensure continued progress toward sustainability and resilience, no matter the challenges we face. In this new era, as we face uncertainty at the federal level, it is more important than ever for municipalities and states to take bold action and secure the resources necessary to address the climate crisis. By utilizing these strategies, we can ensure that the work continues—empowering our communities, protecting our environment, and building a brighter, more resilient future for all.

## **VIII. CONCLUSION AND ACKNOWLEDGEMENTS**

This report demonstrates the vast array of environmental justice and climate-related policies and initiatives the Committee on Environmental Justice, Resiliency, Parks has overseen and undertaken.



While the work may at times seem insurmountable, this Committee is dedicated to ensuring the City of Boston makes good on its promise to keep current and future Boston residents protected from the impacts of climate change.

Environmental justice and resiliency must be a priority for Boston to ensure equitable access to a healthy environment for all its residents, especially marginalized communities that are disproportionately affected by climate change, pollution, and environmental degradation. Boston faces challenges like rising sea levels, extreme weather, and air pollution, which can exacerbate existing social and economic disparities. Environmental impacts can have devastating consequences for our social determinants of health.

By prioritizing environmental justice, the city can create more sustainable, adaptive solutions that protect vulnerable populations, improve public health, and strengthen resilience to future environmental risks. This approach not only fosters a more just society but also ensures long-term ecological and economic stability for the city as a whole.

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I would also like to extend my appreciation to my current council colleagues for their ongoing dedication to our shared goals, with particular thanks to Vice Chair Benjamin Weber of District Six for his leadership and collaborative efforts. Lastly, I want to acknowledge the former Chairs of this esteemed Committee, including the Honorable Kendra Lara and the Honorable Matt O'Malley, whose visionary leadership laid the groundwork for much of the progress we've achieved today. Your legacy continues to inspire and guide our work.

A special thank you goes to all the individuals and organizations I had the privilege of meeting with over the past year. Your valuable insights and expertise have been instrumental in informing the recommendations and findings presented here. To all who have contributed to this endeavor, thank you for your unwavering commitment to advancing local climate action and resilience.

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