

NYC CLIMATE JUSTICE AGENDA 2020

A CRITICAL DECADE FOR CLIMATE, EQUITY, & HEALTH



NEW YORK CITY ENVIRONMENTAL JUSTICE ALLIANCE

APRIL 2020

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Environmental Justice Alliance

ON THE GROUND

AND AT THE TABLE



New York City Environmental Justice Alliance



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A CRITICAL DECADE FOR CLIMATE, EQUITY, & HEALTH

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UPROSE
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PROTECT NYC
FROM CLIMATE CHANGE!
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There's No
Time to Wait!

Our House
Is on
FIRE

PROTECT NY
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Climate, Jobs
and Justice

CHANGE!
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is
1

INTRODUCTION

The climate justice movement is surging and gaining momentum at local, state, and national levels. In New York, thanks to the leadership of frontline communities, we have achieved major climate justice victories, from passing the Climate Leadership and Community Protection Act (CLCPA) at the State level, to mandating major cuts to building sector emissions, transforming our commercial waste system, and authorizing congestion pricing at the New York City level.

Now that the CLCPA is the law of the land, New York must rise to the challenge of drawing down our greenhouse gas (GHG) emissions to achieve an 85% reduction and a carbon-neutral economy by 2050.¹ To do so requires a rapid, dramatic remaking of our economy and a shift in the way we view the urban environment. As one of the most climate-vulnerable and diverse coastal cities, New York City must lead the way for major cities nationally and around the world.

Frontline communities are leading by example, confronting this global crisis at the neighborhood level with projects that increase community resiliency such as cooperative solar projects, local green industrial waterfront plans, coastal protection priorities, and food cooperatives. But as we enter a new decade, New York City needs to accelerate and scale-up solutions for a Just Transition, tackling emissions in an equitable way, supporting climate adaptation for frontline communities, and creating good, green jobs in the process.

New Yorkers are facing new and more complex challenges. The 2020 outbreak of COVID-19 has massively disrupted our city, state, and the world at large. In many ways, this crisis foreshadows future risks exacerbated by climate change, where low-income communities, communities of color, and other marginalized groups are hit first and worst by the impacts. Decades of environmental racism have led to disproportionately high rates of respiratory and heart disease in these frontline communities, increasing their vulnerability to the impacts of viruses like COVID-19.² Our economic system relies on extractive, precarious and low-wage work placing many low-income communities and communities of color in increasingly dire straits with minimal social safety nets. Projections show that the frequency and intensity of pandemics and climate-related disasters will only increase as the planet warms.³ As New York copes with a state of emergency, the experiences will reveal the extent of the challenges ahead and inform our future planning efforts for the escalating climate crisis.

As we mark the 50th anniversary of Earth Day, New York stands at a crossroads in 2020. Our State has just 10 years to reduce GHG emissions by 40%, as mandated by the CLCPA, and our City has a decade to reach the goals set out in the original PlaNYC 2030. We are also on the cusp of the 2021 New York City elections, which will result in a new Mayoral administration as well as the biggest turnover of NYC Council representatives in decades.

This report assesses the targets and progress outlined in *OneNYC 2050: Building a Strong and Fair City*, the latest iteration of the citywide sustainability and resiliency blueprint, as well other key city and state climate policies, from the perspective of low-income communities of color. The report also identifies the strategies and pathways needed to effectively mobilize our city to implement a robust vision of a Just Transition in a new decade. As we embark on a new decade, the NYC Environmental Justice Alliance has developed our third *New York City Climate Justice Agenda 2020: A Critical Decade for Climate, Equity & Health*, around three main themes aimed at achieving an intersectional set of environmental and climate justice goals:

2020 CLIMATE JUSTICE GOALS

1
Reduce Harmful Greenhouse Gases & Localized Emissions

2
Advance a Just Transition Towards an Inclusive, Regenerative Economy

3
Cultivate Healthy & Resilient Communities

Editor’s Note: *The COVID-19 pandemic has abruptly upended our communities, livelihoods, and economies. The current crisis has begun to usher in austerity policies that threaten our collective ability to recover and thrive. As we go to press, news has broken about proposed massive cuts to the New York City budget. New York’s budget cuts are not long-term solutions. We need major Federal, State, and City funding for targeted investments in climate, jobs and justice to recover from the COVID-19 crisis – and to protect New York’s most vulnerable communities from the ongoing impacts of climate change while fostering healthy, resilient communities. For our analysis on COVID-19 and environmental justice, please see pages 56, 58-59.*

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REDUCE GREENHOUSE GASES & LOCALIZED EMISSIONS

Time is running out to draw down our global greenhouse gas (GHG) emissions to prevent climate catastrophe. Scientists have been sounding the alarm for decades, and frontline communities have suffered the consequences of inaction, from devastating wildfires to debilitating hurricanes and floods. New York State is now legally bound to cut our GHG emissions by at least 85% and to achieve carbon neutrality by 2050, but we are far from achieving this goal.

At the same time, drawing down emissions must not come at the expense of environmental justice (EJ) communities. Tackling GHG emissions in a vacuum ignores the noxious co-pollutants that have plagued EJ neighborhoods for decades, causing disproportionate rates of asthma, heart disease, and cancer.



TRANSITION TO A CLEANER ENERGY SYSTEM

EXCEED OUR AMBITIOUS CLIMATE GOALS

Around the United States, the growing concern over our energy production system's contribution to climate change is pushing renewable energy generation to the forefront of local and regional planning and policymaking. In 2019, in response to New York's grassroots demand for a cleaner and more equitable energy system, New York lawmakers passed the most ambitious state climate law in the nation, the NYS Climate Leadership and Community Protection Act (CLCPA). The CLCPA calls for the State to reduce GHG emissions from all anthropogenic sources 85% from 1990 levels by the year 2050, with an incremental target of at least a 40% reduction in climate pollution by 2030.⁴ The law also mandates 100% carbon-free electricity by the year 2040.

The responsibility of fulfilling New York State's ambitious clean energy targets now falls upon government entities, renewable and clean energy industries, and community organizations. In response to this task, the City has decided to set a goal of achieving carbon neutrality by 2050.⁵ Carbon neutrality, or achieving a net-zero carbon footprint, refers to the goal of reducing carbon emissions in the atmosphere to zero by balancing continual carbon emissions with some form of carbon removal or sink (often through carbon offsets)

with no guarantee that the reduced emissions will benefit communities long overburdened by air pollution. The City's approach to decarbonization is extremely troublesome and antithetical to the true goals of the CLCPA: New York's complete transformation to a carbon-free energy system and a reduction of localized pollution to improve public health.

NYC-EJA and our allies in the climate justice movement are particularly concerned with the allowance of carbon offsets, which provides a pathway for carbon-emitting sources to continue polluting New York's environment. While New York's determination of decarbonization is meritorious, NYC-EJA strongly believes the City and State should strive to be carbon negative by 2050. "Carbon negative" is a designation awarded to an activity that goes beyond achieving net-zero carbon emissions to actually create an environmental benefit by removing additional carbon dioxide from the atmosphere. Robust decarbonization should be paired with a commitment to expand and maintain natural carbon sinks, including state-wide forested land and the city's urban forest. New York has the opportunity to become the first state in the United States that strives to become carbon-negative, solidifying New York's role as a leader in the fight against climate change.

ENVIRONMENTAL JUSTICE CONCERNS WITH CARBON NEUTRALITY & OFFSETS

NYC-EJA has strong concerns about the efficacy and equity of mechanisms that have been proposed to achieve “carbon neutrality,” including cap-and-trade, offsets, and other carbon trading mechanisms in both lowering total emissions and protecting environmental justice communities from carrying the burden of fossil fuels. From an environmental and climate justice perspective, carbon neutrality is problematic for several reasons:

LOOPHOLES

A carbon-neutral economy may create loopholes that set back NYC’s efforts to address climate change, including carbon offsets that may not actually result in a net decrease in air pollution. We are already seeing the pitfalls of offsets in California’s carbon trading system. A 2016 study from Cushing et al. shows that the program leans heavily on carbon offset credits, and as a result, California may have overstated their emissions reductions by 80 million tons of carbon dioxide – a third of the total cuts that the state’s cap-and-trade program was expected to achieve in the next decade.

NO RELIEF FROM EJ BURDENS

Relying on carbon offsets to achieve our emissions reductions can perpetuate the disproportionate pollution impacts on communities of color in New York City. A polluter could invest in reforestation hundreds of miles, or even continents away, to “offset” the carbon they release into the atmosphere while doing nothing to alleviate the root cause of asthma attacks, lung disease, and other harms facing New York’s environmental justice communities.

DELAYED EMISSIONS REDUCTION

Working toward carbon neutrality rather than 100% emissions reductions could allow New York City to procrastinate on its emissions reductions goals. Carbon offsets could allow polluters to continue consuming fossil fuels at untenable rates while benefiting from loopholes in a carbon offset market that would lead to a net increase in greenhouse gas pollution. Regardless of the number of trees we plant, we cannot continue to burn fossil fuels at our current rate without dire consequences for the planet – and for environmental justice communities at the frontlines of fossil fuel infrastructure.

REQUIRES HIGH RISK TECHNOLOGY

Focusing on offsetting rather than reducing emissions at the source may incentivize the use of high risk technology, such as “carbon capture and sequestration” (CCS) technology, which essentially captures excess CO₂ from large emitters, like power plants, and stores it underground by injecting it into a geological formation. This technology is neither reliable nor cost-effective, and does not address the problems of co-pollutants. In addition, the long-term impact of injecting carbon into geological formations underground are unknown.

SCALE UP IN-STATE RENEWABLE ENERGY GENERATION

By focusing on city-sited and in-state energy generation, NYC would not only lay the groundwork for energy self-sufficiency but also catalyze the local clean energy economy. Concentrating on in-state, large-scale renewable energy generation such as community-scale solar projects, offshore wind projects, and larger upstate solar projects, New York will also decrease our dependence on imported energy. The City has the opportunity to send a positive signal to invest in New York’s antiquated energy infrastructure while creating tens of thousands of long term, living-wage careers. We commend the NYC Council Speaker Corey Johnson and his colleagues for calling on the State to commit at least half of its proposed 9,000 Megawatts (MW) of offshore wind power by 2035, and their call for new transmission lines to connect upstate-generated renewable energy to New York City.⁶ NYC-EJA urges the de Blasio Administration to invest in New York-based renewable energy infrastructure and a workforce to support this.

In an effort to bring large quantities of renewable energy into the grid in 2019, the New York State Energy Research and Development Authority (NYSERDA), selected two projects from its first competitive offshore wind solicitation. The projected combined capacity of these two projects is 1,696 MW, the single largest renewable energy procurement by a state in U.S. history. Due to the State’s solicitation for in-state, offshore, renewable energy procurement, these two projects alone are projected to generate a combined economic impact of \$3.2 billion in private investments to upstate, downstate, and Long Island. New York has also confirmed plans to issue its second solicitation for offshore wind farms in 2020, expected to add at least 1,000 MW to the state’s renewable energy generation portfolio (*for more information on NYSERDA’s offshore wind solicitation and its impacts on jobs, see Section 2 of this report: “Creating Good, Green Jobs in the Regenerative Economy”*).

NYS CLIMATE LEADERSHIP & COMMUNITY PROTECTION ACT



Mandates economy-wide GHG emissions by at least 85% & carbon neutrality by 2050.



Requires 35% of the benefits of clean energy & energy efficiency funding go to disadvantaged communities.



Codifies NYS clean energy targets:

- 6 GW distributed solar by 2025
- 9 GW offshore wind by 2035
- 3 GW energy storage by 2035



Designates a Climate Action Council, Just Transition Working Group, and Climate Justice Working Group, and other advisory groups to inform the process.



RENEWABLE RIKERS

One vision of NYC-EJA and allies is of a renewable Rikers Island, aimed at transforming the 413 acres of publicly-owned land from a notorious jail into a hub for renewable energy and energy storage technology, as well as other sustainable uses.

In NYC, Rikers Island represents the inequities rampant in the criminal justice system, where people of color have for too long faced disproportionate arrests and incarceration. In 2019, the New York City Council voted to officially close down Rikers Island by 2026.⁷ Council member and chair of the Environmental Protection Committee, Costa Constantinides, in partnership with criminal justice and environmental justice advocates, put forth the Renewable Rikers Act. The Act is a package of legislation aimed at transferring ownership away from the NYC Department of Corrections and studying potential sustainable uses, including renewable energy, energy storage, stormwater management, and solid waste management.⁸

With land at premium in the five boroughs, a publicly-owned clean renewable energy project on Rikers Island would mark a major milestone in achieving NYC’s climate and equity goals.



NYC-EJA & allies supporting the Renewable Rikers Act.
Photo credit: Renewable Rikers Coalition



Proposed rendering of Rikers Island as host to renewable energy and resiliency infrastructure. Source: Lippman Commission

NO TRADING SCHEMES FOR ENERGY EFFICIENCY

NYC-EJA has concerns about the upcoming energy efficiency credit trading study as part of Local Law 97 (LL 97). NYC-EJA and many of our allies oppose trading-based carbon “solutions”. While LL 97 highlights the unproven potential for building investments in environmental justice communities, it ignores the potential pitfalls, including the disproportionate burdens a trading scheme could have on low-income communities and communities of color.

Energy efficiency trading is currently untested anywhere in the United States, and given the poor track record of carbon trading’s impacts on environmental justice communities, we remain skeptical of any new market-based climate scheme. If applied to the energy efficiency goals for NYC, the largest and most polluting building owners might be able to avoid making necessary improvements to their own buildings by making minor investments in rent-regulated and underserved buildings. We need targeted, deep retrofits across NYC’s building stock in order to reach our emissions reduction goals.

CANADIAN HYDROPOWER: A FALSE SOLUTION FOR NEW YORK'S CLIMATE JUSTICE GOALS

Although we commend the de Blasio administration's commitment to climate justice and to achieve 100% clean electricity in OneNYC 2050, we are concerned that this goal relies largely on importing hydropower from Quebec.⁹ This requires the construction of a 330-mile underground high-voltage transmission cable, called the Champlain-Hudson Power Express (CHPE), to bring power from Canada down to NYC. The nearly \$20 billion project would lock NYC into long-term dependence on Canadian hydropower while inhibiting local offshore wind, solar and other renewable industries from developing, providing that energy, and catalyzing good green jobs in the process.

We have concerns about the ecological and social impacts of hydropower, including the potential exposure of Indigenous communities in Canada to poisonous methyl-mercury from dam construction, and the potential exposure to PCBs that may result from constructing the CHPE under the Hudson River, the nation's largest Superfund site. A recent study also shows that the City's sourcing of hydropower may actually increase overall State carbon emissions by drawing hydropower away from other parts of the state that currently source from HydroQuebec, and would consequently have to switch to fossil fuel power.¹⁰

- X \$20B Transmission Line Cost**
- X No Local Job Creation**
- X Health Risks to Indigenous & EJ Communities**
- X Net Increase to NY GHG Emissions**

COMMUNITY-OWNED RENEWABLE ENERGY

Because of New York City's population density and unique topography, citing large-scale renewable energy projects is extremely difficult and costly. However, due to new developments in technology and policies, clean energy companies and community organizations are at the forefront of innovative, in-city sited renewable energy generation.

One of the ways NYC can create economic opportunities while making communities more resilient is by investing in the physical energy infrastructure. Community solar is becoming an increasingly popular opportunity. A community solar program allows residents who might not own their home or apartment, possess strong credit scores, or have adequate roof space to invest in a solar array and receive credits on their electricity bill for solar power.

COMMUNITY-OWNED RENEWABLE ENERGY (CONT'D)

NYC-EJA member UPROSE has launched New York State's first community-owned solar cooperative, Sunset Park Solar, which will be owned and operated by a cooperative (co-op) for the benefit of local residents and businesses.¹¹ One of the ways a community solar system can be part of the city's environmental justice solutions is through a co-op ownership structure. Not only will Sunset Park Solar increase Sunset Park's resiliency, but by increasing solar electricity generation, the adverse health and environmental impacts resulting from the GHG and other pollutants emitted from fossil fuel electricity generation can be reduced. Community solar systems provide a viable solution for in-city, regenerative energy solutions that address the high demand for energy. However, due to regulatory and utility interconnection regulations, community solar projects are often costly and time-consuming.

In an attempt to overcome many of the technical and regulatory hurdles facing community-owned renewable energy generation, in 2017 NYC-EJA partnered with PUSH Buffalo, The POINT CDC, and UPROSE to form REVitalize, which strives to develop strong and equitable partnerships between grassroots community-based organizations and the State through the development of locally-led energy demonstration projects in West Buffalo, Sunset Park, and Hunts Point.

The 2019 passage of the CLCPA has further catalyzed community-driven renewable energy projects, which are now at the forefront of local and state energy development.

A key provision of the CLCPA mandates that disadvantaged communities receive at least 35% (with a goal of 40%) of overall benefits of spending on clean energy and energy efficiency programs from State agencies, authorities, and entities. This spending mandate ensures that there will be an increase in clean energy funding opportunities for community solar projects.

To this end, NYC-EJA collaborated with NYSERDA and other organizations to discuss plans to address environmental justice communities and low-to-middle income households within the 6 Gigawatt (GW) by 2025 goal set by the CLCPA. One program of collaboration was the NY-Sun Incentive Program through which NYSERDA provides financial incentives and financing options for the installation of new grid-connected solar photovoltaic systems or residential solar photovoltaic systems. The stakeholder engagement provided an overview of NYSERDA's proposed strategy for the NY-Sun program and facilitated a discussion of community perspectives and energy equity.



Community solar array atop School 77, a new community center and hub in Buffalo, New York. Photo credit: PUSH Buffalo

COMMUNITY-OWNED RENEWABLE ENERGY (CONT'D)

This provided REVitalize partners, NYC-EJA members, and other community allies a unique opportunity to help guide the future of the \$600+ million NY-Sun solar development program and incentives. NYC-EJA is encouraged by the expansion of NYSERDA's NY-Sun program, although we continue to advocate for deeper funding commitments and better program models.

And finally, we support the recent call from the NYC Council Speaker for a district-scale renewable energy project to develop a network of buildings, potentially including a New York City Housing Authority (NYCHA) development, to provide heating, cooling, and hot water without relying on fossil fuels. Localized, closed-loop, renewable energy systems will be essential to both reducing our GHG emissions and increasing community resiliency in vulnerable neighborhoods.

REPLACE PEAKER POWER PLANTS

Aside from the positive outcomes listed above from scaling up in-state renewable energy generation, investing in city-sited renewable energy generation also helps to displace local, polluting fossil fuel power plants. On hot days, New York City residents turn up their air conditioners, raising demand for electricity above normal levels. In response to this increased demand in electricity, highly polluting power plants known as “peaker plants” were built. New York City is home to 16 peaker plants, both publicly and privately owned. Two are in the South Bronx,¹² and three are located in Sunset Park¹³ – both neighborhoods that are predominantly composed of low-income residents of color.

Peaker plants are more likely to operate on days when ozone levels are high, and air quality is already poor, exacerbating the impact of their harmful emissions. Power plants that burn coal, oil, or natural gas emit numerous air pollutants into the atmosphere. The most common air pollutants emitted from peaker plants are sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), ozone (O₃), particulate matter (PM_{2.5} or PM₁₀), and lead (P_b).^{14,15} SO₂ has been a cause of acid precipitation, commonly known as “acid rain,” which can damage vegetation and acidify lakes. Species vulnerable to acidic conditions have trouble reproducing and in some cases die off.¹⁶ NO_x and volatile organic compounds (VOCs) are components of ozone formation. Ozone is a principal component of smog and can result in respiratory health problems and other negative health and environmental impacts.¹⁷ PM_{2.5} includes dust and smaller particles with a maximum particle diameter of 2.5 microns. Small particulates have been shown to cause respiratory problems because they can penetrate deeper into the lungs than the larger particulates.¹⁸

REPLACE PEAKER POWER PLANTS (CONT'D)

The detrimental health effects of prolonged exposure to pollution in New York City are now well documented. In a 2008 study of New York City children between the ages of 1 and 6, researchers found that those exposed to chronically high ozone levels were more likely to be hospitalized for asthma. The study found that the risk of hospital admissions increased 22% with a 1 part per billion (ppb) increase in mean ozone concentration during the ozone season. Additionally, the effects of ozone on asthma admission were significantly higher among children 1–2 years of age, children living in low-income neighborhoods, children whose mothers had less educational attainment, or Medicaid/self-paid births, and “Hispanic” or Latina/o children. This was compared with older children, children in higher-income neighborhoods, children whose mothers had at least a high school education, or from mothers whose births were covered by other insurance and non-Hispanic children.¹⁹

In response to these severe impacts, New York City has taken numerous steps to decrease pollution levels across all emissions, and as a result, from 2009 to 2016, citywide annual average PM_{2.5}, NO₂, NO, and black carbon levels declined by 28%, 27%, 35%, and 24%, respectively.²⁰ However, further action to reduce localized emissions from environmental justice communities is urgently needed to

improve air quality. The 2013 New York City Community Air Survey notes that low-income neighborhoods bear 55% of the burden of ozone-attributable asthma hospital admissions and account for 56% of emergency department visits among children.²¹

The complete lack of action from the City and State to displace peaker plants has led NYC-EJA and our members to co-launch the PEAK Coalition. Our partnership consists of NYC-EJA, THE POINT CDC, UPROSE, New York Lawyers for the Public Interest, and Clean Energy Group. Our campaign will use community organizing, policy and legal advocacy, research, analysis, and planning to move New York City and New York State to replace dirty peaker plants in frontline communities with large-scale energy storage systems (ESSs), customer-sited solar and battery storage systems, and virtual power plants. A virtual power plant is a cloud-based data control center that aggregates a number of distributed energy resources (DERs) like solar photovoltaic arrays, ESSs, and wind farms. NYC-EJA urges the City to unify its *OneNYC 2050* goal to have 500 MW of storage available by 2025²² with the development of large-scale distributed generation to reduce usage of peaker plants sited in low-income communities of color.

TACKLE EMISSIONS FROM WASTE

Environmental racism has been pervasive in the waste management industry for decades. A global issue is the clustering of noxious industry in communities deemed disposable, leading to higher rates of respiratory and cardiovascular diseases and cancers caused by airborne toxins and particulates.²³ This trend has been replicated in NYC, where for decades, heavy-duty truck dependent waste transfer stations – intermediary locations for refuse and recyclables – are clustered in a few low-income communities and communities of color, reducing quality of life, worsening public health, and adversely impacting our climate.

When Fresh Kills landfill closed in 2001, New York City had nowhere within the five boroughs to burn or bury waste and has since relied heavily on the long haul transport of waste via polluting, fossil fuel intensive trucks. This led to routing of waste to transfer stations built in North Brooklyn, South Bronx, and Southeast Queens – neighborhoods that

today receive over 75% of the city’s commercial waste, at transfer stations that are poorly regulated.²⁴

New York City currently disposes about 33 million tons of waste per year from commercial and residential sources, and is widely reported to be one of the most - if not the most - wasteful city in the world.²⁵ Historically, both commercial and residential waste were collected by the NYC Department of Sanitation (DSNY), but in 1915 the Sanitation Commissioner decided to stop collecting from most businesses, and in 1954 the City stopped collecting from small businesses located in residential buildings, which created an opening for organized crime affiliates to join and control the industry.²⁶ With the advent of the Trade Waste Commission (now called the Business Integrity Commission) in the 1990’s, most organized crime influences were removed from the commercial carting industry – but the disparate environmental impacts on communities of color continued unabated.



DSNY truck. Photo credit: Annel Hernandez



Waste barge on Newtown Creek. Photo credit: Annel Hernandez



Faith-based community group in Southeast Queens pressuring local councilmember to support Waste Equity. Photo credit: Priya Mulgaonkar



Youth from YMPJ and THE POINT CDC pressuring local councilmember to support Waste Equity. Photo credit: Alex Moore

WASTE EQUITY VICTORIES

NYC-EJA and our member organizations including El Puente in North Brooklyn, the POINT CDC and Youth Ministries for Peace & Justice in the South Bronx, and UPROSE in Sunset Park, have advocated for decades to curb the negative impacts of the commercial waste industry, shaping the City’s 20-year Solid Waste Management Plan in 2006, which used principles of environmental justice for the first time and called for the equitable reopening of NYC’s marine transfer stations. We campaigned to pass the Waste Equity Law in 2018, which reduced permitted waste tonnage capacity of transfer stations in overburdened community districts, with certain qualifications (Brooklyn CD 1, Bronx CDs 1 and 2 and in Queens CD 12); and recently we helped pass the Commercial Waste Zones Law in 2019, a tremendous reform that will dramatically reduce truck traffic citywide and increase accountability, sustainability, and fairness in the industry.

Leaders within civic and faith based organizations in Southeast Queens have also been on the frontlines, highlighting the need for reform of transfer stations with poor standards in violation of city zoning codes and other laws.²⁷ While the City has taken important steps to remedy the issues of poor waste separation, excess waste generation, and disproportionate siting of poorly-operating transfer facilities, there is still a lot of work we can do to ensure that proposed and enacted legislation is carried out correctly, and that future innovations improve and localize the handling of our outsized, unjust waste footprint. NYC-EJA continues to fight for increasing equity and sustainability in waste processing locally – though a lot more can be said and done to address how the City must build support at state and federal scales to reduce the amount of waste that is generated to begin with.

COMMERCIAL WASTE ZONES: HISTORIC LAW REQUIRES RIGOROUS AND THOUGHTFUL IMPLEMENTATION

Commercial waste from businesses like restaurants and offices in NYC has been collected by private carting companies, and up until now, they have been subjected to fairly lax regulation, despite the formation of the Business Integrity Commission in 1996 to root out organized crime and improve industry standards.²⁸ The industry has been very dangerous to pedestrians, cyclists and drivers; unfair to workers; inefficient in its truck routes; and highly polluting, especially within environmental justice communities.

Decades of community and coalition organizing coupled with the bold leadership of NYC Council Member and Sanitation Committee Chair Antonio Reynoso, and other leaders within the City Council and the City Administration, recently led to the passage of the Commercial Waste Zones Law (LL 199) in October 2019. The law will rationalize the waste collection system by segmenting the City into 20 zones and selecting waste carting companies for contracts based on their submission of robust proposals in a competitive bidding process. The carters selected must thereafter adhere to certain terms within their contracts, or risk losing them.



Transform Don't Trash Coalition celebrating passage of the Commercial Waste Zones Bill in 2019. Photo credit: Matt Davis

The City needs to ensure that this unprecedented reform is properly implemented and enforced to meet the environmental justice and labor goals that were set out, such that the carters awarded remain in compliance with their contracts through the duration of their contract periods. The City must prioritize rule-making that accounts for concerns raised by members of the most impacted communities, and must ensure that in the new CWZ system, diligent inspection and enforcement is taking place.

PRIMARY BENEFITS OF COMMERCIAL WASTE ZONES



50% Reduction of vehicle miles traveled by heavy-duty trucks



Improved standards and conditions for workers



Increased separation of recyclables



Diversion of waste from transfer stations in EJ communities



Incentivized use of Marine Transfer Stations and rail-based transfer



Contracts with organic waste collectors and microhaulers who use zero- and low-emissions vehicles for local collection



Investment in waste facility improvements



Gradual transition to clean, ideally electric, trucks, to reduce tailpipe emissions



Accountability for public safety and health

MAP OF NEW COMMERCIAL WASTE ZONES



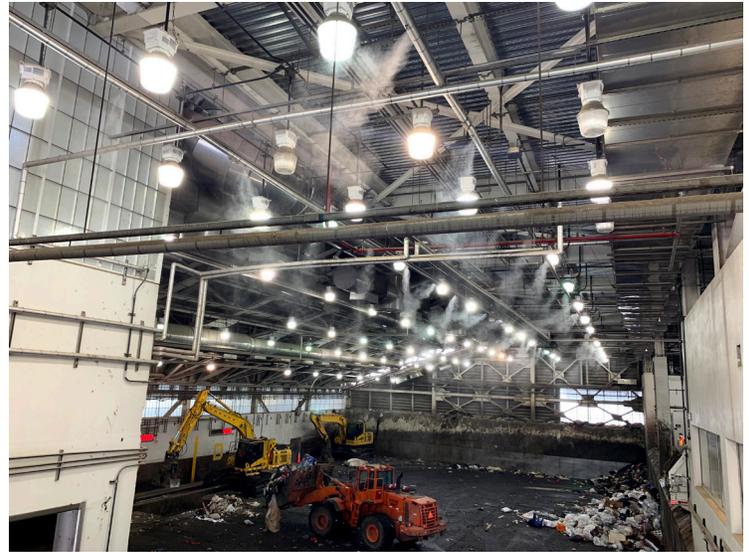
*Midtown North and Midtown South are both part of CD 105

ACTIVATE ALL MARINE TRANSFER STATIONS

In the 20-year Solid Waste Management Plan of 2006 adopted by Mayor Bloomberg, the City committed to re-open its Marine Transfer Stations. The MTSs are more equitably distributed around the city, have higher standards of operation, and would reduce truck traffic and pollutants by replacing outgoing heavy-duty trucks with barges.

In 2020, 14 years after the adoption of the 2006 SWMP, some of the transfer stations are still not open and their acceptance of refuse is far below permitted capacity.²⁹ While Manhattan generates a majority of the city’s commercial waste, there are no private transfer stations in

this borough, so their commercial waste is instead trucked to facilities in outer boroughs in environmental justice communities. Construction of the proposed Gansevoort Marine Transfer Station in the West Village for metals, glass, and plastics would reduce these materials going to truck-based transfer stations around the city, and better localize the City’s recycling efforts. We recommend that the Administration allocate the necessary funding and sign the MOU with NY State this year to build both the MTS and the adjacent public park, and ask that the City present a timeline for construction and operation.



Dust mitigation sprayers at North Shore MTS. Photo credit: Tok Oyewole

PRIORITIES FOR MARINE TRANSFER STATIONS

- 1 Construct and open non-operational Marine Transfer Stations
- 2 Fund overnight staffing of operational Marine Transfer Stations, so that commercial waste trucks can tip at these locations during their night shifts
- 3 Route waste and recyclables away from private transfer stations not in compliance with public health and safety laws, to the Marine Transfer Stations

IMPROVE LAND-BASED WASTE TRANSFER STATIONS

Waste transfer stations are the intermediary locations where waste goes before it is shipped out of the City, by truck, rail, or barge. In addition to the higher number of trucks in environmental justice communities, the facilities themselves have caused health and quality of life issues for nearby residents and businesses, and transfer station employees themselves.

Carting companies under the Commercial Waste Zones system will continue to select private transfer stations with whom to contract, based on guidelines within the laws. We need the City to ensure that the transfer stations adhere to standards that preserve the health and safety of the public and workers.

Accordingly, DSNY inspectors must check and suspend work at transfer stations that do not meet high performance standards required by the City zoning code for industrial uses near residences (e.g. enclosed buildings, odors that do not leave the property, no leachate, proper dust control, etc.) – as well as other local, state and federal laws related to worker and public health and safety. The City should not allow carting companies to contract with repeated bad actors, thereby awarding them decade-long contracts under the Commercial Waste Zones Law. We know that better technology and facility operation standards exist and work within our own City, most notably at the City’s Marine Transfer Stations.

MOVE AWAY FROM INCINERATION & WASTE-TO-ENERGY

Environmental justice advocates globally have long opposed incineration as a strategy for handling waste and producing energy. “Waste-to-energy” incineration is a false “renewable energy” solution because fossil fuels are used in the process of conversion, and the process spews pollutants like carbon monoxide and particulate matter into the bodies of residents nearby, leading to higher rates of respiratory and cardiovascular illnesses and cancers.

Among many locations, NYC sends waste to the Essex Covanta facility in Newark, which is one of the largest incinerators in the nation, operating next to an elementary school in a working class community of color with over 60,000 residents. The facility burns 2,800 tons of waste per day, with contracts from NYC’s Department of Sanitation and locations in Essex County, who are required to ship a minimum amount of waste to burn (referred to as “Put or Pay”) to sustain the facility’s inefficient operations. Due to plumes of purple smoke released from the facility last year, there were concerns raised that Covanta could be burning unpermitted and hazardous medical waste containing iodine, which can create additional burdens such as lung irritation, shortness of breath, and fluid in the lungs.³⁰

NYC needs to commit to being a better neighbor and environmental steward. We must stop deeming outside communities as less valuable, stop enabling incineration despite having shut it down within NYC long ago, and shift toward local processing of waste and recyclables so that we take responsibility for what we generate.

SUPPORT LOCAL, LOW-EMISSION, HIGH QUALITY ORGANICS PROCESSING

Living in cities, we interrupt the natural decomposition pathways for food scraps and other organic materials by trucking them to landfills and incinerators. This creates excess greenhouse gas emissions from the production and transport of materials, fossil fuels used in incineration, and methane release from decomposition in landfills. In NYC, food waste makes up approximately one-third of the city's waste stream headed to landfills and incinerators, but that number can be reduced if we build capacity to process food waste in a more local, regenerative way.³¹

We are troubled that the City of New York has proposed to halt organics collection for fiscal year 2021 as part of Mayor de Blasio's austerity budget. Our City should focus on stated commitments to organic waste processing and use food waste for generating compost or as a feedstock in anaerobic digestion to generate methane biogas. By converting just 5% of the land area of NYC to organics processing facilities, we could process all of the city's food waste.³²

OneNYC 2050 indicates that the City will focus on increasing organics processing inside and outside of the city. We recommend localizing this process as much as possible, in an equitable way, in consultation with overburdened communities and not relying so extensively on neighboring towns or cities to handle our waste.

Small-scale, local organic waste microhaulers are a growing niche within the waste collection industry. While they all have varying methods of operation, the basic premise is that they use zero- and low-emissions vehicles such as bicycles to collect food scraps, then turn them into high-quality compost. The microhauling companies in NYC are primarily run by women and tend to employ young people of color.

The few microhaulers in the city have faced several constraints to scaling up including lack of space to process organic waste, resulting in increased organics sent to landfills and incinerators and the associated excess truck miles in and out of overburdened communities and cities. Another issue is that the laws governing microhaulers are taxing and prohibitive, including insurance codes that view compost as a fertilizer and therefore as an explosive, making it so that overhead costs for having employees is incredibly high. Microhaulers have been enabled to scale up their organics collection in association with commercial carting companies under the forthcoming Commercial Waste Zones system, but are largely prohibited from using the city's private transfer stations.



BK Rot Compost operations at Know Waste Lands community garden. Photo credit: Tok Oyewole

Addressing the insurance laws, creating more clearly marked bike paths and bike-friendly legislation, and constructing organics processing facilities, would allow microhauling to scale up. Additionally, funding should be allocated within the budget to make investments that would enable zero- and low-emissions micro-haulers to access DSNY-funded Organics Processing facilities such as BigReuse, Earth Matter, BK ROT, and Red Hook Composting Facility. Toward the aim of localizing waste processing, the City should reconsider DSNY’s “put or pay” contracts that incentivize dumping higher rates of waste in incinerators or landfills, and instead route this money into well-run local organics separation practices, facilities, and staffing.

IMPLEMENT RESIDENTIAL ORGANICS COLLECTION FOR ALL NYC RESIDENTS

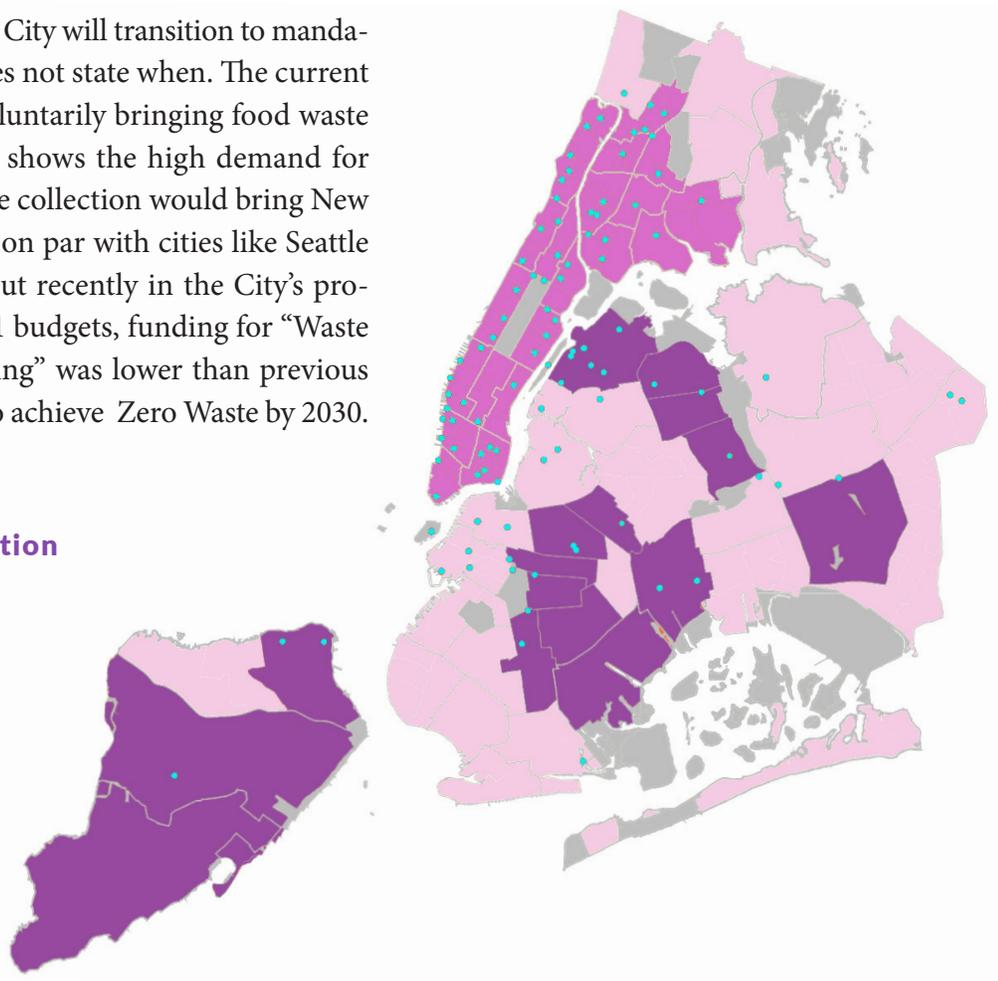
The City passed a mandatory recycling law in 1989 (Local Law 19), which is largely effective in routing recyclables to facilities like SIMS Recycling in Sunset Park, Pratt Industries Paper Mills in Staten Island, and many locations out of the City. However, mandating the collection of organic waste collection has been incredibly slow despite years of promises.

OneNYC 2050 indicates that the City will transition to mandatory organics recycling, but does not state when. The current robust program of residents voluntarily bringing food waste to compost drop-off locations shows the high demand for organics recycling, and citywide collection would bring New York City’s waste management on par with cities like Seattle and countries like Germany. But recently in the City’s proposed fiscal year 2020 and 2021 budgets, funding for “Waste Prevention, Reuse, and Recycling” was lower than previous years, despite the urgent need to achieve Zero Waste by 2030.

NYC Department of Sanitation Compost Program Map

- Curbside Composting Available
- Certain buildings eligible for enrollment
- Future expansion, no specific timeline
- Drop-off available

Map adapted from DSNY.



NYCHA ORGANICS & RECYCLING, COMPENSATING RESIDENTS

Among many urgently needed initiatives – including divesting from single-use materials, excess packaging, and non-recyclable goods, and better food distribution and diversion from landfills and incinerators – the City should make the necessary investments to mandate residential organics as promised years ago, not just voluntary programs in a few privileged neighborhoods. This needs to finally include organized programs in NYCHA housing developments.

NYCHA’s recycling rate is abysmal – by some estimates it is less than 1%.³³ Despite the passage of a law mandating residential recycling in NYC in 1989, progress in implementation has been incredibly slow, a fact that is acknowledged by DSNY, but has yet to be changed. The false narrative that people of color do not care about recycling or sustainability has been disproven time and again by residents of NYCHA developments demanding change and spearheading their own recycling programs in response to the City’s ineffectiveness.

From 2006 to 2009, NYC-EJA member organization West Harlem/Morningside Heights Sanitation Coalition (Sanitation Coalition) increased rates of recycling in the NYCHA General Grant Houses development through a program partially funded by NYCHA. Their educational model has been used by GrowNYC to educate residents about what goes into which recycling bins. However, today residents are still not adequately compensated for recycling projects in NYCHA developments, and are therefore unable to maintain the programs consistently for several years. Additionally, recycling bins tend to be out of the way and inaccessible.

According to participants in the program spearheaded by the Sanitation Coalition, this resident-driven, door-to-door approach was particularly impactful because residents were educated by neighbors instead of by strangers, and demonstrations included strict protocols for recycling education in an approachable and respectful way. We recommend this method for future NYCHA efforts to increase recycling, as well as adequate payment for the work of the residents and others. The City should consider employing members of the existing NYCHA Green City Force Corps, which could be expanded to employ young people to take on the tasks of educating about recycling, and enacting duties of the program.



Members of the Morningside Heights/ West Harlem Sanitation Coalition. Photo Source: MSHWHSC

While 5% of NYC residents in NYCHA housing may not seem like a huge proportion of the population, the City has an opportunity to demonstrate improved recycling and composting in residences with government funding, staff, and resources. Convenient, clearly labeled, organized recycling is a quality of life issue for the residents, who have been faced with disorganized and messy management of recyclables, and should not be forced to perform excessive measures to do something that many New Yorkers do with relative ease. The City should enact laws to prioritize robust zero waste efforts in public housing, in a holistic way that also addresses other quality of life issues.

SUPPORT ENVIRONMENTALLY JUST, LOCAL ANAEROBIC DIGESTION

Anaerobic digestion (AD) is a method of processing of organic materials in the absence of oxygen in an enclosed space to generate methane biogas and solid organic byproducts. The biogas can be used for heating or electricity, or converted into a type of renewable fuel. While not yet fully operational in New York City, converting food waste to energy through AD is commonplace in Europe, as well as a few cities in the United States.³⁴

Better utilizing AD can help the City to avoid the direct release of methane – a potent greenhouse gas – into the atmosphere, and to decrease reliance on fracked gas and polluting fossil fuels. Another end-product is a biosolid that can be used to create compost, though the feedstocks or inputs for AD determine the quality and safety of the biosolid end-product.³⁵

There are over a dozen water pollution control plants (WPCPs) in the city, but the Newtown Creek WPCPs in North Brooklyn hosts one with an active AD plant.³⁶ It has the capacity to treat 330 million gallons of wastewater each day and accepts wastewater from over one million residents. This facility combines wastewater sludge, and a bioslurry created from food scraps by a waste management company off-site, and then digests them to produce the biogas.³⁷



SUPPORT ANAEROBIC DIGESTION (CONT'D)

The routing of food waste bioslurry to this facility reduces waste going to landfills and incinerators, and the associated long-haul truck traffic. Biogas can be used as a renewable electricity and gas source for commercial and residential uses, though this is still underway at Newtown Creek. Currently about half of the biogas is used in the facility for air conditioning and to heat the facilities and boilers; the remaining gas is flared. According to National Grid, the demonstration project will eventually serve approximately 2,500 homes, representing a reduction of 16,000 tons of carbon emissions.³⁸ This demonstration pilot began in 2010, and we request that the City generate a timeline for connecting biogas into the grid.

Some additional factors stakeholders must consider include properly managing the feedstocks, permitting and coordination between agencies and businesses, and purifying the biogas to remove carbon dioxide and other unwanted compounds.³⁹ Furthermore, the biosolid produced is typically of lower nutritional quality than some other composts, and the presence of pharmaceuticals and other toxins in wastewater raises concerns about whether these biosolids are safe to use to grow food.⁴⁰

The need to process organic materials at a different site before it can be digested at the WPCP increases truck traffic in a

neighborhood that is already overburdened by the commercial solid waste industry. If possible, we recommend building infrastructure on-site to localize the AD process to one place at Newtown Creek, and in the meantime, using zero- and low- emissions vehicles like electric trucks to transport the bioslurry. We also recommend that this demonstration project be fast-tracked so that the efficacy can be evaluated and potentially replicated throughout the city. To the extent that AD can be done efficiently, and without increasing truck traffic in already overburdened neighborhoods, it should be expanded citywide, including at all wastewater treatment plants.

The Hunts Point WPCP has AD infrastructure in place, but likewise it is not fully operational. In *OneNYC 2050*, the City discussed plans to replace old digesters and supply organic waste from the local food and fish markets at this WPCP; moving forward, it is particularly important that this operation minimizes truck traffic in a neighborhood with rather poor air quality, and the highest asthma rates in the city.

We appreciate *OneNYC 2050's* commitment to girding the WPCPs against future climate risks, and recommend more transparency in future plans, to ensure that projects are paired with practices that reduce these risks.



TRANSPORTATION BIOFUELS: A FALSE SOLUTION FOR THE CLIMATE

The prospect of utilizing many biofuels as a bridge fuel for transportation to achieve emissions reduction goals, or as an alternative to renewable energy sources, obscures the major concerns about their limitations and possible unintended consequences for environmental justice communities. New York must avoid false solutions that would undermine our reduction goals.

Emissions analyses of biofuel combustion often do not account for the full lifecycle of emissions – from production of the crops and materials that make up the fuels, to the tailpipe emissions from vehicles. One study showed that the lifecycle emissions of biofuels derived from soybean oil is 50% more carbon-intensive than ultra-low-sulfur diesel.⁴¹ Biofuels contribute to additional untold environmental risks when derived from unsustainable sources like palm oil, soybeans, landfills, or the massive dairy farms used to produce the necessary volume of organic waste.

We also do not support the usage of natural gas, which like many biofuels is also primarily composed of methane, but is derived from the decomposition of ancient organic materials below the ground via polluting fracking processes.

Biofuels are often transported via pipelines and mixed with fossil fuels, prolonging the usage and construction of fossil fuel infrastructure.⁴² Thus, investing in biofuels would ultimately undermine climate goals because they are inextricably linked to the status quo perpetuation of extractive systems, and delay the generation of truly renewable energy.

NYC-EJA supports the use of locally-generated renewable energy above all other types of fuel for buildings, transportation, and other purposes. Electric vehicles do not result in tailpipe emissions which cause respiratory and cardiovascular diseases, and they have the potential to be fueled by wind, solar, or other renewable energy sources. However, there are some situations – like anaerobic digestion from wastewater treatment – where we support the capture and local use of biomethane that would have gone into the atmosphere from necessary, ongoing processes.



Investing in biofuels would ultimately undermine climate goals because they are inextricably linked to the status quo perpetuation of extractive systems, and delay the generation of truly renewable energy.



SCALE UP LOW-CARBON TRANSPORTATION SOLUTIONS

INVEST IN ELECTRIC VEHICLE INFRASTRUCTURE

As the second leading source of emissions in New York City, transportation sector emissions remain a challenge in meeting the City's long-term climate goals. While *OneNYC 2050*'s goal of achieving 70% emissions reductions in the transportation sector by 2050 will be a vital contribution toward overall GHG reductions, the latest data from 2017 indicates that we are a long way from reaching that achievement. Within the next 30 years the City must make the strongest and most equitable investments toward reducing carbon emissions in the transportation sector.

We commend the commitments made at the State level to transition the entire Metropolitan Transportation Authority (MTA) public bus fleet to all-electric by 2040, and the City's commitment to developing a citywide network of Electric Vehicle (EV) charging infrastructure on City-owned lots.⁴³ However, more detail is required to understand how the City plans to overcome a critical issue identified by the NYS Department of Public Service (DPS): the underutilization of charging stations, which has led to the low penetration of EVs on the road.⁴⁴ Mayor de Blasio's recently announced Executive Order No. 53 mandates the pursuit of an all-electric municipal vehicle fleet by 2040.⁴⁵ It requires all NYC agencies to cooperate and it charges the Department of City Administrative Services (DCAS) with the development of a Clean Fleet Transition Plan (CFTP) that will outline fuel alternative, efficiency, and electrification requirements, as well as a schedule for adopting cleaner

vehicles. The executive order also requires DCAS and their NYC Fleet program – an effort to manage the 30,000 vehicles in conjunction with the 10 major fleet operating agencies and 60 fleet agencies in total – to work together on a Safe Fleet Transition Plan (SFTP) focused on devising safety requirements and providing a schedule for adopting safer vehicles and technology.

While this order supports the advancement of EV chargers to supply energy for the City's public fleet, it does not respond to the need to increase public access to charging infrastructure. In addition, the language used in the *OneNYC 2050* as well as the Executive Order describes the carbon reduction goal as “carbon neutrality”, rather than zero-emissions. As mentioned previously, carbon neutrality is a compromising, half-measure that will not seed the deep reductions needed to transform our transportation sector. The City should move boldly to adopt a zero-emissions mandate in order to avoid incentivizing the advancement of false solutions like biofuels.

In addition, in the Commercial Waste Zones Law passed in 2019, the City recommended that carting companies award bidders who display a commitment to transition to “clean” waste trucks over time. We recommend that the City specifically favor electric vehicles as opposed to false renewable energy solutions, to reduce tailpipe emissions from trucks in environmental justice communities.



ElectrifyNY Coalition launch. Photo credit: ElectrifyNY

According to *OneNYC 2050* the City aims to increase the share of new motor vehicle purchases that are electric to 20% by 2050, which will require a significant increase in EV charging infrastructure. The City plans to install 50 fast-charging stations across all boroughs to add to its existing 921 publicly accessible chargers, and to pilot curbside level 2 chargers. In 2019 it was reported that NYC aimed to reach 20% EV registrations by 2025.⁴⁶ However, the existing charging stations are predominantly located in Manhattan, signaling a clear prioritization to site them in more affluent areas.⁴⁷ The current strategy for siting EV chargers does not support increased electric vehicles sales, which have the potential to benefit many commuters, including those who live in transit deserts and may benefit from EV charging infrastructure.

While New York is on pace to meet its goal of 2,000 EVs within its city fleet, much more work is needed to increase access to privately owned EVs. In New York City, private vehicles are responsible for 90% of all transportation-related GHG emissions. However one of the biggest problems identified by DPS

staff has been the cost of installation. While the City states its intent to partner with Con Edison, more detail is required on the nature of that collaboration.

The City should look to adopt a more targeted approach like the Make-Ready program⁴⁸ – proposed by DPS staff members to expand the EV charging network– which emphasizes the importance of partnership with utilities in order to increase financial capacity and affordability of charging infrastructure installation. According to the Public Service Commission (PSC) proposal, the Make-Ready program would support 90% of the overall cost of installation, providing a much needed incentive for property owners to install public access charging stations.

Beyond the cost barrier, the City must respond to perception challenges associated with EV access for all. Much more substantive programmatic efforts must be made in environmental justice communities that have been historically overburdened by poor air quality due to pollution from the transportation sector.



The City should move boldly to adopt a zero-emissions mandate to avoid incentivizing false solutions like biofuels.

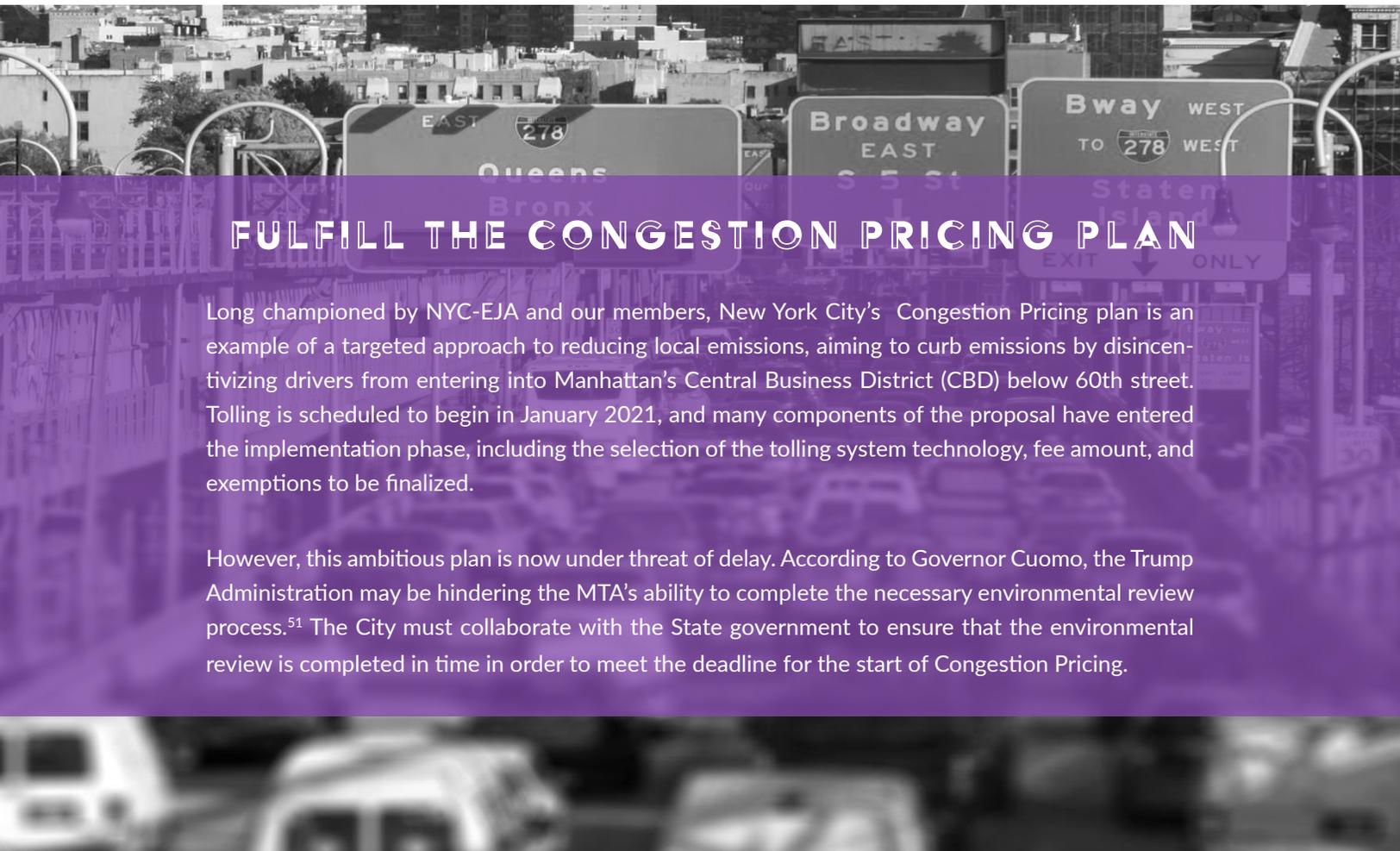


INVEST IN ELECTRIC VEHICLE INFRASTRUCTURE (CONT'D)

Efforts could include a strategic partnership with the New York City Housing Authority (NYCHA) to support the installation of charging stations in public housing parking lots, accompanied by an incentive package including rebates for vehicle transitions and new EV purchases. This effort could influence the personal electric vehicle market, create new access points for charging, and further GHG reductions in EJ neighborhoods.

As part of the 2019 NYC Department of Transportation (DOT) EV charging pilot program, the City committed to invest \$10 million in fast charging stations, and Con Edison pledged \$20 million to the effort. According to the Curb Enthusiasm report, an EV Advisory Committee established in 2016

was charged with monitoring the pilot, which was scheduled to run from spring 2018 to spring 2020.⁴⁹ However, as we approach spring 2020 the DOT project website contains no recent updates on the initiative.⁵⁰ Apart from conducting a survey to gain insight on public opinion on charging locations, and a series of meetings with community boards across the city where DOT received community push-back – mainly due to fears of losing parking spots – the DOT has not made sufficient efforts to meaningfully advance this initiative. The DOT must provide updates to the public on the status of the pilot program and it should conduct a robust engagement process with grassroots partners to identify the opportunities to site EV charging stations, especially in communities where an increase in EVs would have deeper impacts in improving air quality.



FULFILL THE CONGESTION PRICING PLAN

Long championed by NYC-EJA and our members, New York City's Congestion Pricing plan is an example of a targeted approach to reducing local emissions, aiming to curb emissions by disincentivizing drivers from entering into Manhattan's Central Business District (CBD) below 60th street. Tolling is scheduled to begin in January 2021, and many components of the proposal have entered the implementation phase, including the selection of the tolling system technology, fee amount, and exemptions to be finalized.

However, this ambitious plan is now under threat of delay. According to Governor Cuomo, the Trump Administration may be hindering the MTA's ability to complete the necessary environmental review process.⁵¹ The City must collaborate with the State government to ensure that the environmental review is completed in time in order to meet the deadline for the start of Congestion Pricing.



All-electric MTA bus piloted in Manhattan. Photo credit: Curbed NY.

PRIORITIZE EJ NEIGHBORHOODS FOR NEW BUSWAYS

Buses are a primary mode of transportation for New York City’s low-income communities and communities of color. They can also serve as a vital resource during subway service disruptions, as was the case of the 14th Street Busway, spurred on by the L-train Shutdown. As the L-train Shutdown became increasingly concerning, NYC-EJA and allies urged MTA to utilize electric buses as part of the proposed bus-train to shuttle approximately 225,000 commuters between Brooklyn and Manhattan. When Governor Cuomo revised the shutdown plan to a slow-down plan, the MTA was still able to establish the 14th Street Busway and deploy electric buses along the newly configured roadway. Though the initiative met some community opposition and even a lawsuit from residents in Manhattan, the outcome has been deemed a success by the MTA and customers.

While *OneNYC 2050* indicates DOT’s aim to increase the current pace of implementing signal prioritization for buses, the

DOT should also look for more strategic and equitable opportunities along routes servicing low-income residents and communities of color, who make up the majority of their ridership.

The DOT should collaborate with the MTA to leverage the success of the 14th Street Busway and conduct analysis to identify other roadways in environmental justice communities that can be redesigned to support electric bus-only routes. Electric buses would reduce environmental harm for the low-income communities of color who most utilize bus service and who live in close proximity to bus depots. The MTA operates 28 depots across the five boroughs, 75% of which are sited in communities where the majority of residents are people of color.⁵² Coordination with the concurrent Bus Network Redesign project for strategic deployment of electric buses is paramount to reducing the negative impacts that are currently felt by overburdened environmental justice communities.

IMPROVE PUBLIC HEALTH & EQUITY VIA NYC'S CYCLING POLICIES

The City has recently passed policies to reduce emissions from the transportation sector, including the Commercial Waste Zones Law and Congestion Pricing, installing more bike lanes, and introducing legislation to support alternative transportation.

The City's aims for cycling within *OneNYC 2050* include increasing the proportion of people using sustainable modes of transit, increasing the proportion of New Yorkers living within one-quarter mile of a bike network, and improving bike paths. The report addresses the need to improve street safety, but does not equally address who the riders are, or some of the specific issues they face. In addition to the use of bikes and e-bikes in the fast food industry by workers who are frequently low-income immigrants and people of color, another burgeoning cycling industry is microhauling. These food scrap collectors rely on bike lanes and roadways to transport materials to composting sites.

Cyclists have been killed in accidents with vehicles at alarming rates in NYC, yet the City has not taken a proportionate response in safeguarding their lives, at times taking stances that dissuade cyclists and would-be cyclists from using this mode of transit.⁵³ In addition to traffic accidents due to unsafe driving and poor road conditions, other hazards include poor examples set by law enforcement parking in bike lanes; danger on thoroughfares such as the Brooklyn Bridge bike path due to lack of separation of pedestrian and cyclists paths; lack of accountability for a dangerous commercial waste industry killing cyclists; and a general unsupportive ethos for cycling among many New Yorkers. These practices devalue the importance of cyclist safety. However we appreciate *OneNYC 2050's* stated commitment to building more bike lanes with DOT, and recommend that more of these lanes include semi-permeable barriers, paired with other rigorous street design for cyclists and pedestrians. Furthermore, we urge the DOT to make



Photo Credit: Vincent Barone via AMNY.

IMPROVE PUBLIC HEALTH & EQUITY VIA NYC'S CYCLING POLICIES (CONT'D)

holistic plans in consultation with residents in order to mitigate against the possibility of cycling infrastructure fueling gentrification.

OneNYC 2050 also promises to improve fairness in policing practices – practices that disproportionately target low-income people of color. The City has earned revenue by ticketing cyclists for minor infractions that do not risk harm to others, and in the last year, the NYPD has issued violations to cyclists at higher rates than motorists, along with fines of similar value to motorists.⁵⁴ The existing enforcement practices do not consider the moment-to-moment decisions cyclists must make to protect themselves, especially on roads without demarcated bike paths, while navigating regressive targeting practices of the City, and an unsupportive ethos around cycling.

OneNYC 2050 promises to expand the private Citi Bike network, and we recommend that it prioritize adding this service in communities of color that have been neglected, and facilitate wider use of the Citi Bike reduced fares program for NYCHA residents and SNAP recipients.^{55,56} Other recommendations include catching up to other large cities like Los Angeles by installing bike racks on City buses, and installing more bike racks and pumps around the City. DOT should conduct a survey of ridership demographics and learn more about the chief issues cyclists face. In doing so, the City's actions can meet the



Delivery worker on a bicycle during the COVID-19 outbreak in NYC. Photo credit: Jay Giampietro.

demands of some of our most vulnerable commuters, and enable us to shape fairer policies and enforcement to expand this sustainable mode of transit to everyone able to use it.

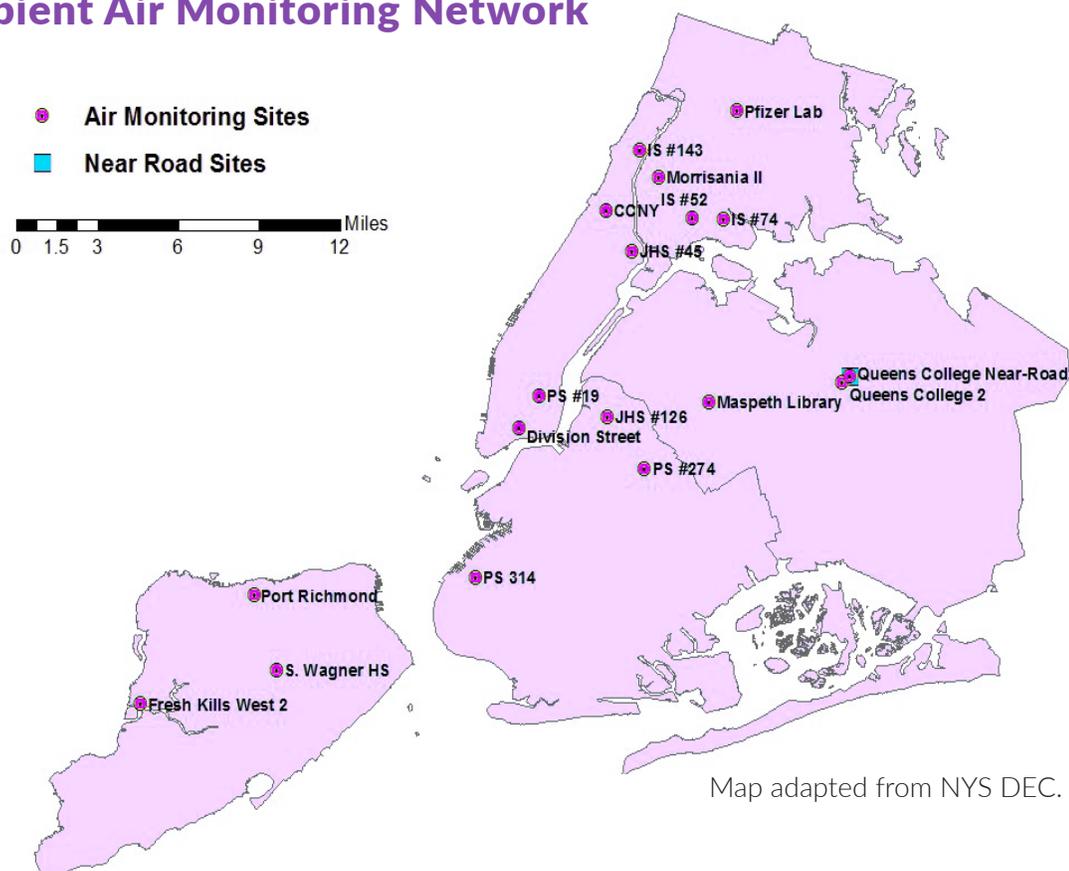
In addition to reducing air pollution, cycling benefits public health by decreasing crowding on subways, including promoting social distancing during the COVID-19 pandemic, which has hit NYC particularly hard.⁵⁷ The availability of this mode of transit is critical during this time, especially for essential workers who can not work from home.

MONITOR CO-POLLUTANTS AT THE NEIGHBORHOOD LEVEL

Air quality monitoring has proven and will continue to be an important tool for community advocacy; for example, grassroots air quality monitoring paired with truck counting played a key role in advocacy for the transformation of the inefficient and polluting commercial waste system.⁵⁸

NYC-EJA’s Community Air Mapping Project for Environmental Justice (CAMP-EJ) is a grassroots, community-led participatory research project. CAMP-EJ raises awareness of the higher rates of negative health outcomes faced by low-income communities of color through the disproportionate exposure to air pollution from various environmental sources, informing our advocacy to reduce GHG and harmful co-pollutants such as PM_{2.5} in environmental justice communities. CAMP-EJ empowers communities to measure and understand their local air quality, and to use this data to drive campaigns to address disproportionate impacts of PM_{2.5} and GHG emissions. Eight NYC-EJA member organizations were involved in 2018 and 2019 air quality monitoring including Youth Ministries for Peace and Justice, THE POINT CDC, and We Stay/Nos Quedamos in the South Bronx, as well as El Puente, the Brooklyn Movement Center, and UPROSE in Brooklyn.

NYS Department of Environmental Conservation Ambient Air Monitoring Network





North Brooklyn community members at the Nuestro Aire/ Our Air launch event. Photo credit: El Puente

SUPPORT COMMUNITY AIR MAPPING PROJECTS

Currently, the New York City Community Air Survey and NYS Department of Environmental Conservation monitoring networks are sparse and spread out, and accordingly fail to capture the fine-scale spatial variability of air pollution levels or street-level impacts.

CAMP-EJ aims to close some of these gaps, by arming communities with the resources they need to gather the necessary data. Grassroots air quality monitoring using air quality sensors such as the AirBeam2 – due to ease of deployment and lower cost – can help to identify local and fine-scale neighborhood patterns and hotspots of $PM_{2.5}$ pollution in a manner that neither of the current government monitoring networks can.

In January 2020, the Mayor’s office announced the CityScanner program – a mobile monitoring program that utilizes City vehicles in the South Bronx – which begins to address the lack of hyper-local data that is needed to truly understand what is happening on the

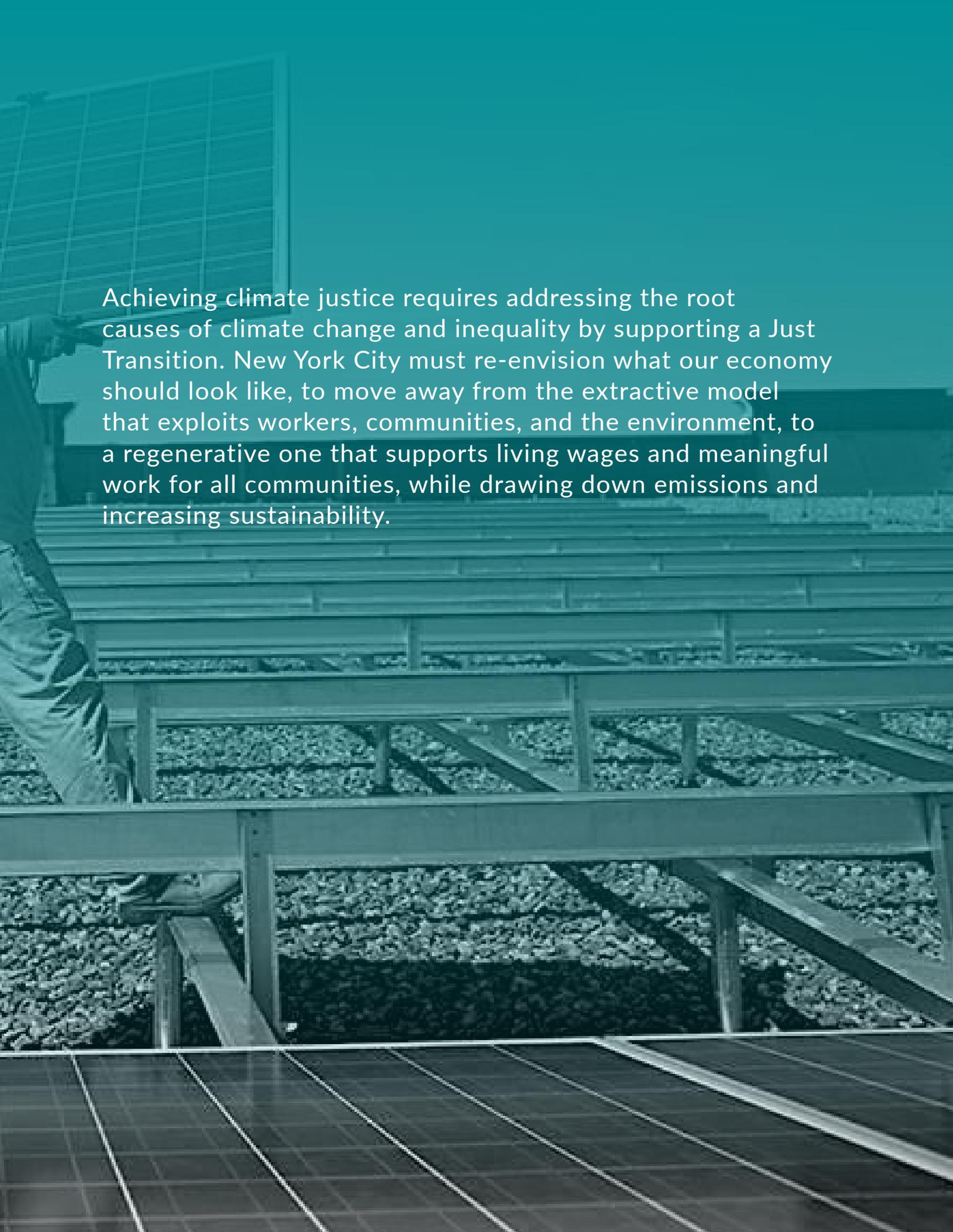
ground.⁵⁹ However, this program lacks the advantage of being community-led.

Our member El Puente leads the work of CAMP-EJ in North Brooklyn through their own corresponding air quality monitoring project, “Our Air!;/¡Nuestro Aire!” In July 2019, the launch of this project was a community event that included art-making and performances, and encouraged participants to sign a petition to improve air quality at a local park.⁶⁰ The event brought together dozens of community members to raise awareness about air quality issues to the community, and to empower the community to improve the air they are breathing every day.

Moving forward, the City should allocate funding to community organizations to perform grassroots air quality monitoring so that harmful emissions can be reduced, and air quality related health disparities in environmental justice communities can finally be eliminated.



ADVANCE A JUST TRANSITION TOWARDS AN INCLUSIVE, REGENERATIVE ECONOMY

A teal-tinted photograph of a construction site. In the foreground, a worker is visible on a wooden structure, possibly a roof or a large platform. The structure consists of numerous wooden beams and joists. In the background, a large array of solar panels is visible, suggesting a focus on renewable energy. The overall scene is industrial and construction-oriented.

Achieving climate justice requires addressing the root causes of climate change and inequality by supporting a Just Transition. New York City must re-envision what our economy should look like, to move away from the extractive model that exploits workers, communities, and the environment, to a regenerative one that supports living wages and meaningful work for all communities, while drawing down emissions and increasing sustainability.

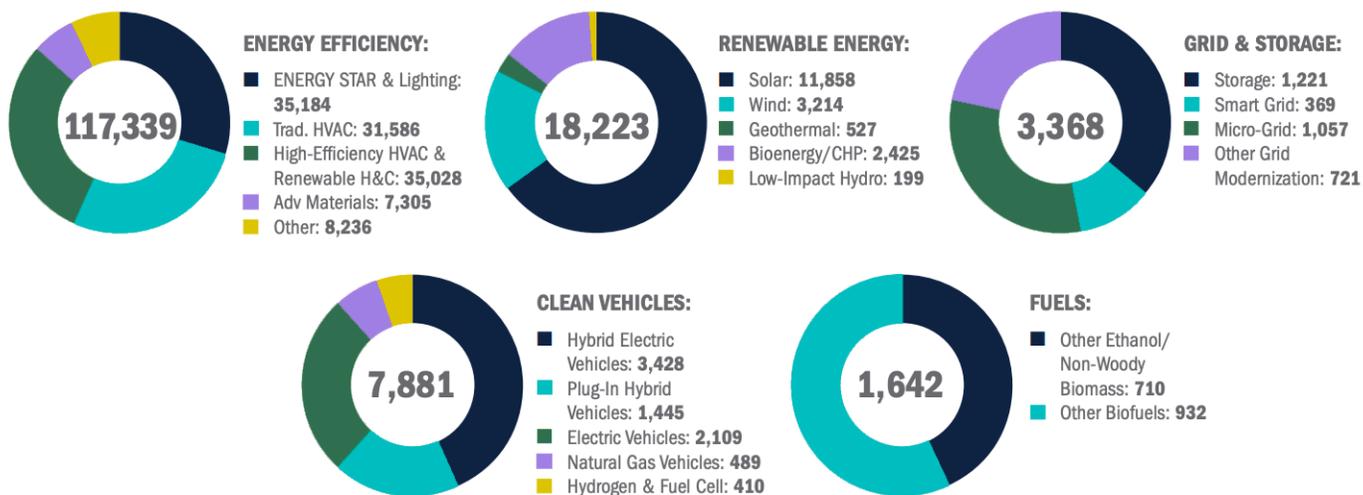
CREATING GOOD, GREEN JOBS IN THE REGENERATIVE ECONOMY

ENERGY EFFICIENCY JOBS

A regenerative economy must be low-carbon, and energy efficiency is key to both reducing emissions and generating good green jobs. New York City is beginning to lead the way in scaling up energy efficiency through passing one of the most ambitious emissions reduction mandates for large buildings in the country, Local Law 97 (LL 97) of 2019. Long-championed by NYC-EJA and our allies, LL 97 requires large buildings over 25,000 square feet to reduce their greenhouse gas emissions by 40% by the year 2030 and 80% by the year 2050, relative to such emissions in 2005. With buildings accounting for 67% of all greenhouse gas emissions in New York City, LL 97 sets a bold, but necessary mandate to help tackle the escalating risks of climate change and adverse public health effects.

The City has the opportunity to address energy efficiency in low-income housing while generating good green jobs by investing in a Climate and Community Development Fund (CCDF). NYC-EJA and our allies in the Climate Works for All Coalition envision that the CCDF would be distributed across all 51 council districts to support energy efficiency and other climate projects in affordable and public housing developments. The amount of funds allocated would vary depending on the district needs criteria such as income, exposure to environmental pollution, energy grid vulnerabilities, and other related factors. A CCDF Program should subsidize wages and attach pre-apprenticeship and apprenticeship labor standards to ensure that trained candidates are lined up from low-income communities and communities of color. Connecting industry, union, and pre-apprenticeship training programs with community-based organizations like NYC-EJA's members will ensure that qualified candidates are connected to the career pathways from a robust energy efficiency sector.

CLEAN ENERGY JOBS IN NEW YORK STATE



Industry breakdown of clean energy jobs in New York State as of 2019. Adapted from E2.org Clean Jobs New York report, 2019.

JOB CREATION THROUGH THE NYC CLIMATE & COMMUNITY DEVELOPMENT FUND

Projected types of jobs produced through a Climate and Community Development Fund targeting energy efficiency investments across every council district. Source: Climate Works for All Coalition.

GOAL	SECTOR	EMPLOYMENT NEEDS
Workforce Development in Environmental Justice Communities	Clerical/ Consulting/ Policy	City Research, Analysis, Budgeting Environmental Justice Program Coordinator Management of Green Jobs Apprenticeship program
	Training	Training, Teachers Recruiters Apprenticeship Program Development
Retrofitting and Building Construction in Low-Income Housing	Construction	Heating/AC Mechanics and Installers Carpenters Plumbers Pipefitters Steamfitters Electricians Insulation Workers Window Glaziers
	Professional Services	Architects Mechanical Engineers Drafters Civil Engineers Energy Auditors
	Building Services	Stationary Engineers & Boiler Operators General & Operations managers General Maintenance & Repair Workers Janitors, Cleaners, & Porters

JOB IN THE ZERO WASTE ECONOMY

To further support a transition to a regenerative economy, the City should facilitate the expansion of jobs that increase our diversion and local processing of recyclable and compostable materials. Within the Commercial Waste Zones Law, microhaulers are enabled to scale up their tonnage allowances as subcontractors with primary haulers, but space to process organic material within the city is limited. Microhauling is an industry that employs high proportions of women and young people of color, standing in stark contrast to the male-dominated private sanitation industry. In addition to limited organics processing space within the city – which stifles productivity and incomes – microhaulers are additionally burdened by laws that categorize compost as a fertilizer, and therefore as an explosive, making these small businesses pay exorbitant overhead costs to insure their workers.

JOBS IN THE ZERO WASTE ECONOMY (CONT'D)

As mentioned earlier, in addition to supporting microhauling operations, jobs to create well-operating organics processing facilities need to be prioritized. The City should spur good, union jobs in the waste sector by addressing the longstanding need to retrofit and update existing private transfer stations, so that they are in compliance with laws impacting public health (e.g. full building enclosure, no odor release, dust control). The City should also develop a program alongside relevant community organizations to employ, train, and properly compensate residents within all NYCHA developments to lead recycling and organics education and separation.

JOBS IN THE ZERO WASTE ECONOMY

SECTOR	GOAL	ACTION NEEDED	EMPLOYMENT NEEDS
Collecting & Processing Organics & Recyclables	Mandatory recycling and composting in all residences	Compensate residents for recycling implementation & training.	Drivers: Residential compost collection
			NYCHA Resident Leaders: Recycling education, separation, management
	Locally processing all recyclables and organics	Expand in-city organics processing, and staff facilities.	Sanitation Workers: Commercial organics separation
			Construction/Design: Design, architecture, engineering
			Operations: Sorters, machine operators
	Support small-scale organics collection	Build safe bike infrastructure for microhauling Support financing cooperative and small-scale organics collection companies	City Planners: Policy development, traffic safety, EJ oversight
Clerical: Documentation (e.g. waste tonnage, staff wages & benefits, etc)			
Upgrading Waste Transfer Stations	Improve conditions for NYC transfer stations	Update facilities by fully staffing with good, union jobs	Microhauling: Haulers, composters, contract management
			Policy: Insurance policy adjustments, bike safety, land use & acquisition
Building Infrastructure & Equipment	Support more sustainable modes of waste collection	Utilize industrial land to attract EV and renewable energy manufacturing base	Building Services: Retrofitting private transfer stations for public health & safety
			Enforcement: Training, documenting, public communications
			Manufacturing: Electric truck manufacture
Enforcing & Expanding Zero Waste Policies	Comprehensive zero waste policies across full lifecycle of materials	Ensure zero waste policies enforced in every sector	City Planners: City land & equipment acquisition
			Construction: Electric vehicle charging stations, in-city renewable energy construction
			Clerical/Consulting/Policy: Policies for reducing packaging, organics collection, NYCHA recycling, in-city processing

GREEN FEEN: EMBODYING THE ZERO-WASTE, COOPERATIVE ECONOMY

Achieving zero waste requires unprecedented, innovative approaches to handling waste and alternative economic models.

Green Feen is a composting cooperative under NYC-EJA member organization Green Worker Cooperatives, which incubates and supports worker-led green businesses. Green Feen works to transform parts of the South Bronx from a heavily industrial landscape with a high waste collection burden, into a regenerative landscape with reduced diesel truck traffic, where organics can be processed locally.

The City can support this effort in many ways, including by increasing local processing of food waste, and by mandating organics separation and collection citywide.



Photo credit: Green Feen Organix

RETAIN THE INDUSTRIAL CHARACTER OF OUR WATERFRONTS

NYC's waterfront provides many benefits to the community, including recreation, community space, protection against coastal storms, and economic opportunity. The waterfront is also home to seven Significant Maritime and Industrial Areas (SMIAs). SMIA is a NYC Department of City Planning (NYC-DCP) designation where development applications are subject to a lower review standard than other waterfront areas, thereby facilitating the siting and clustering of potentially noxious, polluting uses and infrastructure.⁶³

Six of the seven SMIA in the City – the South Bronx, Sunset Park, Red Hook, Newtown Creek, Brooklyn Navy Yard, and Kill Van Kull – are located in predominantly low-income neighborhoods and communities of color.⁶⁴ Together, these original six SMIA encompass 4,000 acres of land and all are vulnerable to storm surge.⁶⁵ The majority of the residents

in areas around the original six SMIA are people of color. According to the last census, 430,000 people of color (a number similar to the population of Atlanta) live in Census tracts that are vulnerable to storm surge, and that fall within a half-mile of the SMIA.

NYC-EJA's Waterfront Justice Project aims to address the climate change impacts projected for NYC's SMIA and the potential for the dislodgment of hazardous materials during severe weather events. Although industry is a potential source of hazard for the community, we recognize that it is also a source of economic opportunity for the community as well. As we work to make these industrial areas more sustainable, resilient, and clean, we must also make sure that economic opportunity is accessible and equitable for current community residents.

RETAIN THE INDUSTRIAL CHARACTER OF OUR WATERFRONTS (CONT'D)

Private developers throughout NYC have worked to rezone industrial space—more than 16% of industrially zoned land from 2005 to 2015—to expand commercial and residential uses.⁶⁶ Community groups such as NYC-EJA member organizations UPROSE and Chhaya CDC have been leading local fights against rezonings like those in Industry City in Sunset Park, Brooklyn and along Flushing Creek in Flushing, Queens.

Rezoning such as these that propose turning industrial areas into luxury commercial and retail space are misguided. These rezonings have the potential to lead to gentrification and displacement, underestimate climate risks, and undervalue manufacturing land that should remain to support a Just Transition. Industrial retention is a long-standing priority for environmental justice communities. Manufacturing jobs can support working and middle-class families, paying an average of \$62,000 annually compared to retail and other service sector jobs that pay an average of \$44,020 and \$36,350 annually, respectively.⁶⁷

Industrial land will be critical to supporting the economic transition to a renewable energy economy. The CLCPA, which legislated commitments to reduce greenhouse gas emissions

by 85% in NYS by 2050, is expected to create over 150,000 new green jobs in the ensuing decades. These new climate jobs, including solar and wind manufacturing, green infrastructure, and coastal resilience, need industrial land and infrastructure to ensure local benefits and sustainable economic development.

For example, through the 2019 NYSEDA offshore wind solicitation, the two offshore wind projects – Sunrise Wind and Empire Wind – will have an expected combined capacity of 1,696 MW. NYSEDA projects that the Empire Wind project, led by European developer Equinor, will bring a combined economic impact of \$3.2 billion in private investment to New York State, create and support more than 1,600 jobs, and catalyze the modernization of port infrastructure throughout New York.⁶⁸ UPROSE, with support from NYC-EJA, will continue to provide critical perspective in conversations with Equinor to call for local job training opportunities for offshore wind development and assembly in Sunset Park. Industrial space will be essential to create opportunities for local manufacturing of offshore wind materials to maximize economic benefits for New York and Sunset Park as a green manufacturing hub.

SUPPORT A RESILIENT, WORKING WATERFRONT

At the end of this year, the NYC Department of City Planning (DCP) will be releasing the NYC Comprehensive Waterfront Plan, which “aims to further the City’s goals of making New York City’s 520 miles of waterfront more accessible, active, and resilient.”⁷³ If we are to make the waterfront more resilient, we must completely reimagine our urban coastlines as a critical resource in the fight for climate resiliency – not as areas for potential luxury development, but as sites for ecologically-sound climate solutions that protect our society’s most vulnerable.

DEVELOP NEW ECONOMIC & OWNERSHIP STRUCTURES

People of color and other marginalized communities have historically been excluded or exploited across many sectors of the economy, including now in the emerging renewable energy sector. A 2019 study showed that people of color and women are underrepresented in the solar industry across the United States.⁷⁴ Furthermore, another national study found that census tracts with a Black or Latino majority have significantly fewer rooftop solar installations on average.⁷⁵

With the newly mandated transition towards more renewable, sustainable, and regenerative infrastructure, New York State should seize this opportunity to implement new

economic structures and workforce development that uplift people and communities that have been sidelined from wealth-building, ownership, and decision-making. New York City’s electrical grid and power generation are operated by investor-owned utilities and private companies, respectively. As we transform our dirty energy grid, we must transform the economic structures that underpinned the fossil fuel industry. The public sector and community organizations can gain a foothold in the growing industry by spearheading local renewable energy projects and ensuring the economic, social, and environmental benefits accrue to local communities.

WHAT IS A JUST TRANSITION?

As members of the national Climate Justice Alliance (CJA), NYC-EJA supports a shared vision of a Just Transition, developed by the CJA steering committee:

“ Just Transition is a vision-led, unifying and place-based set of principles, processes, and practices that **build economic and political power to shift from an extractive economy to a regenerative economy**. This means approaching production and consumption cycles holistically and waste-free. **The transition itself must be just and equitable**; redressing past harms and creating new relationships of power for the future through reparations. If the process of transition is not just, the outcome will never be. **Just Transition describes both where we are going and how we get there.** ”



Environmental Justice advocates and IBEW members at solar installation. Photo credit: Climate Works for All

SUPPORT COMMUNITY OWNERSHIP

For example, community-owned solar projects can prioritize greater reduction in monthly utility bill costs while publicly-owned projects can catalyze solar and storage projects that can provide resilient backup power during emergencies.

Encouraging the expansion of cooperative economies will support economic empowerment and inclusion across a variety of sectors including renewable energy, nature-based infrastructure, and waste management. NYC-EJA recommends that the City ensure strong Minority and Woman-Owned Business Enterprises (MWBE) participation across various government procurements for sustainable endeavors, including building solar on public buildings, processing organic waste, and maintenance of ecologically-grounded solutions.

Building new economic structures requires systems changes from hyperlocal to citywide levels and beyond. The City's pension divestment efforts mark a milestone in recognizing the power of investing in local and sustainable

efforts and not continuing to shore up the fossil fuel industry.⁷⁶ We are encouraged that Comptroller Scott M. Stringer and Mayor de Blasio in his State of City 2020 report committed to investing \$500 million of pension funds in local business, and recommended that this support sustainable industries. However, there remain other much-needed divestment strategies across City government holdings, such as shifting to utilize a NYC public bank instead of banking billions of public dollars in Wall Street.⁷⁷

Additionally, true labor unions continue to uphold the importance of good wage and labor standards for workers in the renewable energy industry. Labor unions and economic justice advocates have continually advocated for apprenticeship programs, local hiring, and project labor agreements (PLA) that have clear benefits for a localized workforce. For example, the International Brotherhood of Electrical Workers (IBEW) Local 3 view PLAs as proven to provide numerous benefits to the construction industry and residents, as well as safety and training for union workers.⁷⁸

3

CULTIVATE HEALTHY & RESILIENT COMMUNITIES



Achieving true climate justice requires more than drawing down emissions and creating jobs – it also requires supporting the health and resilience of every community in our city and honoring the rights of communities to articulate their own climate solutions.



Environmental justice and frontline communities often face intersecting climate, environmental health, and social risks. Industrial waterfront communities face the equally pressing challenges of gentrification and coastal flooding – and heat vulnerable neighborhoods that lack open, green space and adequate heat mitigation plans often deal with substandard, energy-intensive housing, and the resulting high energy costs. The City must address the vulnerabilities facing frontline communities in a way that promotes the health, safety, and perspectives of coastal communities. The City must also equip communities with the resources they need to mitigate and prepare for looming climate emergencies such as heat-waves and storms.

Our vision for healthy, resilient communities includes secure, safe, and healthy housing; access to clean air, open space, and healthy food; and community control over renewable energy and other critical utilities. The City and State should prioritize funding holistic neighborhood-scale climate justice solutions that maximize local participation and control.

PROTECT OUR COASTLINES

Eight years after Superstorm Sandy, New Yorkers are still waiting for needed investments in coastal protection and shoreline resiliency construction. The City continues to prioritize the financial district in Lower Manhattan for coastal protection investments, while leaving behind other flood-vulnerable communities across the city, including Hunts Point, East Harlem, North Brooklyn, and Sunset Park.⁷⁹

The New York City Panel on Climate Change (NPCC) 2019 report's projections demonstrate that sea-level rise, tidal patterns, flooding, and storm surge will increasingly threaten NYC's coastlines.⁸⁰ By 2050, NPCC projects a low-range sea-level rise of 8 inches and high-range estimate of 30 inches, and by 2100 those projections increase to 15 inches and 75 inches, respectively.⁸¹ Even more concerning, recent research on glaciers and ice sheet-ocean-atmosphere interactions pushes these projected numbers higher, reaching almost 114 inches or 9.5 feet by 2100 under this scenario.

Investments in coastal resiliency are not meeting the pace of urgent climate risks. We commend NYC Council Speaker Corey Johnson for announcing a renewed commitment to a five borough coastal resiliency vision in his March 2020 State of the City report.⁸² But in light of the troubling vulnerabilities of our coastline, we are deeply concerned that in *OneNYC 2050*, Mayor de Blasio failed to announce any new funding or commitments to much needed coastal protection projects.

In February 2020, the United States Army Corp of Engineers (USACE) indefinitely halted the New York and New Jersey Harbor & Tributaries Focus Area Feasibility Study (HATS), which was a critical opportunity to address coastal storm and flood risk to vulnerable populations, housing, critical facilities, ecosystems, and infrastructure in New York City. While NYC-EJA opposed the \$119 billion sea wall proposal,⁸³ one of the options put forth by USACE, we are troubled that

PROTECT OUR COASTLINES (CONT'D)

the study did not receive continued federal appropriation funding. In 2019, NYC-EJA and member organizations recommended incorporating nature-based infrastructure into the proposed coastal protections project as an equitable solution for disproportionate climate vulnerabilities and negative public health outcomes historically overburdening low-income communities and communities of color. Despite the indefinite hold on this long-term multi-billion-dollar investment, NYC-EJA will continue to recommend that nature-based coastal resiliency investments benefit NYC's environmental justice communities every day of the year by maximizing the numerous co-benefits of green infrastructure.⁸⁴

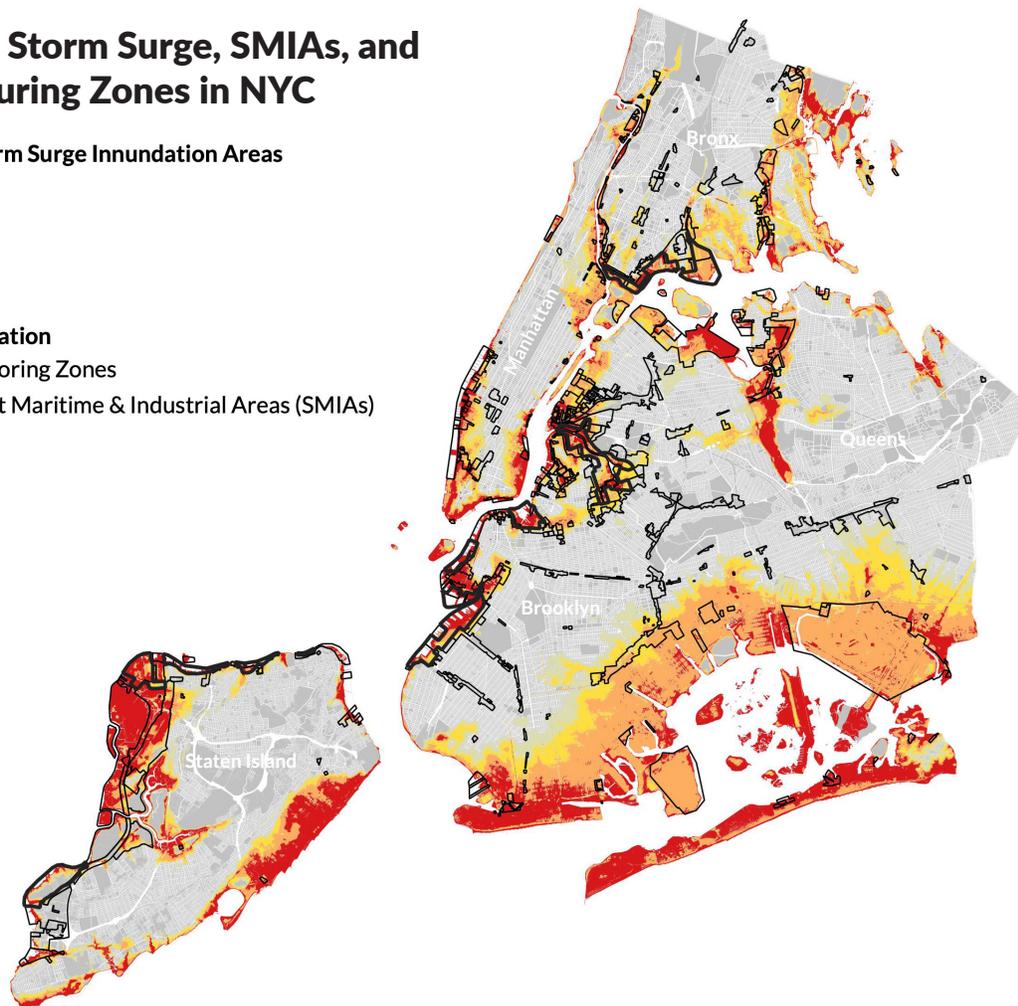
Furthermore, in the 2020 State of the State, Governor Cuomo announced the \$3 billion Mother Nature Bond Act for resiliency investments across the state.⁸⁵ While this is a welcome commitment to nature-based solutions, the Act at first failed to provide a clear pathway forward and fair share of funds to working waterfront communities in New York City.⁸⁶ However, after input from NYC-EJA and allies, the Bond Act was officially included in the New York State fiscal year 2021 Budget with a clear commitment to devote at least 35% of the funds to disadvantaged communities, as mandated by the CLCPA. NYC-EJA hopes to see concerted investments in coastal resiliency for the working waterfront as a result.

Hurricane Storm Surge, SMIA, and Manufacturing Zones in NYC

Hurricane Storm Surge Inundation Areas



Zoning Designation

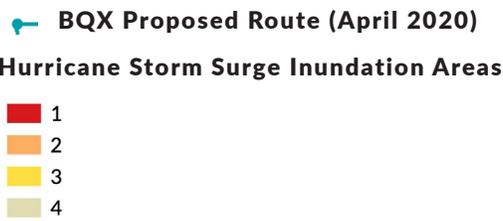


THE BROOKLYN-QUEENS CONNECTOR: A TRANSIT BOONDOGGLE IN THE FLOODPLAIN

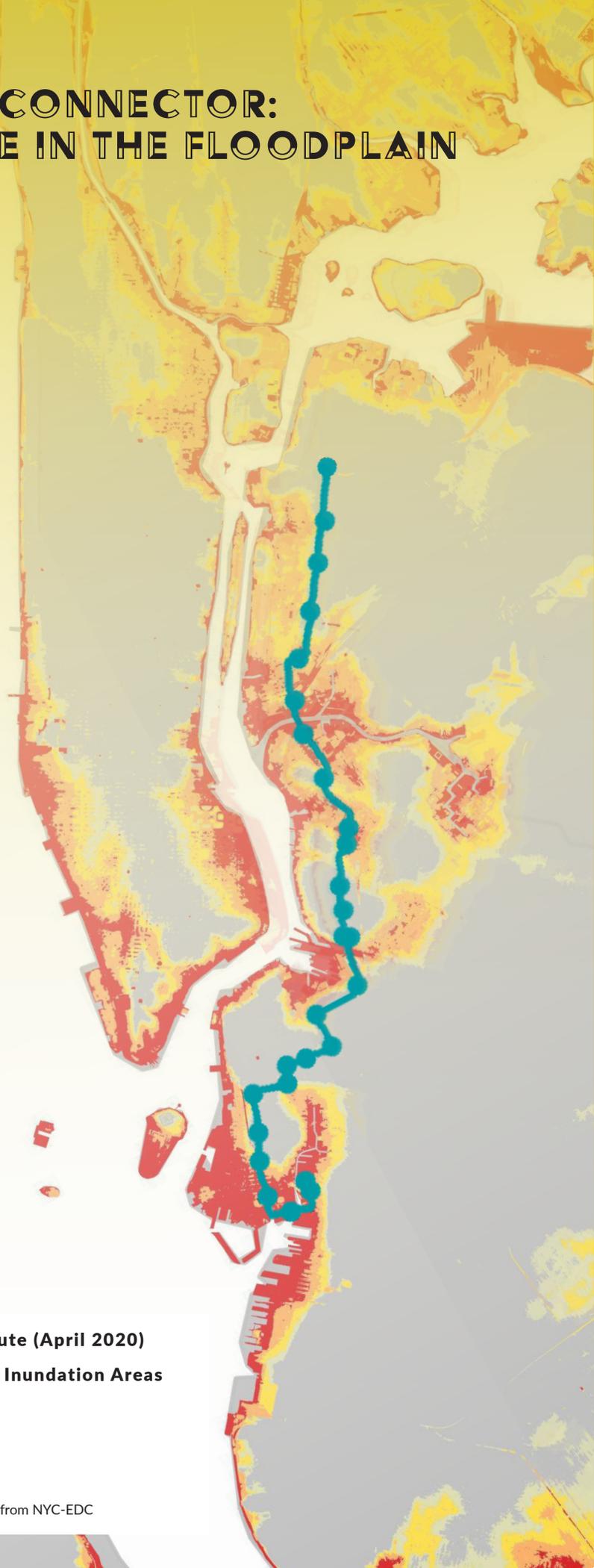
Mayor de Blasio and the NYC Economic Development Corporation (EDC) have continued to advance the Brooklyn Queens Connector (BQX), a proposed street car for the Brooklyn-Queens waterfront, while ignoring the increasing public demand to cancel this project and prevent wasteful spending of public funds.

One among many of the major problems we have identified is the extreme vulnerability of the proposed BQX to storm surge and flooding, and the overall lack of climate resiliency, which should be paramount in designing transportation in a coastal city like New York. Since the BQX's initial conception in 2016, NYC-EJA member organization UPROSE examined and presented strong critiques of the proposed trolley initially planned to run from Sunset Park to Astoria. UPROSE's investigation of this project illuminated one of the major problems – that rather than being born out of an expressed community need for better transit access, the BQX was in fact driven by real estate development interest along the proposed route. Thanks to strategic grassroots organizing, one of the most ill-conceived aspects of the project was revealed – the then 16-mile fixed rail system was proposed to be built within the storm surge zone along the Brooklyn and Queens waterfront.

UPROSE was successful in defeating efforts to have the BQX run through Sunset Park, and in 2018, EDC released a revised project proposal which removed Sunset Park from the route. While the route was shortened to only 11-miles, the cost of the project ballooned to \$2.7 billion and the route remained within the storm surge zone.



Note: BQX proposed route derived from NYC-EDC



The EDC's proposal made no mention of the danger posed by the route's location; instead it misrepresented the climate threat by claiming the majority of the route was located outside of the 100-year flood plain.⁸⁹ This description completely ignored the more immediate climate risk of storm surge, which impacted New York's coastal communities during Superstorm Sandy in 2012. If faced with a similar event in the future, the BQX would be rendered inoperable, so the project team's only solution to a storm surge scenario would be to park and store the rail cars on higher ground.

Public transit buses play a pivotal role in disaster emergency response, and have been used to assist in evacuations by sheltering people, carrying supplies,⁹⁰ and other purposes. In addition, the City has given no guarantee of transfer between the BQX and MTA transit, thereby creating a two-fare zone for riders along the corridor, entirely excluding NYCHA residents and other low-income and working-class commuters that may need to rely on a transfer.⁹¹ The limitation of the BQX in this critical scenario further emphasizes its lack of alignment with the City's climate resiliency goals.

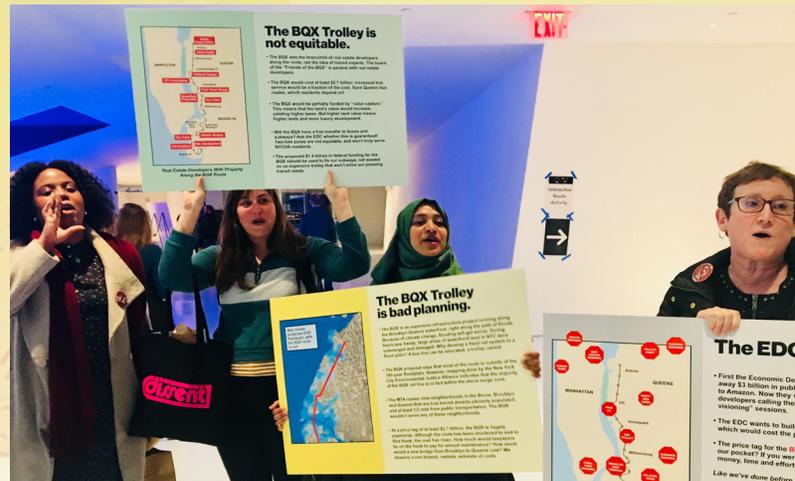


Photo credit (left to right) : Patch NYC, Renae Reynolds

Between February and March 2020, the EDC hosted five community engagement events throughout Brooklyn and Queens. At each of these events, public opinion has been a resounding rejection of the BQX. Community groups including NYC-EJA and El Puente, along with Queens allies Justice for All, Queens Neighbors United, and Woodside on the Move, spoke out publicly, presented poster boards mounted with analysis of the proposed route, and organized a demonstration to put a halt to EDC's prescribed gallery walk of BQX renderings in order to allow the community members to express their concerns.

The City should reconsider whether advancing the BQX project into the Uniform Land Use Review Procedure (ULURP) process is the best use of public resources or if the project is in alignment at all with the equity principles proclaimed in the OneNYC 2050 report. The City should change course by committing to deepening investments in public transit and consolidating its resources toward the Bus Network Redesign efforts, in order to close transit gaps and lead us to a truly equitable transportation future for all New Yorkers.

IMPROVE STORMWATER SYSTEMS

In the summer of 2019, the increasing risks of flooding hazards were highlighted when a strong thunderstorm caused flash floods in communities across the city, impacting streets, roadways, and subway stations.⁸⁷ These acute flooding events demonstrate the growing need to improve our stormwater systems, including increasing green infrastructure and nature-based solutions.

The NYC Department of Environmental Protection (DEP) has continued to make strides in building stormwater infrastructure across the priority watersheds, including building 4,585 green infrastructure assets with a total equivalent of 591 greened acres between 2010 and 2018. However, many communities have been left behind in this approach. The recently proposed Citywide/Open Waters Long-Term Control Plan did not go far enough in addressing combined sewer overflow (CSO) and catalyzing green infrastructure for stormwater retention, particularly in the Bronx.⁸⁸ In *OneNYC 2050*, the City committed to increasing the “combined sewer overflow capture rate” from 79%, but did not specify a target.



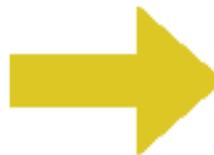
Combined sewer outfall in Newtown Creek, Brooklyn. Photo credit: Jalisa Gilmore.

Strategies for addressing coastal protection and stormwater must be done in tandem, as the issues are inextricably linked. We recommend that relevant New York City agencies pursue an integrated climate resilience approach that addresses multiple climate and environmental hazards, focuses on frontline communities, and prioritizes interagency collaborations for climate planning.

NYC GREEN INFRASTRUCTURE SNAPSHOT

TYPES OF ASSETS

- Right of Way (ROW) Rain Garden
- ROW Porous Pavement
- ROW Infiltration Basin
- Rain Garden
- Porous Pavement
- Subsurface Retention/Detention
- Turf Fields with Retention
- Tree Trench
- Green Roof



4,585

Assets constructed or under construction

~5,500

Assets planned for construction as of 2019

~13,800

Assets under investigation for GI

Data from DEP Green Infrastructure Annual Report, GreenHUB Snapshot

ADDRESS CLIMATE HEALTH RISKS FOR EJ COMMUNITIES

PREPAREDNESS FOR HEAT VULNERABLE COMMUNITIES

The world has experienced another record-breaking year in terms of extreme heat, with 2019 being the second hottest year on record. This is consistent with trends: every decade since the 1980s has been hotter than previous ones, and this past decade was the warmest.^{100,101}

As NYC-EJA described in our 2018 *NYC Climate Justice Agenda*, it is likely that NYC is significantly underestimating the actual number of annual heat related mortalities, because deaths from other illnesses that may have been exacerbated by an extreme heat event are not counted.¹⁰² NYC-DOHMH makes heat morbidity data available through its environmental health data portal, but has not updated the data since 2017.^{103,104} We also highlighted the need for daily-level mortality data to be available to the public so researchers can create and refine models for heat related deaths with the most accurate data.¹⁰⁵ It is absolutely necessary to ensure current and future numbers are as close to accurate as possible so that the scope of this issue is not underestimated and the appropriate amount of resources can be directed towards reducing heat related vulnerability, morbidity, and mortality. NYC-EJA appreciates City Council Speaker Johnson's call for legislation requiring DOHMH to re-evaluate its metrics for counting heat related deaths, as we have long championed. We also recommend that this legislation call for data transparency by making daily-level heat mortality data available.¹⁰⁶

As detailed in the 2018 *NYC Climate Justice Agenda*, a majority of NYCHA's residents are located in heat vulnerable neighborhoods. NYCHA has acknowledged, given its large population of senior residents, that they have a responsibility to protect them from extreme heat in the face of climate change. In 2019 they began two pilot projects: a smart air conditioning pilot at Meltzer Tower in lower Manhattan and a heat pump pilot at Fort Independence Houses in the North Bronx.^{107,108} However, both of these projects are in community districts that are ranked lower on the City's Heat Vulnerability Index.¹⁰⁹ As NYCHA evaluates the results of these pilot projects and expands these programs, NYCHA must prioritize implementation in communities that are the most heat vulnerable, such as communities in the South Bronx, Northern Manhattan, and Central Brooklyn.

Furthermore, NYCHA Senior Centers, which often serve as cooling centers for communities, have experienced long-standing breakdowns with their HVAC systems, which prevents these centers from providing necessary relief during an extreme weather event. NYC-EJA member organization Community Voices Heard (CVH) has called for a portion of the approximately \$450 million earmarked by New York State towards NYCHA to be dedicated to repair broken HVAC systems.¹¹⁰ Moreover, after years of disinvestment, CVH and other community activists are calling for an annual investment of \$3 billion in public housing to fix critical capital repairs to ensure safe, quality, and affordable homes.

PREPAREDNESS FOR HEAT VULNERABLE COMMUNITIES (CONT'D)

Publicizing cooling centers prior to an extreme heat event is a crucial community preparedness strategy for coping with extreme heat. According to the Centers for Disease Control and Prevention, the definition of community preparedness is “the ability of communities to prepare for, withstand, and recover from public health incidents in both the short and long term.”¹¹¹ If the public does not have access to the list of potential cooling centers in their neighborhood (which is usually disclosed by the City the day of an extreme heat event), it is impossible for them to properly “prepare” for when a heat emergency inevitably arises. If the public has access to cooling center lists prior to the actual onset of a heatwave (especially given the potential for some communities to experience power outages during heatwaves, making accessing cooling center info online impossible, they will be able to choose a location and plan how to get there during a heat emergency, as well as choose an alternative cooling center if their primary choice is closed for any reason. We commend Speaker Corey Johnson for acknowledging the need for building-specific cooling centers for vulnerable populations in his 2020 State of the City.¹¹² Furthermore, these building-specific cooling centers should ensure extended and overnight hours to address high nighttime temperatures due to the Urban Heat Island effect.

COVID-19 & EXTREME HEAT PREPAREDNESS

NYC-EJA is deeply concerned that the COVID-19 crisis is likely to stretch into the summer months, and that many of the communities most impacted by the virus also live in the most heat vulnerable parts of our city.

According to the NYC Panel on Climate Change, by the 2050’s New York City can expect to see the number of 90 degree days to double, and the number of heatwaves to either triple or quadruple, which puts increasing strain on our energy grid and causes the most polluting power plants to be fired up, worsening air quality and increasing electricity costs. New Yorkers who are currently suffering from higher rates of asthma and respiratory issues – whose best defense against COVID-19 is to shelter at home – will have to deal with skyrocketing electricity costs in order to cool their homes. In the event the grid becomes so strained to trigger blackouts and brownouts, those most vulnerable to both heat related illness and COVID-19 will be trapped home with no relief from the heat.

The City’s main point of intervention for heat emergencies is to open up public cooling centers when a heat emergency is announced. The usual ways New Yorkers keep cool will likely be unavailable – public pools and beaches are likely to remain closed, and maintaining social distance in parks and cooling centers presents a challenge. How can environmental justice communities follow the mandate to shelter in place during a heat emergency with no A/C or if the power goes out?

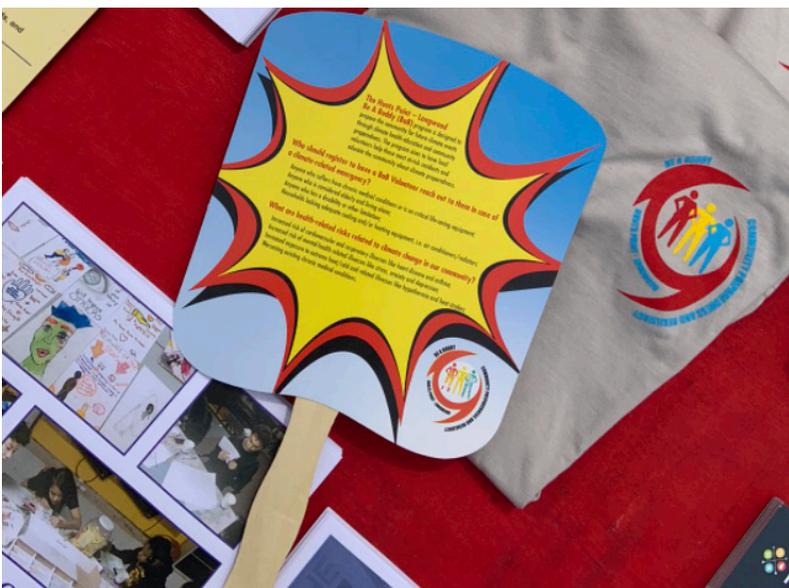
In case of an extreme heat event, Con Ed needs to prepare for a strain on the energy grid. NYC needs to start developing a plan for how they can open community cooling centers while maintaining social distancing guidelines. In addition, NYS should expand the Home Energy Assistance Program (HEAP) for cooling to meet the needs of COVID-vulnerable communities.

PREPAREDNESS FOR HEAT VULNERABLE COMMUNITIES (CONT'D)

In 2018, NYC took an important step towards community preparedness with the launch of the Be A Buddy program, a community-led preparedness initiative to promote social cohesion and identify vulnerable residents, so that neighbors can reach out to those at risk during an extreme heat event.

THE POINT CDC was one of the community organizations identified to lead the Be A Buddy pilot program in the heat vulnerable South Bronx. THE POINT CDC saw considerable success under Be a Buddy, with 100 people enrolled and over 500 people reached during a summer 2019 extreme heat event. Furthermore, as we work towards climate justice and work with communities, we need to recognize that talking about heat in a silo may not be the best approach.

In implementing Be a Buddy, THE POINT CDC reimagined the program not just for extreme heat but for extreme weather events in general, and they are working to ensure that Be a Buddy helps to build capacity in Hunts Point, so that the community is truly prepared for all types of climate emergencies. This holistic climate preparedness strategy has built off of previous work by THE POINT CDC and NYC-EJA through the South Bronx Community Resiliency Agenda (SBCRA) – a comprehensive climate resiliency agenda to strengthen the physical and social resiliency of the South Bronx. For example, in 2017 SBCRA organized an emergency drill scenario that simulated a catastrophic hurricane and blackout to clarify the current state of community preparedness and emergency response efforts among local stakeholders and residents.^{113,114,115} Programs like these are crucial in preparing for a city where frequent extreme weather events become the norm. Be a Buddy currently has no dedicated funding source and was not mentioned in the latest *OneNYC 2050* report. If NYC is to be truly resilient, funding for community preparedness needs to be prioritized – the City needs a dedicated funding stream for community preparedness and awareness projects like Be a Buddy.



Outreach materials for Be a Buddy. Photo credit: THE POINT CDC

RECOGNIZE INFECTIOUS DISEASE AS A CLIMATE CHANGE THREAT

Infectious disease outbreaks like COVID-19, Zika, Ebola, Middle East Respiratory Syndrome (MERS), and Severe Acute Respiratory Syndrome (SARS) have been rising and experts have long warned about the potential of pandemics from these emerging infectious diseases.^{1,2} The ongoing COVID-19 pandemic has exposed a glaring gap in the country's preparedness for an infectious disease-related public health emergency. It's also brought to the forefront the connection of climate change and infectious disease. Although the connection between climate change and the global pandemic spread of COVID-19 is complicated and still not fully understood, it's likely that climate change will exacerbate the spread of infectious diseases generally.

Zoonoses—diseases that are spread to humans from animal populations—are largely responsible for emerging diseases like COVID-19.³ There are many factors that can be attributed to the emergence of these infectious diseases, such as demographic change, global travel and trade, and climate change⁴. Climate change is likely to alter the habitat of animal species and increase the likelihood of animals coming into contact with humans, allowing for these diseases to “jump” to human populations. Vector-borne diseases are a type of infectious disease carried by “vectors” such as mosquitoes or ticks; transmission of these diseases is also sensitive to climatic conditions. For example, increases in temperatures may lead to an expansion of disease range or earlier seasonal activity, which can result in increased disease transmission.⁵

COVID-19 & ENVIRONMENTAL JUSTICE

Similar to any other climate change impact, environmental justice communities are left extremely vulnerable to infectious disease. Decades of environmental racism have led to disproportionately high rates of air pollution and resulting respiratory and heart disease in these communities, increasing their susceptibility to viruses like COVID-19. Furthermore, new research is showing that higher levels of $PM_{2.5}$ are associated with higher death rates from COVID-19, and that marginal decreases in pollution could have resulted in hundreds fewer COVID-19 deaths in NYC.⁶

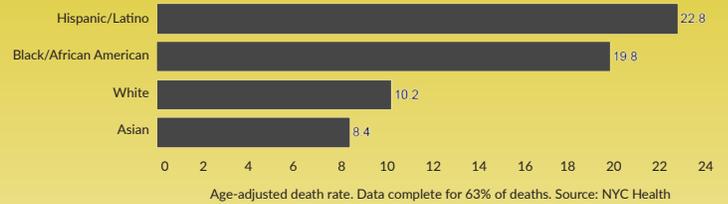
It is becoming increasingly clear that race and socioeconomic status are determining COVID-19 health outcomes. According to the NYC Department of Health, African Americans and Latinos represent higher rates of fatalities than their representation in the population. As of April 2020, Latinos and African Americans represent 34 percent and 28 percent of people who have died of the virus, but only 29 and 22 percent of the City's population, respectively. In NYC, the 5 communities with the highest COVID-19 positive tests have average per capita incomes of \$26,708, whereas the 5 communities with the lowest COVID-19 positive tests have average per capita incomes of \$118,166.⁷

COVID-19 & ENVIRONMENTAL JUSTICE

Compounding these clear disparities, it is likely that NYC is undercounting the COVID-19 related deaths – some estimates suggest by as much as 40% – due to residents who are dying at home and not included in the official death toll. In fact, City officials recalculated the toll the virus has taken and disclosed a new staggering number – adding nearly 4,000 to the total. Just as NYC-EJA highlighted the potential underestimation of extreme heat deaths in NYC, in order to truly understand COVID-19 disparities and where the need for support is greatest, we must fully understand which communities are being most impacted.⁸

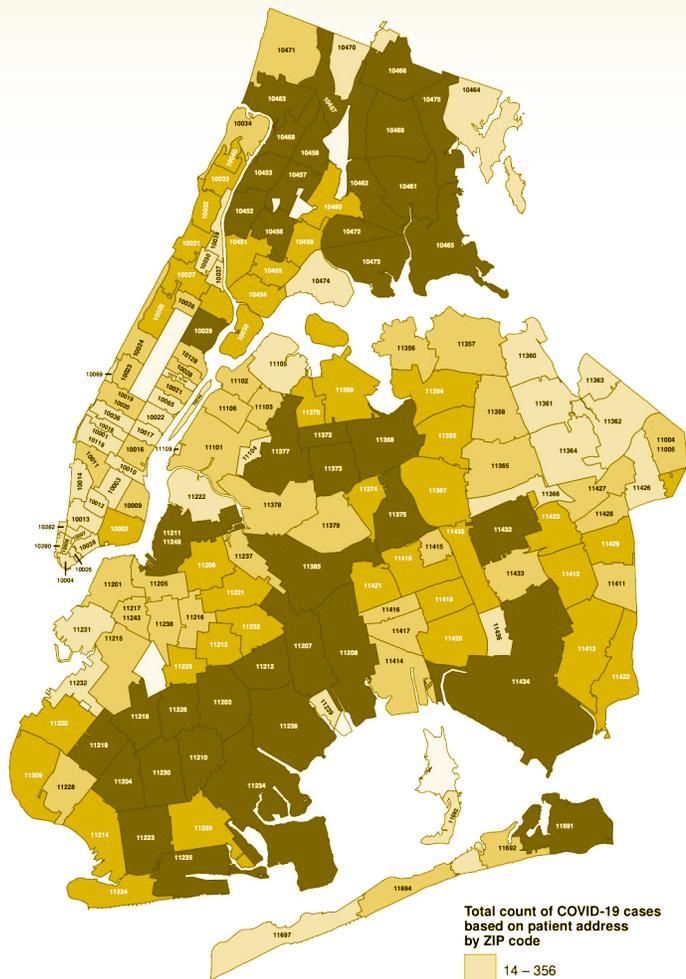
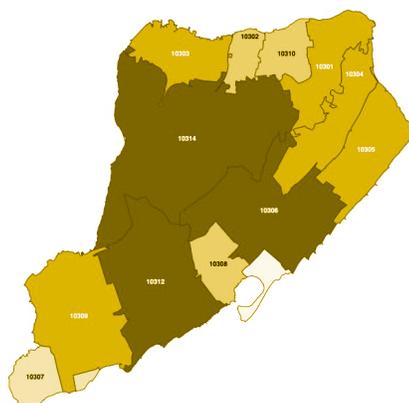
Closely mirroring climate change, a legacy of environmental racism in NYC has left environmental justice communities disproportionately impacted by the health and socioeconomic costs of the COVID-19 public health crisis. Given the disproportionate impact of COVID-19 in low-income communities of color, NYC needs to prioritize testing in these communities to ensure that residents are getting the medical care they need and are able to follow proper guidelines to reduce disease transmission and help keep the rest of the community safe.

Age-adjusted rate of fatal lab-confirmed COVID-19 cases per 100,000 by race/ethnicity group (April 6, 2020)



The COVID-19 global pandemic is an opportunity to recognize that community preparedness in NYC needs to account not just for extreme weather events like heat waves and hurricanes, but also recognize the threat of emerging infectious diseases.

Total Count of COVID-19 Cases by Zip Code



Total count of COVID-19 cases based on patient address by ZIP code

- 14 – 356
- >356 – 612
- >612 – 1064
- >1064 – 2817

ZIP code unknown = 1864

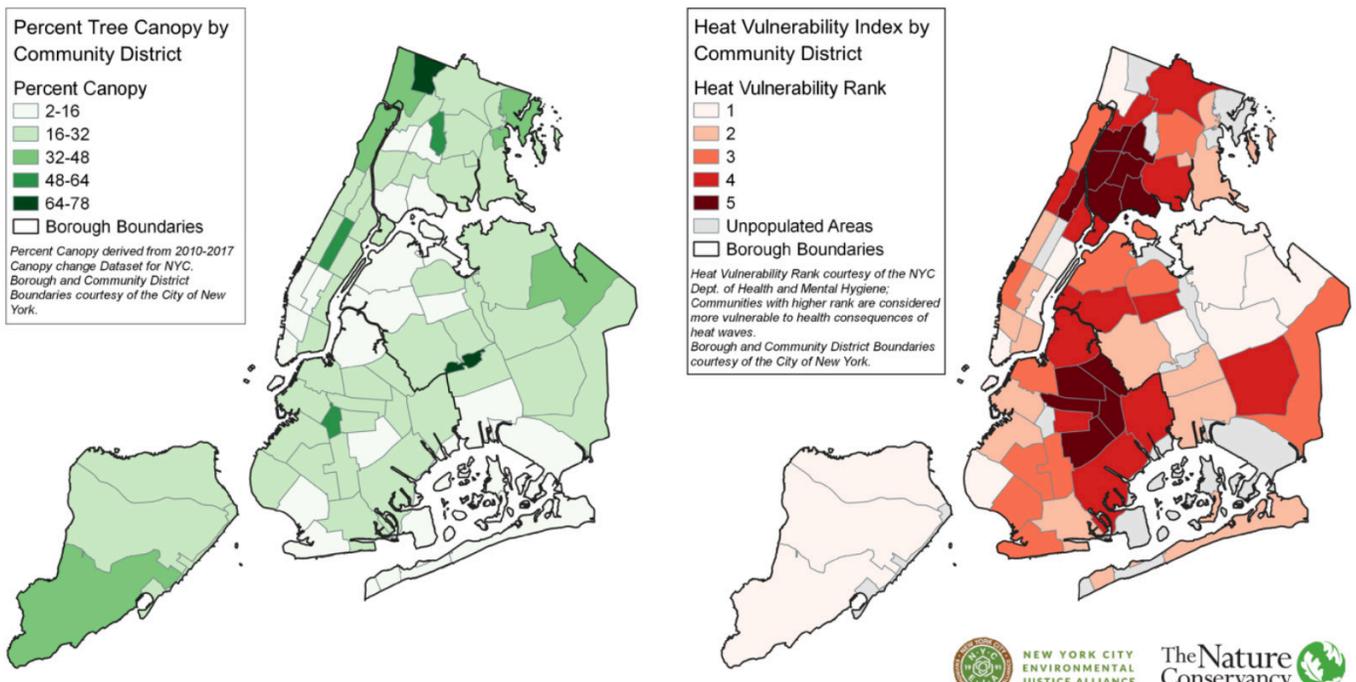
N = 132001 total cases as of April 19, 2020

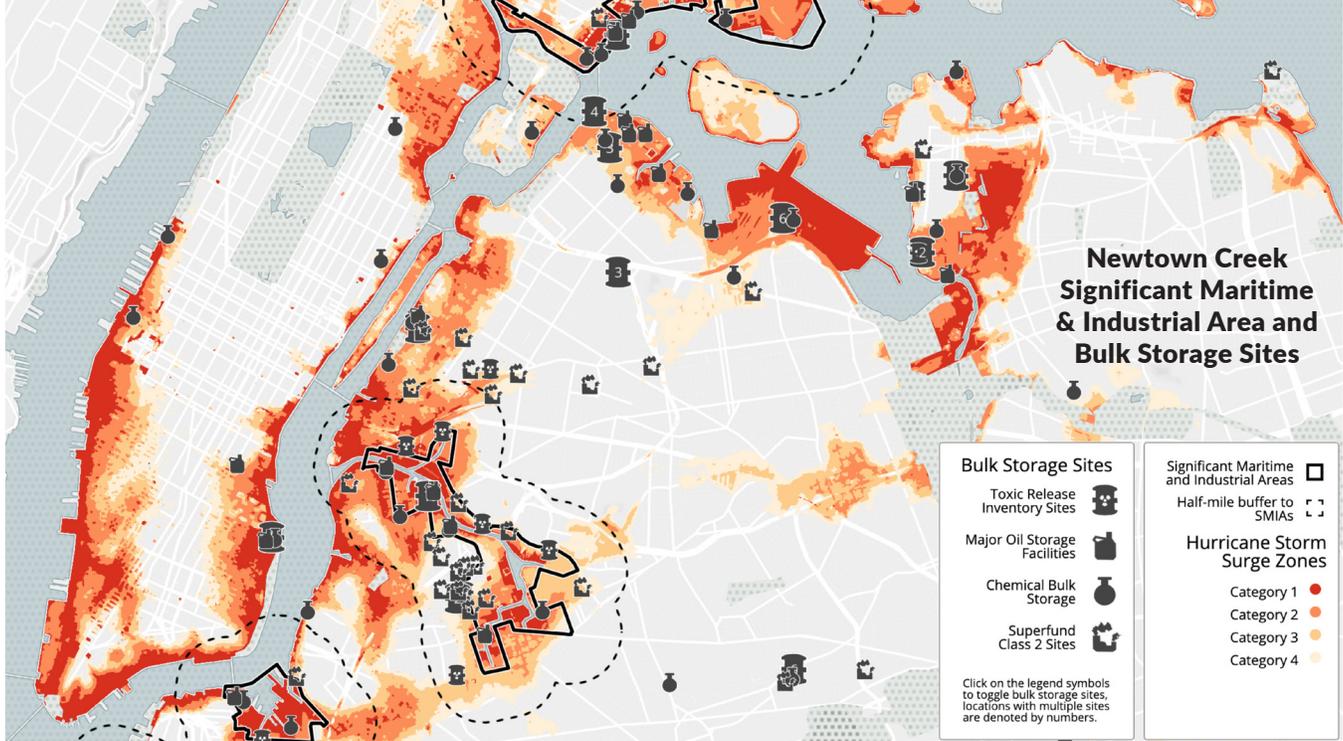
GREEN INFRASTRUCTURE TO IMPROVE HEALTH

Low-income communities and communities of color face disproportionate risk from heat related illness and higher rates of air quality related respiratory diseases. For example, Hunts Point in the South Bronx is one of the most heat vulnerable neighborhoods in NYC, and has among the highest rates of heat related death and illness.¹¹⁶ Additionally, rates in Hunts Point of avoidable hospitalizations for asthma are 2.5x the city average and 10x higher than the healthiest neighborhoods in the state.¹¹⁷

While climate change will only exacerbate these risks, trees have the potential to mitigate its effects. Trees not only have the ability to store and absorb carbon emissions that are driving the climate crisis, but also absorb harmful co-pollutants like particulate matter that affect respiratory health.¹¹⁸ Furthermore, trees provide cooling by mitigating the urban heat island effect through evapotranspiration and shading.¹¹⁹

Given the important role that trees can provide to reduce the impacts of environmental and climate risk faced by EJ communities, trees need to be a key strategy to combat climate change. While *OneNYC 2050* highlights the crucial benefits of street trees and the broader urban forest, particularly for combating extreme heat, it does not commit to further investment in this critical project. We continue to urge that the City expand the Cool Neighborhoods NYC street tree commitment, and renew the successful MillionTreesNYC program to increase urban canopy coverage and ensure the long-term maintenance and health of the city’s urban forests.





Source: Waterfront Justice Project Interactive Map <https://scaan.net/waterfrontmap/>

ADDRESS HEALTH RISKS FROM EXTREME WEATHER & FUGITIVE CHEMICALS

The SMIA in NYC are predominantly located in low-income neighborhoods and communities of color, as well as storm surge zones. NYC-EJA’s Waterfront Justice Project aims to build community resiliency through addressing the climate change impacts projected for NYC’s SMIA. As we have seen after extreme weather events like Katrina, Sandy, Harvey, and Maria, floodwater inundation can dislodge chemicals and other hazardous materials causing them to become “fugitive.” The potential public health consequences of these chemicals are unknown and the lack of community-focused environmental monitoring is a hindrance to truly understanding the magnitude and scope of this issue.¹²⁰

Through Grassroots Research to Action in Sunset Park (GRASP) NYC-EJA and UPROSE, along with our research partners the RAND Corporation and the Lifeline Group have been working to address this issue in Sunset Park, Brooklyn. GRASP’s research has focused on identifying possible sources of chemical

contamination, and modeling potential fugitive chemical releases and resulting public health risks. Through this work, GRASP has been able to develop proposals for mitigating adverse impacts to vulnerable waterfront communities and advocate for policy action.¹²¹

Climate change projections suggest more frequent and intense storms – this will only increase the threat of fugitive chemicals being released into communities. The NYC Department of City Planning has responded to NYC-EJA’s advocacy by creating an initiative to address the threat of fugitive chemicals in the industrial waterfront, with their *Resilient Industry: Mitigation and Preparedness in the City’s Industrial Floodplain* report that offered policy recommendations and case studies for minimizing risks of future flooding to industrial businesses.¹²² However we still need commitment from the City to address health threats from fugitive chemicals and to take steps to ensure that community concerns after contamination are appropriately addressed.

CREATE HEALTHY, RESILIENT NEIGHBORHOODS

EFFICIENT AFFORDABLE HOUSING FOR ALL

As previously mentioned, a significant portion of New York City’s housing stock is struggling to achieve energy efficiency, and a Climate and Community Development Fund, as advocated by the Climate Works for All Coalition, will be essential to meeting the resiliency and public health needs of low-income tenants.

Every NYC Council district hosts some form of public, rent-regulated, or government-assisted housing – serving over 3 million people, or 59% of all renters. Affordable, rent-regulated, and public housing tend to require higher baseline consumption of energy than their market-rate counterparts because these buildings tend to be older, inefficient, and in disrepair; thus investing in increased efficiency will be essential to achieve NYC’s 80x50 goals.

Furthermore, the Dirty Buildings Law (LL 97) exempts rent-stabilized affordable housing from mandatory retrofits, which are instead allocated only prescriptive measures, since the costs of retrofits could be passed to vulnerable tenants as Major Capital Improvements (MCIs) and lead to displacement.

New York City needs a large scale, City-funded energy efficiency program to help improve and preserve affordable and public housing. Energy efficiency not only draws down building carbon emissions, but also results in ancillary benefits such as reduced operating and maintenance costs that can be invested for other property improvements, healthier residential environments, lower utility bills, and quality job creation.

Energy efficiency is also key to increasing community resiliency. Tenants in rent-stabilized, affordable and public housing tend to be low-income people of color, residing in areas of high heat vulnerability, made worse due to lack of access to green space. Tenants in inefficient rent-regulated buildings face a disproportionate energy burden, paying a much higher proportion of income on energy costs.¹²³ On hot days, when everyone is running their A/C, the most heat vulnerable communities are susceptible to blackouts and brownouts – meaning losing power when it’s needed most. These same residents are often excluded from energy efficiency and clean energy financing programs.



Climate Works for All coalition rally to #FundOurFuture, demanding a Climate & Community Development Fund. Photo credit: Patrick Nevada



New York City needs a large scale, City-funded energy efficiency program to help improve and preserve affordable and public housing.



WHAT WOULD A CLIMATE & COMMUNITY DEVELOPMENT FUND MEAN FOR NYC?

Large-scale investments, energy efficiency, and other climate projects, can help to transform and revitalize NYC's neighborhoods. Rather than rely on importing hydropower from Canada to meet our 80x50 GHG reduction goals, which would yield virtually no economic development or job creation in New York City or even in the state, a city-level Climate and Community Development Fund (CCDF) could spur the green economy locally.

Every community could see an investment to retrofit multiple buildings in an entire block, or multiple blocks at the same time. When coordinated with other districts, the City can maximize cost efficiencies through bulk purchasing of materials, leverage additional funding opportunities through federal and state programs, and preserve affordable and public housing for decades to come.

OUR VISION FOR THE CCDF:



Provide career-track jobs in the energy efficiency sector for local residents through local hire and training programs



Improve public health by reducing localized emissions and improving indoor air quality



Improve resilience of low-income tenants to extreme temperatures



Reduce energy burden amidst rising utility costs



Improve neighborhood economic activity



Increase civic participation and leadership in community development

PROMOTE LOCAL ACCESS TO HEALTHY, AFFORDABLE FOOD

Food insecurity disproportionately impacts low-income communities and communities of color – an avoidable injustice considering the amount of food waste sent to landfills and incinerators from New York City daily. Localizing access to healthy, affordable food is a critical component of a resilient, low-carbon, and just city. NYC-EJA’s members have been leading the charge for community-led sustainable food systems. For example, Brooklyn Movement Center is in the process of launching the Central Brooklyn Food Co-op, which is described as “a 100% working member-owned and -operated food store with membership open to all. Our mission is to utilize our collective strength to ensure access to affordable and fresh food within the mostly-of-color, low- and moderate-income communities of Central Brooklyn.”¹²⁴ The Co-op’s core values include openness and accessibility to all, self-determination and community building, skills-sharing and political education, transformation of local food system and social responsibility, and dedication to cooperative values.



Bronx River Foodway. Photo credit: Regenerative Design Group

In the South Bronx, Youth Ministries for Peace and Justice (YMPJ) has developed the Bronx River Foodway, a pilot project at Concrete Plant Park exploring how a sustainable food landscape can be part of a public park. The Foodway offers access to a variety of edible plants, including medicinal plants like echinacea, nut trees like the chestnut, and native berries. Soon, the foodway will host a section dedicated to kitchen herbs and vegetables.

Transformative solutions to achieve food justice and sustainability are emerging from the ground up. The City should work with community organizations like Brooklyn Movement Center and YMPJ to support similar efforts.



Postcard promoting the Central Brooklyn Food Co-op. Photo credit: CFBC

CONCLUSION

New York City needs an intersectional approach to climate justice that centers leadership from the frontlines. *OneNYC 2050* is a good start, but we need more concrete timelines as well as ambitious financial and legislative commitments to meet our climate and environmental justice targets, as well as to prepare for future climate hazards and public health emergencies.

In order to adequately implement the recent groundbreaking laws – including the CLCPA, LL 97, LL 199, congestion pricing and more – we need strong governance structures at the City and State levels. Over the past decade, the governance structures that implement and manage our urban planning, policymaking, and programming have shifted in response to the complex physical and political challenges in New York City. As we enter a new decade, we need to implement an intentional, transformative, and equitable adaptation of our governance structures to realize a Just Transition.

The strategies and pathways identified in this report guide NYC's progression toward: reducing greenhouse gases and localized emissions; advancing a just transition towards an inclusive, regenerative economy; and cultivating healthy and resilient communities. With the upcoming 2021 elections, New Yorkers have the opportunity to support new leaders in the Mayoral Administration, NYC Council, and beyond, that can truly champion and realize climate justice goals. NYC-EJA will continue to engage with agencies, monitor progress of policy implementation, and challenge candidates to step up and commit to strong climate justice platforms.

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