Climate Action Manual

Policies for a more sustainable and resilient New York

RPA Regional Plan Association
Produced by:

**Make The Road NY**
Julissa Bisno, Associate Director
Leticia Pazmino, BASTA Organizer
Jose Lopez, Co-Organizing Director

**Regional Plan Association**
Vanessa Barrios, Senior Associate, State Programs & Advocacy
Ellis Calvin, Data Research Manager
Carlos Mandeville, Research Analyst
Lauren Tsuboyama, Director of Communications
Christina Kata, Special Projects Associate
Dave Zackin, Graphic Designer
Marc Sapec, Intern
Arvind Sindhwani, Intern
Rob Freudenberg, Vice President, Energy & Environment
Christopher Jones, Senior Vice President and Chief Planner
Kate Slevin, Senior Vice President, State Programs & Advocacy

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Contents

Introduction and Process / 3

Adapt / 5
Address Extreme Precipitation & Flooding / 5
Address Urban Heat / 6
Ensure Food Security / 7
Fund Adaptation Projects in Low-Income Communities with a Polluter’s Fee / 8

Mitigate / 9
Reduce GHGs from Vehicles / 9
Reduce GHGs from Buildings / 10
Reduce GHGs from Waste / 10
Reduce GHGs from the Power Sector / 11
Climate Leadership and Community Protection Act / 12

Thrive / 13
Work Against Displacement, including Green Gentrification / 13
Develop an Upwardly Mobile Workforce / 15
Educate the Next Generation / 16

Conclusion / 18
The effects of climate change are already here and will become increasingly evident in the lives of all New Yorkers. While our region had a wake-up call with Superstorm Sandy in 2012, we are now experiencing the impacts of climate change more frequently. For example, in July 2019, a rainstorm triggered flash flooding in the Brooklyn neighborhood of Park Slope that rose high enough to submerge parked cars. A couple of weeks later, more than 30,000 households across Brooklyn, Queens, and Long Island lost power during a heatwave and were unable to use their air conditioning units or fans on one of the hottest days of the year.

The effects of climate change will only continue to grow, with far-reaching implications for public health, the economy, and everyday lives. This decade, New York City is likely to experience 26 to 31 days above 90 degrees each year, 50 percent more than the annual average between 1970 and 2000. By the 2080s, New York City could be facing more than 60 days above 90 degrees every year. Extreme heat can cause serious health problems like heat stroke and dehydration, as well as exacerbate existing conditions such as asthma, cardiovascular disease, and stress, and is estimated to cause more deaths and hospitalizations than any other climate change effect. Major storms will become stronger and more frequent, damaging not only coastal areas, but upland areas as well. More stormwater means more pollution in local waterways, and more extreme weather of all kinds means more economic disruption, as people are unable to get to their jobs and schools.

Introduction and Process
Why an Action Manual

In the face of a growing climate crisis that will yield more extreme heat, severe weather events, and disruptions to the everyday lives of city residents in the coming decades, it is imperative to begin planning for a more sustainable future. New York State took an important step towards addressing the climate crisis with 2019’s Climate Leadership and Community Protections Act (CLCPA). However, practitioners still need to answer the question of how this impetus is mobilized at a local level, including in the communities of Central Queens.

Over the course of the past two years, Regional Plan Association (RPA) and Make the Road New York’s Queens Office (MRNY) have worked in partnership to build climate adaptation capacity at MRNY and to develop policy solutions that can make Queens a more resilient place. The product from our first year, *Equitable Adaptation: Building climate change adaptation capacity for Make the Road NY and Central Queens*, provided an overview of the climate challenges facing Central Queens residents and presented an overview of adaptation strategies that could be taken. This Climate Action Manual picks up where that report left off and offers clear legislative and programmatic changes that residents and groups like Make the Road New York can advocate for their elected officials to make at the city and state levels. This Climate Action Manual is the result of this partnership and serves as a call to action for elected officials to develop a broader, more inclusive climate adaptation agenda. The policies included here range in scale from making composting easier to supporting a Polluter’s Fee as proposed by the NY Renews Coalition. Taken together, these policies represent a step towards an inclusive, clean energy future.

The Climate Action Manual follows the leadership of the environmental justice community by drawing upon a Just Transition framework. As stated by the Climate Justice Alliance, a Just Transition entails democratizing systems of governance and wealth creation alongside advancing ecological restoration. The New Consensus Group discusses how the goal of achieving net-zero greenhouse gas emissions can facilitate a Just Transition by creating many well-paying jobs, rebuilding infrastructure to be more resilient, and promoting justice and equity through the active inclusion of historically marginalized people. While the Climate Action Manual by no means is the answer to all of Queens’ climate adaptation needs, it is an opportunity to demonstrate how the goals and investments of the CLCPA can be implemented locally while centering environmental justice community members in the process.

Policies within the Climate Action Manual fall into three broad action areas: Adapt, Mitigate, and Thrive. Adapt calls for broader investments in Queens that will create a more resilient and healthy community. Mitigate offers strategies for immediate actions that can address the adverse effects of climate change in the short term and set up preventative measures for ensuring the long-term stability of communities with the investments in Queens. Thrive provides a set of policies that can facilitate a longer term Just Transition. While each individual policy has benefits, RPA and MRNY encourage Queens’ policy makers to consider the whole project of these policies: a step towards a sustainable, equitable, and healthy future.

The Process to Develop an Action Manual

Adapting communities to the imminent effects of climate change requires attentive listening to community needs, proactive government policy, and collective effort from all involved parties. Municipal and state policies have the power to protect residents from the brunt of extreme weather and delegate resources to those in need.

Building off of the policy recommendations included in the publication, *Equitable Adaptation*, we sought to identify, streamline, and strengthen additional policy recommendations that will positively impact and protect the livelihood of all residents. To gain a deeper understanding of what policies could be most effective, we listened and shared ideas at multiple sessions in fall 2019. We spoke with MRNY community organizers as well as the Youth Power Project about climate change-related issues that were pressing in the Queens community, then worked together to hone our set of policy recommendations.

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3 Just Transition. https://climatejusticealliance.org/just-transition/
Address Extreme Precipitation & Flooding

Expand NYC Department of Environmental Protection’s Green Infrastructure Program and Prioritize Low-Income Communities

Relevant Agencies: NYC Council, NYC Department of Environmental Protection

For New York City streets, the challenge presented by climate change is two-fold. Extreme temperatures are exacerbated by concrete and asphalt, while more extreme precipitation will continue to overwhelm the city’s aging sewer system, leading to polluted discharges into local waterways known as Combined Sewer Overflow (CSO) events. According to the Natural Resources Defense Council, in 2018, NYC experienced a sewage overflow once every three days on average, a 44 percent increase from 2016. To lessen the number of CSO events, the Department of Environmental Protection (DEP) created the green infrastructure Program, which has developed a significant amount of rain gardens, green roofs and other Green Infrastructure throughout the five boroughs. City Council and DEP should expand the Green Infrastructure Program to be able to build more green infrastructure and prioritize low-income neighborhoods. The program has accumulated about $600 million in funding between the fiscal year of 2012 and early 2019. DEP’s proposed budget through the end of fiscal year of 2019 was $1 billion, and we recommend that the agency makes a concerted effort to increase it to $2 billion through fiscal year 2020. The State can help support the City’s green infrastructure projects by adopting the New York League of Conservation Voters’ (NYLCV) proposal for $1 billion in water infrastructure investment statewide.

The key challenge for green infrastructure is maintenance, which is under the New York City Parks Department. While NYC Parks has rapidly increased its green infrastructure maintenance staff in recent years, residents complain that too often rain gardens and bioswales are full of litter. The maintenance workers receive horticultural training and certification, and are based out of facilities in the Bronx and Brooklyn. To meet the growing

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demand of the Green Infrastructure Program, maintenance staff should be increased, including opening local facilities in other boroughs. NYC Parks also works with community organizations, such as the Gowanus Canal Conservancy in Brooklyn, to train volunteers in green infrastructure maintenance. These local partnerships could be enhanced by offering not just volunteer opportunities, but providing stipends for community members’ work.

Adapt DEP’s Green Infrastructure Fund to Support Community Gardens

► Relevant Agencies: NYC Department of Environmental Protection

The GreenThumb program at New York City Parks Department coordinates with hundreds of community gardens citywide to provide supplies and support, but can improve with City and State support. New York City’s Department of Environmental Protection is tasked with the design and construction of green infrastructure through the Green Infrastructure Fund. NYC DEP should consider making community gardens eligible for the program. Community gardens are widespread across the city and help manage stormwater with their permeable surfaces. An initial step could be including community gardens in their Rain Barrel Giveaway Program, though community gardens may need larger receptacles than typically provided for home use.6

Allocating funding for DEP to community gardens could boost tree plantings in the neighborhoods that need it the most. Trees in urban areas can counteract the urban heat island effect and remove the pollutants in the air. The cost of tree planting in NYC has increased from an average of $501 per tree in 1999 to $4,300 per tree today. This price increase is due to the fact that there are a limited number of private contractors.7 DEP funded community gardens would enable the greening of the streets of NYC and contribute to improved air quality and health for the community.

Address Urban Heat

Make Cooling Centers More Functional and Accessible

► Relevant Agencies: New York City Council

Extreme heat events in NYC can be deadly for people like the elderly and those suffering from chronic medical conditions.8

Cooling centers are free, air-conditioned spaces open to the public during heat events, but the current program falls short in a few key areas. There are around 350,000 seniors in New York City that live more than a half-mile from a cooling center, and the success of the program is the square footage of treated roofs.9 Based on conversations with stakeholders, various changes should be made to improve the program. West Harlem Environmental Action (WEACT) proposed a pair of bills in their 2019 legislative agenda to improve wayfinding to cooling centers, and to study how to improve the program overall. In line with this proposal, we think that efforts to improve the program should include the development of a Cooling Center Task Force to advise on the development of program improvements. Next, the City should incorporate similar public outreach as seen with WEACT’s Wayfinding Design Contest to increase awareness of Cooling Centers. Lastly, the City should consider utilizing NYCLink Kiosks to spread information on cooling centers. These changes, and others identified by a task force, would help make the cooling center program more accessible and responsive to communities across the city.

Expand Cool Roofs Program

► Relevant Agencies: New York City Council, NYC Small Business Services, NYC Mayor’s Office

The concentration of dark surfaces, such as roofs and roads, and a lack of green space in lower income neighborhoods exacerbates the urban heat island effect. The City developed the NYC Cool Roofs Program to train and employ New Yorkers to paint qualifying roofs with a white, reflective coating. The paint reduces the amount of heat absorbed by buildings, which has the potential to lower the energy demand of households. The NYC Cool Roofs Program is one method of addressing rising temperatures brought on by climate change.

Based on conversations with stakeholders, various changes should be made to improve the program. First, low-income homeowners should be able to participate in the program at no cost. A panel of policy makers and community members should be responsible for defining income guidelines for the new Cool Roofs Program. Next, the City should assess the feasibility of removing the citizenship requirement. A New Yorker should not be barred from participating in this type of program based on their documentation status, especially when the program is looking to reach a wide range of participants. Finally, we recommend improving the study and report on the effectiveness of the Cool Roofs program. Currently, the only metric which measures the success of the program is the square footage of treated roofs. NYC Small Business Services should partner with the Mayor’s Office to conduct an official study of the program by assessing temperature changes, local albedo levels and tenant confirmation of lower temperatures in their homes.


Ensure Food Security

Expand Urban Agriculture

► Relevant Agencies: New York City Council, NYC Department of City Planning, NYS Legislature

Food insecurity is widespread across New York City. 12.8 percent of the City’s population, or about 1.1 million people, experienced food insecurity between 2015 and 2017. A myriad of challenges including high housing costs and low wages are central to this issue. Neighborhoods across New York City have activated underutilized spaces to create community gardens with the goal of building community and growing food for people to consume in their own neighborhoods. NYC Parks’ GreenThumb program, a key actor in the urban agriculture space, supports over 550 community gardens throughout the City, but still faces several structural challenges to formalizing and expanding the presence of urban agriculture in NYC.

To help formalize the presence of urban agriculture within NYC, City Council should require the Department of City Planning to conduct a comprehensive urban agriculture plan that uplifts the voices of community gardeners, as proposed by former City Councilmember Rafael Espinal and Borough President Eric Adams. An urban agriculture plan can ensure that land use policies do not restrict the ability of farmers (which includes commercial, non-profit, and community farmers) to grow, sell, or distribute food in their communities. Though a majority of community gardens comply with zoning as is, a comprehensive plan can formalize their presence in the wake of efforts to convert them into housing. City Council amended and passed an initial version of this local law to require the creation of a website on urban agriculture, but it accomplishes little beyond sharing information on existing resources available from the GreenThumb program. By passing a local law to create this plan, urban farmers and community gardeners can identify areas of growth for urban agriculture in NYC and Queens. A component of this will need to address the current barriers that prevent non-profit farms from selling what they produce on site. Additionally, a new champion for this work is needed since the departure of former Councilmember Espinal.

In 2017, New York State announced the creation of the Vital Brooklyn initiative, which invests funding into Central Brooklyn to support affordable housing, healthcare, open space, healthy food, and more. The program aims to create a healthier neighborhood through comprehensive investments, though the effects are still to be measured due to the long-term nature of public health data. This initiative does serve as a model, however, for the State investing in programs in a specific geography, including programs that expand healthy food options. The NYS Assembly and Senate should look to expand their Mobile Market Grant Program and other funds by working with GreenThumb to connect funding from the State to community gardens in Queens that can provide locally grown, fresh foods. Even if there is not the full backing of an initiative the size of Vital Brooklyn, the best practices from the process should be replicated in other parts of the City.

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12 History Of the Community Garden Movement. https://www.nycgovparks.org/about/history/community-gardens/movement
Fund Adaptation Projects in Low-Income Communities with a Polluter's Fee

Relevant Agencies: NYS Legislature

New York State’s Climate Leadership and Community Protection Act (CLCPA) sets ambitious goals for net-zero greenhouse gas emissions by 2050. While this is a necessary disruption to the status quo of contributing to climate change, it will also be a disruption for tens of thousands of workers across the state in fossil fuel-related industries. The term “Just Transition” refers to the policy framework that reduces emissions while ensuring communities of color and low-income workers are not left behind. The transition will be costly, but not nearly as much as doing nothing. To fund a Just Transition, the businesses that contribute to the problem should be held accountable for funding the solutions.

NY Renews, a coalition of over 300 organizations across New York State, succeeded in passing a version of their ambitious climate change legislation in the CLCPA, which set emissions goals and mandated that 35 percent of funds would go to disadvantaged communities. Building on that legislation, NY Renews has proposed a Polluter’s Fee, which puts a price on greenhouse gas emissions. The fee could raise as much as $7 billion every year for the first ten years, and would be distributed to four funds:

- **Climate Jobs and Infrastructure Fund (30 percent),** for large-scale regional investment in things like supply chain infrastructure for offshore wind production.
- **Community Just Transition Fund (33 percent),** for targeted investment in low-income communities and communities of color, such as community-led energy planning and capital costs for renewable energy projects.
- **Worker and Community Assurance Fund (7 percent),** for retraining and extended unemployment benefits for displaced workers in fossil fuel industries
- **New York Energy Rebate Fund (30 percent),** which includes utility energy assistance, transit assistance, and tax rebates for low- and middle-income New Yorkers and small businesses.

New York State should pass additional legislation to institute a Polluter’s Fee to help the state achieve the ambitious goals it set in 2019 with the CLCPA. Similar to the CLCPA, it should require the establishment of working groups that are representative of the communities most affected by environmental injustice to participate in the rulemaking process for this policy.

Other initiatives, such as the Transportation Climate Initiative (TCI), have proposed a cap-and-invest program for the transportation sector. TCI’s proposal would require gasoline and fossil fuel suppliers to hold allowances for the emissions caused by the consumption of their fuel. Revenue would be used to fund public transportation and safe street policies, supplementing, but not substituting, the Polluter’s Fee funds listed above. Regardless of the fundraising mechanism, revenues must be targeted toward adapting communities most affected by climate change and enabling a Just Transition as specified by CLCPA’s mandates.

19 Fact Sheet: Cap-and-invest As a Tool To Reduce Pollution. https://www.transportationandclimate.org/fact-sheet-cap-and-invest-tool-reduce-pollution
Reduce GHGs from Vehicles

Electrify the MTA Bus Fleet

▶ Relevant Agencies: MTA, NYC Transit, ConEdison

According to the U.S. Environmental Protection Agency (EPA), diesel exhaust poses one of the greatest public health risks of all air pollutants. Diesel combustion releases toxins that can be inhaled into the deepest parts of the lungs. This can cause many health problems, including asthma, bronchitis, cancer, and premature death. Electric buses are not only less of a local public health hazard, but can allow for drastically lower carbon emissions. Electric buses rely on electricity supplied by the power grid, which may still run on fossil fuels today. But, as New York State moves toward eliminating carbon emissions from its power sector, electric buses will be closer to carbon neutral. Even today, an analysis by the Union of Concerned Scientists found that in every state, electric buses produce fewer carbon emissions than diesel (87 percent less) or compressed natural gas-powered (85 percent less) buses.

The MTA has the potential to play an important role in enhancing urban resilience through the complete phase-out of diesel-powered buses. The MTA has committed to transitioning its entire fleet to electric by 2040, and in its 2020-2024 capital plan, the MTA committed to purchasing 500 electric buses. Yet this is only around 20 percent of the nearly 2,500 buses it will be replacing or adding in the next five years, and less than 10 percent of the total fleet. While the capital plan does emphasize that the 2,200 replacement buses will include hybrid and compressed natural gas buses in addition to electric, it does not specify how many or if new diesel buses will also be included. Compressed natural gas buses emit fewer particles than diesel, but nearly as much carbon dioxide. MTA and New York City Transit should commit to transitioning the entire bus fleet to electric within 10 years, as well as ending the use of diesel buses.

Only one New York City bus depot is currently equipped to charge electric buses. To be able to scale up its electric fleet, the MTA will need to upgrade all bus depots to include charging. Managing the charging of electric buses will be important in not overburdening the electric grid during peak demand. Certain routes may also benefit from en-route charging, which all but eliminates the need to return to the depot as buses are charged at certain stops. This takes considerable investment in infrastructure and significant space, and may only be suitable for certain routes. The MTA has started a pilot for en-route charging for the M42 bus on 42nd Street in Manhattan. Its first all-electric fleet has also been deployed for the M14 on Manhattan’s 14th Street. While phasing in electric buses, routes that serve environmentally-burdened neighborhoods should be prioritized.
ConEdison, New York’s electric utility, should also enable a faster transition by redesigning rates for electric vehicle charging. ConEdison should follow Southern California Edison’s lead in offering a rate for electric vehicles that offsets so-called “demand charges,” making charging more economical if done during off-peak periods.

Additionally, NYSERDA should clarify citizenship requirements for participation in their programs and work to ensure undocumented people can access them. Currently they do not disclose what the citizenship requirements are for the EmPower program. Clarifying these expectations will allow undocumented people to more confidently participate in programs without fear of consequences like deportation.

Finally, while the current income limits correspond to those set forward by the Federal low-income guidelines, there would be a substantial number of rent-burdened NYC residents kept from qualifying because their annual income exceeds set amounts. Therefore, we recommend that NYSERDA revises the income guidelines for each of their tenant efficiency programs to be more inclusive of other socioeconomic statuses.

Reduce GHGs from Buildings

Widen the Scope of the J-51 Tax Abatement to Include Energy Efficiency Upgrades

*Relevant Agencies: NYS Legislature, New York City Council*

The J-51 Tax Program is an as-of-right tax exemption and abatement for residential rehabilitation or conversion to multi-family housing. This program needs to be updated to include specific modern energy efficiency upgrades as eligible for the tax incentive. Significant energy-efficiency upgrades like efficient windows, installation of energy recovery ventilators (ERVs), and solar roofs have high upfront costs and may deter building owners from incorporating them without an incentive.

Because of long-term savings through reduced utility costs, these improvements already have the ability to provide a return on investment, a return which should be taken into account when calculating the value of this tax incentive. These improvements should also not come at the expense of tenants, especially given the existing dual-financial incentives of energy cost and property tax savings. Rent increases for these improvements through the MCI program should not be allowed, and the existing J-51 requirement of rent stabilization for the period of the benefit should be maintained.

State-Run Efficiency Programs

*Relevant Agencies: NYSERDA*

Energy efficiency programs can help low-income households reduce their utility and energy costs. Programs like EmPower, which is managed by NYSERDA, can facilitate and pay for a household’s solar projects, appliance replacements, lighting upgrades, and improve insulation at little to no cost. Barriers such as technological literacy or a lack of resources dedicated to communications can be a major limiting factor in the programs’ accessibility. NYSERDA should dedicate additional resources to communicating these programs to low-income communities, and take into account the need for translation in this engagement.

Reduce GHGs from Waste

Expand DSNY’s Food Scrap Drop-Off Program

*Relevant Agencies: NYC Department of Sanitation (DSNY)*

A key component of addressing local challenges with garbage is the reduction of waste. While the State has taken important steps to reduce waste via the plastic bag ban, one-third of waste that New York City produces still comes from organics that can be composted. Mayor Bloomberg introduced the Department of Sanitation’s Food Scrap Pick-Up program in 2013 as part of the goal to have zero waste go to landfills by 2030. Local Law 77 of 2013 required the development of a pilot program to “test the efficacy and cost-efficiency of the curbside collection and processing of organic material.”20 In 2018, DSNY collected over 45,000 tons of organic waste through this program, 40 percent of which came from Queens.21 Recent reports from 2018 showed that the City paused the expansion of this program to reevaluate in the hopes of making it more sustainable long term, though it is still fully operational in 24 Community Boards.22 The City only diverts about 10.6 percent of organic waste from landfills, compared to around 50 percent for paper.23

To support the growth of composting in Queens, DSNY should increase the number of drop-off locations strategically for the Food Scrap Drop-Off program, which supplements the Pick-Up program and consists of 180 public sites city-wide, including

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23 Ibid.
New York State should consider a phase-out program that ends with the complete elimination of single-use plastics. The program would have an initial phase of a few years to begin filtering out of single-use plastics from daily life. The first phase could require stores to provide single-use cutlery to customers only upon request. The second phase would call for the complete ban of single-use plastics in NYC. During the duration of the first phase, the City and State should work closely alongside single-use focused manufacturing companies to develop scalable solutions for single-use products made from sustainable resources.

Reduce GHGs from the Power Sector

Promote Community Solar Projects that Give Marginalized Communities a Chance to Directly Benefit from Green Energy

Relevant Agencies: NYSERDA, NYS Legislature

With the passage of the Climate Leadership and Community Protection Act, New York State is obligated to eliminate carbon emissions from power generation by 2050. Governor Andrew Cuomo has also committed to expanding New York State’s solar capacity to 6 gigawatts by 2025, up from 1.8 gigawatts in mid-2019. Since only 5.7 percent of the region’s current generating capacity is green, this will require a transformation in how our energy is produced. Individuals and businesses have already turned to solar power as a clean source of energy as well as a sound investment, as surplus electricity is sold back to the utility. However, until recently, these benefits were primarily available only to property owners who could construct solar panels on their buildings or land, leaving renters out. Community solar allows renters and other community members a share in solar power energy savings, typically through subscription to a solar farm in or near the community. Community solar projects are also typically low-to-no cost to sign up.

Community solar projects have proliferated over the last few years, but there is still room to grow. New York City’s lack of space means it has lagged behind the rest of the state in community solar projects, but public agencies with large buildings, like NYCEDC, NYCHA, and the MTA have stepped up to offer community solar sites. Despite the progress in recent years, there are still many barriers. Unpredictable expenses, a lack of suitable space, and outdated subsidies are slowing the growth of community solar. For example, the current framework makes it difficult for non-residential customers to serve as anchor-customers, which could lower project costs. Additionally, community solar developers in New York City must pay for ad hoc Coordinated Electric System Interconnection Review (CESIR) studies to assess what improvements would need to be done to the local electric grid to allow for a solar project. These studies are expensive and unpredictable, and can return results that make the

Discourage Single-Use Plastics

Relevant Agencies: NYS Legislature

Garbage is a visible nuisance within New York City and is tied to questions of climate change and adaptation.24 In 2018, the New York City Department of Sanitation (DSNY) measured a total of 2.5 million tons of residential waste collected city wide with an average overall diversion rate (total recycling / total waste) of 17.85 percent. Queens produced 697,438 tons of residential waste with an average overall diversion rate of 19.52 percent. Despite performing slightly better than the City in terms of diversion rate, Queens residents expressed frustrations with the state of garbage handling in their neighborhoods.

Single-use plastics contribute to environmental degradation in their production and increased waste in neighborhoods across New York. New York lawmakers have taken important steps to reduce the amount polluting our streets by passing a state-wide law banning single-use plastic bags, the second in the country. Bags are only one of the many pollutants that occupy the City’s environment. While the ban was certainly a step in the right direction in reducing the 23 billion plastic bags used by New Yorkers each year, we propose that New York State should consider the reduction or elimination of all single-use plastics.25

32 in Queens. According to the map of pick-up sites in Queens, there is a disparity in the distribution of sites between western Queens and eastern Queens.24 This program can improve its collection figures by increasing the quantity of Drop-Off sites and by targeting transportation hubs so that Queens residents can incorporate composting into their everyday routines. Specifically, transportation hubs like Flushing, Jackson Heights, and Jamaica currently do not have Drop-Off locations near their primary transit stops. Building out from there, DSNY can target subway stops and high-trafficked bus stops to increase the impact of the program. Also, through an engagement process with community members, DSNY could identify complementary sites that are better ingrained into the everyday lives of people in Queens.

Additionally, DSNY should invest in improving communications about how to compost and why it is important to increase participation in the Drop-Off program. Several strategies highlighted in a literature review on recycling campaigns created by the University of Wisconsin include mobilizing people from local communities as advocates, discussing environmental benefits, using messages that emphasize social norms, and increasing the quantity of receptacles in public places and at events.25 DSNY should apply similar strategies to ensure that the public is aware and able to participate as the Drop-Off and, eventually, the Pick-Up programs.
project financially infeasible. Subsidized, proactive preliminary studies could offer solar developers a screening tool to offer more predictability and reduce costs for individual projects. Cross-utility crediting would also provide community solar opportunities to more New Yorkers, especially those in New York City where space is lacking.

We recommend the following:

- Provide add-on incentives for community solar through the NY Sun program, similar to incentives for solar on affordable housing and for elevated solar installations.
- Expand the number of community solar projects eligible for NYSERDA’s Solar For All program by allowing smaller projects and those earlier in the development process.
- Allow the use of NYSERDA’s PON3414 funding for soft costs, like interconnection (CESIR) studies.
- Standardize the process of CESIR studies to allow for more predictability in developing community solar projects.
- Provide alternative incentives to tax breaks, so tax-exempt, nonprofit organizations can also feasibly convert to solar energy.
- Pass S.8273 in the New York State Senate. Companion bill A.10474 already passed the Assembly in 2019. This bill would temporarily return the methodology by which utilities pay solar projects (and their members) for surplus power back to net metering, providing more predictability in financing projects.

Climate Leadership and Community Protection Act

Clarify How 35 Percent Investment in “Disadvantaged Communities” from the Recent Climate Law will be Operationalized by Working with Community Groups and Leaders

Relevant Agencies: NYS Legislature

New York State took a big step forward with the passage of the Climate Leadership and Community Protection Act28 which set ambitious state-wide carbon reduction goals. It also stated that 35-40 percent investments related to this bill “to the extent practicable” should be invested in “disadvantaged communities,” which at face value is a huge win.29 However, the language directing the investment of funds is ambiguous. It states, “that disadvantaged communities shall receive no less than thirty-five percent of the overall benefits of spending on clean energy and energy efficiency programs, projects or investments.”30 While the law indicates that the definition of the term “disadvantaged communities” will be determined through the Climate Justice working group process, it does not discuss the need for further interrogation of the metrics set out in the “Investment of Funds” section. The questions of what counts as a benefit of spending, what “to the extent practicable” means and how progress will be measured and tracked over time remain.

New York State should clarify how the investment of funds into disadvantaged communities will be defined, operationalized, and measured by working with organizations and leaders from these communities. Though the Sections 75-0111 mentions that the climate working group will address “the allocation of investments related to this article,” establishing clear criteria and operational mechanisms for investment will be crucial components of ensuring that the 35 percent of the overall benefits of spending is actually felt by these communities. Some of the criteria for investment could include: dollars going directly to community organizations; community members trained and hired into well-paying jobs and careers by either the City or by private businesses; businesses with “green” operations started; green infrastructure built for adaptation; or housing units retrofitted for energy efficiency. Based on the structure outlined in the law, this process can be included in the charge for both the Just Transition and climate justice working groups, and should involve a public review process such as the one outlined in § 75-0111. Section 2a.

The success of the CLCPA hinges on how well it implements the environmental justice components of the law. While many specifics still need to be sorted out, policy makers can begin examining documents like this Climate Action Manual, PUSH Buffalo’s Achieving Energy Democracy,31 WeACT’s 2019 Policy Agenda,32 and work by other leaders in the space to begin imagining how CLCPA funds can be spent in accordance with the 35 percent requirement.

29 Ibid., p. 13-14.
30 Ibid., p. 16.
Work Against Displacement, including Green Gentrification

The displacement of low and moderate-income residents by wealthier populations is a common occurrence in New York City and throughout the region. The neighborhoods that tend to be at risk of displacement and gentrification are former industrial hubs or communities home to ethnic enclaves or minorities. Many marginalized communities in New York have been home to polluting industrial uses and vacant land due to disinvestment. Recently, improvements like utilizing vacant land for community gardens and other environmental improvements have lifted communities in the five boroughs. However, this has led to the phenomena of “Green gentrification” in those same neighborhoods. Green gentrification is the process by which local real estate prices increase and put pressure on long-time residents following the transformation of low-income polluted neighborhoods.

Green gentrification is evident in New York City. Before it was known as neighborhood of high-rise condominiums and cocktail bars, Williamsburg was once a center for urban industry with breweries, sugar refineries, and clothing manufacturing. We can learn valuable lessons from its sudden transition from an urban manufacturing hub. When industrial and manufacturing are displaced due to real estate speculation, remediation, or other causes, their workers, who tend to be a largely immigrant and minority workforce, suffer from those losses. Just north of Williamsburg, the Greenpoint neighborhood depended on community awareness to achieve an “alternative vision for urban sustainability”. The Newtown Creek, a well-known superfund site, was recommended for remediation by the DEP in 2010. To ensure the livelihoods of the neighborhood’s working-class, the community pushed for the preservation of some of the industrial uses on the waterfront.

Based on these lessons, we recommend that environmental improvements and green developments must be balanced with displacement protections. Furthermore, both City and State legislators should enact policies to protect residents who would be subject to predatory real estate practices. Finally, community land trusts should be used to preserve and create permanently affordable homes in communities in danger of losing affordable housing stock.

33 “Green gentrification” also known as Climate gentrification, eco gentrification, and environmental gentrification.

NYC Leaders Should Incorporate Displacement Risk into Decision Making

- **Relevant Agencies:** NYC Mayor’s Office, New York City Council

The creation of new park space, enabling waterfront access, and the development of LEED-certified buildings are some of the ways planners and decision-makers can address the environmental problems which affect the neighborhoods. These types of improvements can make neighborhoods healthier and more resilient, but can have adverse impacts on households that are already rent burdened. Over 580,000 New York City households pay more than 50 percent of their income for rent, which classifies them as severely rent burdened.\(^{35}\) Considering this, the Mayor and City Council should revise the way displacement risk is measured in the CEQR manual to better project the impacts of land use decisions.

A 2018 report by the Pratt Center found that the CEQR manual does not quantify displacement risk accurately.\(^{36}\) First, CEQR does not consider race and ethnicity when evaluating “inequitable impacts” by rezoning. Second, the CEQR Manual only considers low-income tenants who reside in buildings that comprise 1-4 units as vulnerable to displacement. Next, if a neighborhood is already considered gentrified or gentrifying, the CEQR Manual disregards the potential for displacement. Finally, EIS authors have too much discretion in overlooking or dismissing potential impacts of land use actions. New York City needs to revise the CEQR process to address these critical flaws that disproportionately impact low-income communities of color.

Implement “Good Cause” Eviction Legislation

- **Relevant Agencies:** NYS Legislature

The 2019 New York State legislative session saw tremendous success with rent reforms, thanks to the Housing Security and Tenant Protection Act of 2019. However, tenants in non-regulated units still lack protections against unfair eviction and landlord harassment. The Good Cause Eviction bill introduced by Senator Julia Salazar would protect tenants from “unconscionable” rent increases, or increases over 1.5 percent of the consumer price index, and

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The Risk of Climate Gentrification

Could climate change edge you out of your home?

Nearly 70% of households in Central Queens are renters with residents that carry a higher rent burden than the rest of New York City and Queens. Most buildings here were built before 1970 and are more susceptible to damage and flooding.

While building renovations or neighborhood improvements are needed, they come at a cost and renters often pay.

Increased rent could usher in a new wave of “climate gentrification,” pushing people out of their homes.

Where do we go from here?

The negative impacts of climate gentrification can be mitigated by ensuring there are mechanisms that protect low-income residents from unlawful behavior by landlords. Policies that include access to free counsel, rent limitations and stringent eviction requirements would guarantee such residents have sufficient resources to remain in their homes and enjoy the sustainable amenities. Finally, as the City has confirmed, the viability of community land trusts should be leveraged to increase preservation capacity of local community development corporations (CDCs). Together, these actions can guarantee sustainability is a feature to be enjoyed by all community members.
provide a right to a lease renewal for renters in buildings with fewer than six units. These protections would give tenants the power to demand safer living conditions and repairs without fearing retaliation from their landlord. This bill would not protect tenants who violate the terms of their lease, and would allow rents to reset to market rates in between tenancies.

**Expand Legal Counsel Programs to Prevent Evictions and Protect Low-Income Residents**

- **Relevant Agencies:** New York City Council

Evictions are an immensely stressful and disruptive event in people’s lives. Evictions cause a ripple effect which can destabilize the communities in which those residents live. Most eviction prevention programs provide financial assistance to help renters facing eviction stay in their homes, but they can only be utilized once.

In NYC, eviction prevention has gone beyond rental assistance. For example, the City’s 2017 Universal Access program guaranteed legal representation to any low-income resident facing eviction. The right-to-counsel guarantee is for households with incomes of less than 200 percent of the Federal poverty level or less, which equates to $24,980 for a single household. Measuring qualifications for legal assistance should not be compared to Federal level, especially when, according to the U.S. Department of Housing and Urban Development (HUD), an annual salary of $59,750 or less is now considered low-income in the New York Metro Area. Despite the expansion of the program to new neighborhoods, the program’s income qualifications should expand to include a broader array of at-risk tenants.

**Promote Community Land Trusts to Create Permanently Affordable Housing**

- **Relevant Agencies:** New York City Council, NYS Legislature, NYC Department of Housing, Preservation, and Development

Community Land Trusts (CLTs) are non-profit organizations that acquires and holds land in perpetuity to preserve affordability of housing among other uses. The CLT owns the land it has acquired and leases the use of structures on the land via long-term leases, usually 99 years, that include restrictions on resale value to preserve long-term affordability. CLT’s governance structure prioritizes the goals and needs of the community by giving them a seat at the table. This board structure consists of three groups: one-third drawn from residents in the CLT, one-third from the community, and the last third consisting of concerned parties. This ownership model reduces real estate speculation since the CLT retains ownership of the underlying land. This long-term continuing benefit makes CLTs an interesting affordable housing alternative that the City should pursue.

In 2017, NYC’s Department of Housing, Preservation and Development (HPD) released a Request for Expressions of Interest (RFEI) for groups interested in forming community land trusts. This marked the first time the city has put resources towards starting CLTs in New York. According to HPD estimates, the city owns approximately 600 buildable vacant or underused properties that could be transferred to CLTs to develop. We urge the City and State to support this type of housing model by providing more resources to assist in the development of vacant City-owned land or in the acquisition of qualified buildings.

**Develop an Upwardly Mobile Workforce**

**Require Targeted Communications of Training and Certification Opportunities to Environmental Justice Communities and Create Additional Programs like the Green Jobs-Green New York Program**

- **Relevant Agencies:** NYS Legislature

In order to meet the demands of a transitioning economy, it is crucial that as many people as possible can get the training and skills necessary to perform well in these new jobs. Expanding the resources available for training and certification in the green economy can be an effective way to build out the capacity of our workforce. Doing so will benefit workers, employers, and the economy at large by better equipping the workforce to adapt to sectoral shifts in the economy. New York State has already taken a step forward with the Green Jobs-Green New York Act of 2009 (GJ-GNY) which has funded energy audits, financing for retrofits, and job training. New York City has also taken steps through its budding Green Jobs Corp, though available information on the program is limited.

It is important, however, to target communities that have been historically harmed by environmental injustices as a way to promote a just transition. An analysis from Brookings Institute suggests that, to date, green jobs have gone more consistently to men and white people versus women and non-white people. This shows that opportunities are either not being communicated

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39. RFPs, RFQs, RFEIs. (n.d.). Retrieved from https://www1.nyc.gov/site/hpd/services-and-information/rfps-rfqs-rfeis.page


well or not accessible to a broader set of people. While programs like GJ-GNY have put meaningful dollars towards transitioning buildings for energy efficiency, it can do a better job of scaling efforts down to the neighborhood level to better target its investments around workforce development. We propose that the New York State Assembly and Senate amend this law or create a new law that will require more funding for more local organizations to provide training and information on certification programs. Additionally, investing money in building capacity at community organizations to help lead these sorts of trainings could be an opportunity to make a bigger impact in Queens.

While GJ-GNY has spent $6.8 million on workforce development since 2009, they only have one active contract left in the City with Green City Force, a non-profit that connects low income New Yorkers to green jobs. They do however have other “outreach and marketing” contracts with community-based organizations, suggesting the capacity for a broader set of partners at the community level. Considering the progress New York State has made already via GJ-GNY along with the recent passing of the CLCPA which specifies that 35 percent of climate investment should go to “disadvantaged” communities, the City and State are well positioned to increase funding for this program or similar ones.

This program would target all of Queens, but particularly under-resourced communities where there is the desire to grow green workforce capacity. From RPA’s engagement, we heard frustrations about accessing green jobs. Creating meaningful pathways for Queens residents, regardless of immigration status, to gain knowledge and experience in the green economy will position the borough to be a hub of a growing, inclusive green workforce.

The State can implement this policy through investments coordinated with community groups that can more directly interface with people on the ground. Much of the infrastructure to do this already exists through the GJ-GNY program, so the implementation should not require too much operational reworking within NYSERDA, where the program is currently housed. It will require additional investment, however, which would focus on the workforce development side of the program.

**Establish a Green Jobs Fair Program at NYC Economic Development Corporation**

*Relevant Agencies: New York City Council, NYC Economic Development Corporation*

In addition to policies that grow the skills base of Queens residents to obtain green jobs, RPA’s engagement showed that there needs to be a more concerted effort from local government and private actors to communicate opportunities to communities in Queens. Currently there are few pathways, mostly run by private entities, for people who have not been involved in the sector to get information about employment opportunities. As City and State governments begin working closely with more private entities in the green economy, connecting New Yorkers to green job opportunities can be a way of streamlining operations.

We propose creating legislation that requires NYC Economic Development Corporation working in partnership with Small Business Services and the Mayor’s Office of Workforce Development to invest in hosting borough-based green jobs fairs to better connect government and its partners in the green economy space with New Yorkers who can do the job. Ideally, this would highlight opportunities for people with varying levels of education and work experience. While programs like Mayor De Blasio’s proposed Green Job Corps and Career Pathways begin to connect New Yorkers to Green Jobs and develop a clear pathway for upward mobility through job training, the City can improve how they inform under-resourced communities. Further, a green jobs fair program could engage private sector actors in the green economy space to lead on the City’s broader workforce development goals outlined in the Green Job Corps and Career Pathways work.

Currently, green job fairs have only been hosted by private entities primarily targeting people with professional degrees or higher levels of training. The most visible event in New York is the All Ivy Environmental and Sustainable Development Annual Career Fair which connects Ivy League students to employers in environmental industries. Others like the Urban Green Emerging Professionals Career Fair emphasizes highly skilled industries like architecture and engineering.

It is unclear how people with lower education or experience levels have been able to access jobs thus far. This policy is targeting people across New York City who want to learn about what working a green job could mean for them. Especially considering the feedback we received, this program should take a targeted approach to raise awareness for opportunities for all residents, regardless of immigration status. This program will offer Queens residents new connections to growing job opportunities by better communicating and connecting people looking for work to employers looking to grow.

**Expand NYC SBS’s Worker Cooperative Development Initiative and Include Worker-Owned Businesses as Priority Vendors for the City**

*Relevant Agencies: New York City Council*

Another area of opportunity for Queens residents to make an impact in the green economy involves entrepreneurship. Currently, large scale public and private actors are driving the rhetoric around the green economy. While this is an important piece of scaling up renewable energy and green technology, more attention needs to be paid to community-level actors. In House

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47 About Us. (2019, May 2). Retrieved from https://www.urbangreencouncil.org/aboutus
48 Offshore Wind. (n.d.). Retrieved from https://www.nyserda.ny.gov/All-Programs/Programs/Offshore-Wind/Offshore-Wind-Solicitations
Resolution 109 on recognizing the duty of the federal government to create a Green New Deal, Representative Ocasio-Cortez called out worker cooperatives as a key constituent in the development of a just transition.52 A worker-cooperative is a business owned and operated by workers who then have a greater stake in decision making and tend to earn more than similar positions at non-worker owned companies. While this term represents a broad set of possible enterprises, the governance model of cooperative ownership ensures that workers have more power to shape organizational policy and goals, such as ensuring that company operations adhere to strict environmental goals, and can develop a stronger sense of place within a community especially if worker-owners live in the area.

Based on conversations with stakeholders, we propose two policy improvements to expand the worker cooperative ecosystem in New York and Queens: formalize the NYC Small Business Services’ Worker Cooperative Business Development Initiative (WCBDI) by establishing permanent, non-discretionary funding for the program, and include worker-owned enterprises as priority vendors for the City. For the past five years, WCBDI has funded 13 local nonprofits to provide business education services and technical assistance to people wanting to create or expand their cooperative business. Beginning with a budget of $1.2 million in 2015 and expanding to $3.05 million in 2018, WCBDI helped establish 132 cooperatives around the city and assisted many others. We recommend that the City Council expand funding for this program as it is formalized as well. An important next step in expanding resources available for worker-owned enterprises is to establish meaningful contracting opportunities with the City by including them as a priority contractor along with Minority- and Women-Owned Enterprises. By helping to establish independent businesses that better represent communities, investment in local green worker cooperatives can help them become lasting local players without the need for long-term, sustained investment.

Educate the Next Generation

Education has the power to change the world. At workshops with MNRNY’s Youth Power Project, participants voiced concerns that climate change and its effects are rarely, if ever, talked about or formally taught in classrooms. There is a desire to learn more about climate change in school. By including the science behind climate change in mandatory curriculum standards, students can understand how their actions and habits have an effect on our earth.

Include the Study of Climate Change in Science Curricula for NYC Public Schools

Relevant Agencies: New York City Council, NYC Department of Education

Students are not the only stakeholders who recognize the importance of teaching climate change. In 2015, New York City Council called for climate change education for all K-12 students in NYC.53 The resolution states that, “It is important for the science of climate change to be taught, both in formal and informal educational environments, in order for future citizens to be able to make scientifically informed decisions about the consequences of climate change.” City Council should require and put more resources towards providing all New York City students with a curriculum that teaches climate change science to a further degree.

Develop and Fund Additional Science-Based Educational Opportunities

Relevant Agencies: New York City Council

The NYC Department of Education should expand partnerships with non-profit organizations like GrowNYC, Green Schools Alliance, and Open Space Institute. As Teachers College at Columbia found though, most of these partnerships are in more affluent neighborhoods. Because more than half of NYC public schools lack these resources, the DOE should create a network for these non-profit organizations and provide incentives to partner with schools in low-income communities of color. The network could require organizations to meet certain educational standards and work with DOE staff or teachers to ensure programming compliments their existing work.

A possible way to provide better environmental education to NYC’s students is by utilizing experiential learning. NY Sun Works, a non-profit organization that builds innovative science labs in urban schools, has done this by constructing “hydroponic classrooms” in various New York schools. To date, NY Sun Works has built more than 100 labs and over 300 teachers have been trained to facilitate corresponding lessons. In 2017, Councilman Constantinides allocated funding to build new hydroponic labs in Queens in partnership with NY Sun Works. This should continue to be a concerted effort in Queens and the broader NY-metro area so that schools in Environmental communities can participate in comprehensive environmental learning.


The Climate Action Manual proposes a set of policies that can help Queens mitigate the immediate effects of climate change, adapt the built environment to better respond in the future, and thrive as a result of investments in frontline communities.

As scientists’ projections of the effects of climate change seem to predict worse and worse outcomes, not only is it imperative that we change the trajectory of current emissions levels, but also that we plan and adapt our neighborhoods to be able to respond to more frequent extreme weather events. Engaging with frontline communities to develop policies is the best way to ensure that the most relevant policy and planning solutions are mobilized.

Through Regional Plan Association and Make the Road Queens’ partnership, we combined local knowledge with policy and planning context to identify and advocate for policies that can help Queens adapt equitably. As a national policy discussion around addressing climate change evolves, Equitable Adaptation can be a local model for how planning entities can connect with frontline communities to make sure that investments in adaptation and mitigation are tailored to each context. Scaled up, this process can help ensure a just transition and a livable future for all.

Conclusion
Regional Plan Association is an independent, not-for-profit civic organization that develops and promotes ideas to improve the economic health, environmental resiliency and quality of life of the New York metropolitan area. We conduct research on transportation, land use, housing, good governance and the environment. We advise cities, communities and public agencies. And we advocate for change that will contribute to the prosperity of all residents of the region. Since the 1920s, RPA has produced four landmark plans for the region; the most recent was released in November 2017. For more information, please visit rpa.org or fourthplan.org.

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