



NYCHA's Sustainability Agenda Progress Report 2022

April 2022

Total Commitments	134
Completed	9
In Progress	90
Not Started	32
Canceled	3

	Commitment	Status	Progress (April 2022)
Goal 1	Reduce greenhouse gas emissions by 80 percent by 2050		
Strategy 1	Implement NYCHA's GHG reduction roadmap		
1.1	Achieve near-term carbon savings through EPCs		
1.1.1	Finance \$300M in EPC projects	In Progress	Submitted a \$62 million EPC project to U.S. Department of Housing and Urban Development (HUD) in April 2022. GHG Reduction - NYCHA's annual 2021 GHG emissions dropped 13% from 2005 levels.
1.2	Participate in programs that drive innovation		
1.2.1	Participate in EDC's RFP for the Proptech program	In Progress	In 2021, NYCHA worked with New York City Economic Development Corporation (EDC) to award JLL and UrbanSense a contract to vet and source new Proptech vendors for pilots at NYCHA buildings. NYCHA is now working with EDC to procure a program management vendor who will implement the selected technologies at NYCHA properties.
1.3	Ramp up energy usage intensity reductions as part of the Better Buildings Challenge		
1.3.1	Improve energy efficiency by 20% over 10 years	Not Started	Not started.
Strategy 2	Advance electrification and deep energy retrofits		
2.1	Complete RetrofitNY net-zero energy project		
2.1.1	Design and construct RetrofitNY project at Ravenswood	In Progress	In 2021, NYCHA completed the design phase of its RetrofitNY pilot. Cycle Architecture provided design for a net Zero-Energy retrofit at Ravenswood building 12. In March 2022, NYCHA released a procurement for construction services to make the design a reality. Bids are due at the end of June 2022, and an award is expected soon after. Construction is expected to start in Fall 2022.
2.2	Deliver a design-build program to electrify building heating systems		
2.2.1	Complete Heating Design-Build projects at 11 developments	In Progress	In the Sustainability Agenda, NYCHA committed to completing Design-Build projects at 8 developments; however, the number has increased to 11. Seven of the 11 developments Design-Build agreements have been executed: <ul style="list-style-type: none"> - Brownsville - Saratoga Village - Ocean Hill - Eastchester - Jackson - Tilden - Pink
2.2.2	Identify innovative future-looking heating and hot-water-making technologies	In Progress	NYCHA's Decarbonization Map was updated in April 2022. NYCHA plans on updating the map every 6 months as better applications are established.



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Strategy 2	Advance electrification and deep energy retrofits		
2.3	Complete the Packaged Window Heat Pump Challenge with NYPA and NYSERDA		
2.3.1	Complete Clean Heat for All Challenge	In Progress	<p>In the Sustainability Agenda, the implementation was originally titled: "Complete the Packaged Window Heat Pump Challenge with NYSERDA"; the change was made to include New York Power Authority (NYPA).</p> <p>In 2021, NYCHA worked with NYPA and NYSERDA to issue an RFP to manufacturers seeking a cold climate heat pump that can be installed through a window. In March 2022, six proposals were received. They will be reviewed by a scoring committee made up of the three agencies and a purchase order for 24,000 units will be awarded in the Summer 2022.</p>
2.3.2	Launch industrial design competition to improve in-unit & outdoor appearance of cold climate air-source heat pumps	Not Started	Not started.
2.4	Implement optimal heating and hot water upgrades		
2.4.1	Prioritize developments based on heating system replacement needs and geographic suitability	In Progress	NYCHA's Decarbonization Map was updated in April 2022. NYCHA plans on updating the map every 6 months as better applications are established.
2.5	Identify buildings that can be fully electrified quickly		
2.5.1	Determine buildings that are suitable for heat pump conversions with existing technology	Complete	NYCHA's Decarbonization Map released with the Sustainability Agenda in September 2021, and identifies locations suitable for heat pump conversions. The first update was released in April 2022, with further updates happening every 6 months.
2.5.2	Obtain funding to retrofit & electrify buildings	In Progress	NYCHA is investigating financing water and energy saving from CompMod funding.



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Strategy 2 Advance electrification and deep energy retrofits		
2.6 Leverage PACT Program to drive investment in electrification and deep energy retrofits		
2.6.1	In Progress	<p>PACT Round 8 and 9 required greenhouse gas reduction and electrification analyses.</p> <p>PACT Round 10, 11, and 12 RFEIs have required partners to include electrification and deep energy retrofit scenarios in their proposals, along with long-term electrification plans where electrification at the time of conversion is not feasible.</p> <p>As of PACT Round 10, RFEI requirements to prioritize as a baseline decoupling space heating from domestic hot water production, incorporating back-up power, and decentralizing have been strengthened.</p> <p>Deep energy retrofit scope prioritized includes envelope upgrades with continuous insulation and cladding at the exterior, or insulation at the interior to meet or exceed code, including installation of high-performance windows and integrated shading; roof replacement to meet or exceed code; comprehensive air-sealing; installation of efficient mechanical systems, whether fuel-fired or electric; installation of electric stoves; Enterprise Green Communities certification is required of all projects entering the PACT program since a base sustainability program requirement was implemented in 2017. LL97 compliance is required of all projects entering the PACT program.</p>
2.6.2	In Progress	<p>PACT Brooklyn Bundle (Project completion 2021): upgrades to hydronic condensing boilers.</p> <p>Williamsburg (PACT Round 8, Under Construction): upgrade to centralized hydronic condensing boilers with updated distribution</p> <p>Penn Wortman Houses (PACT Round 8, Under Construction): centralized VRF heat pumps for decoupled Domestic Hot Water</p> <p>Linden Houses (PACT Round 8, Under Construction): Brick repair with new EIFS cladding and window wall façade system at existing breezeways</p> <p>Boulevard Houses (PACT Round 8, Under Construction): centralized VRF heat pumps for decoupled Domestic Hot Water</p> <p>Harlem River Houses (PACT Round 8, Under Construction): centralized VRF heat pumps for heating and cooling and Harlem River II (PACT Round 8, Under Construction): unitized heat pumps (Ephoca HPAC) for heating and cooling, brick repair with new EIFS cladding</p> <p>Audubon, Bethune, and Marshall (PACT Round 8): centralized VRF heat pumps for heating and cooling, brick repair with new Fundermax duromer high-pressure laminates (HPL) cladding at Marshall Plaza</p>
2.6.3	In Progress	<p>PACT Round 10, 11, and 12 RFEIs have required partners to include and price electrification-ready infrastructure in their long-term electrification plans where electrification at the time of conversion is not feasible.</p>
2.6.4	Canceled	<p>NYCHA has required this in prior PACT projects but will not be requiring this going forward until a program that incentivizes changes in resident behavior to lower energy usage justifies the capital investment</p>



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Goal 1 Reduce greenhouse gas emissions by 80 percent by 2050			
Strategy 3 Expand distributed energy resources			
3.1 Expand the Community Shared Solar program			
3.1.1	Install 30MW of solar	In Progress	Construction has completed for NYCHA's first two solar leases, totaling 3 MW of capacity across 5 developments. Up to an additional 8 MW of solar leases are currently in development. At PACT sites, 2.216MW of solar power have been installed at 7 developments, and 1.483MW are under construction at another 2 developments.
3.1.2	Update estimates for NYCHA's rooftop solar potential	In Progress	NYCHA is currently in the process of updating its information on solar-ready roofs.
3.1.3	Release solar RFPs	In Progress	NYCHA is planning on releasing its third solar solicitation later in 2022.
3.1.4	Strengthen renewable energy commitments in PACT solicitations	In Progress	RFEI Language has been updated and REDD requires Electrification & Solar Analysis and Long-Term Emissions Reduction Plan for each PACT development prior the designation to analyze the feasibility of replacing fossil fuel-powered systems such as those used for space heating, water heating, cooking, laundry with electrified technologies and on-site generation.
3.2 Invest in battery storage			
3.2.1	Explore methods to use solar power and battery storage to help provide on-site resilience	Complete	In 2021, NYCHA engaged two Environmental Defense Fund (EDF) fellows to explore the feasibility of incorporating on-site battery storage into future projects. This study explored: - Financing options - Technologies - Permitting processes It modeled how batteries could either be used to provide backup power to critical loads such as elevators and health equipment or provide financial benefits in the form of demand response participation.
3.2.2	Assess potential projects for implementation	In Progress	NYCHA is working with NYPA and NREL on a study to assess the cost and feasibility of installing solar plus storage for critical loads (focusing on elevators and the community center) at two buildings at Borinquen Plaza. This study will result in an RFP for NYCHA's first solar plus storage project to be released this year.
Strategy 4 Expand electric vehicle program			
4.1 Expand electric vehicle adoption and charging infrastructure			
4.1.1	Purchase additional electric vans and trucks as outlined in NYCHA's Clean Fleet plan	In Progress	NYCHA's General Services department is going over its current budget to incorporate pure EVs that are available through OGS or State contracts that will meet replacement needs as necessary - such as SUVs, cargo vans etc. as they become available.
4.1.2	Double NYCHA's EV fleet	In Progress	NYCHA placed an order for 15 Chevy Bolts in 2021; this order will be received by the end of 2022.
4.1.3	Install its first EV chargers available for public use	In Progress	NYCHA has identified Cypress Hills and Baisley Park as pilot sites for the Authority's first public EV chargers and is working with ConEd to make the necessary electrical upgrades.



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Goal 2 Cultivate healthy and resilient communities based on design excellence		
Strategy 5 Update the NYCHA Design Guidelines and adopt sustainability standards		
5.1 Update the Design Guidelines		
5.1.1	In Progress	<p>NYCHA is working with Imaginit to update and unify CAD/BIM standards across the Design department. The CAD/BIM Standards initiative is aimed at improving the consistency of design documentation, automating standard tasks, aligning print protocols and documentation for internal and external consultants. It will also streamline our methods for sharing and setting requirements for design documentation with consultants.</p> <p>NYCHA is in the early stages of updating our Design Standards - currently meeting with internal stakeholders to gather information.</p>
5.2 Incorporate health and sustainability-related elements into Physical Needs Assessments		
5.2.1	In Progress	<p>Consider "green" costing opportunities for potential energy conservation and beneficial electrification measures at every development</p> <p>New PNA contract anticipated award is Spring 2022, which includes costing for energy savings and decarbonization opportunities.</p>
Strategy 6 Ensure healthy and hazard-free indoor environments		
6.1 Expand mold management program to address water infiltration through capital upgrades		
6.1.1	In Progress	<p>NYCHA, in collaboration with Independent Data Analyst (IDA), is working to adopt the Building Line Tool (developed by IDA) to identify the most impacted building lines, initiate the repair work (e.g.: Building Line Initiative by OMAR) and prioritize capital work based on the highest needs.</p>
6.1.2	In Progress	<p>NYCHA continues to work with IDA develop the process to flag capital needs on development level and inform Capital Projects Division (CPD). Once adopted, the capital flag solution will allow:</p> <ul style="list-style-type: none"> - NYCHA property management staff to identify and flag capital needs during the initial inspection. - Create a follow up review by the certified mold professional. - Provide an interim repair or enable temporary resident relocation while pending completion of work (when feasible). - Notify the Capital Project Division (CPD) of capital needs. - Utilize the Building Line Tool to prioritize capital work.



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Goal 2 Cultivate healthy and resilient communities based on design excellence		
Strategy 6 Ensure healthy and hazard-free indoor environments		
6.2 Upgrade mechanical ventilation systems for mold prevention		
6.2.1	Perform portfolio-wide ventilation upgrades	<p align="center">In Progress</p> <p>Roof Fan Replacement Program - NYCHA's Office of Mold Assessment and Remediation (OMAR) completed 93% of work. Of 8,441 roof fans assigned to OMAR, 5,672 roof fans were installed and 2,208 roof fans were retained.</p> <p>Clean Ventilation Initiative - OMAR completed the cleaning in 70% of the units with mechanical ventilation assigned to OMAR. Of 104,821 units assigned to OMAR, 17,708 (17%) were confirmed as not having mechanical ventilation and 61,044 units were cleaned. - To date, OMAR attempted to clean 100% of assigned to it units. - 25,758 units were attempted but were not able access. OMAR is returning to these units as part of the 3rd attempt to clean in-unit vents</p>
6.2.2	Publish a new standard procedure for monthly roof fan inspections	<p align="center">Complete</p> <p>On July 30, 2021 NYCHA has published the Roof Fan Inspections at NYCHA Residential Buildings Standard Procedure (SP 050:21:1)</p>
6.3 Replace roofs and parapets		
6.3.1	Replace leaking roofs and parapets at 135 developments	<p align="center">In Progress</p> <p>For roof and parapet replacement: - 35 Developments 203 Buildings in Design Phase - 8 Developments 28 Buildings in Procurement Phase - 5 Developments 73 Building in Bidding Phase</p>
6.4 Test new cost-saving technologies to reduce water infiltration and seal façades to prevent leaks		
6.4.1	Test breathable mineral coating technologies to coat façades that will prevent leaks and water infiltration	<p align="center">Not Started</p> <p>Not started.</p>



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Goal 2 Cultivate healthy and resilient communities based on design excellence		
Strategy 6 Ensure healthy and hazard-free indoor environments		
6.5 Implement a standard procedure for leaks		
6.5.1	Create a NYCHA-wide standard procedure for leaks to address the root causes of floods, leaks, and excessive moisture	<div style="background-color: #fcf8e3; padding: 5px; text-align: center;">In Progress</div> <p>In December 2021, NYCHA launched the Leak Standard Procedure pilot 2.0 at Brevoort, Low, Roosevelt I and II Houses. The pilot introduced:</p> <ul style="list-style-type: none"> - Enhanced intake process for leaks to help a resident better document the condition and severity when submitting a work order in Siebel (CCC) and MyNYCHA. - Enhanced leak inspection workflow to capture NYCHA compliance with 24 and 48 hour requirements, document the root cause(s) of the condition and select appropriate repair method, and link any repair needed for additional unit to the initial (parent) work order. - Updated procedure for performing wall breaks, pipe insulation and fire-stopping work developed in collaboration with Independent Mold Analyst (IMA).
6.6 Implement an informational campaign for residents on mold awareness		
6.6.1	Roll-out an information campaign to educate residents to identify, prevent, and report mold growth	<div style="background-color: #d9ead3; padding: 5px; text-align: center;">Complete</div> <p>NYCHA's Resident Engagement Department (RED) continued to proactively engage with residents during 2021 by undertaking the following activities:</p> <ul style="list-style-type: none"> - Conducted outreach during the months of October-December 2021 to various developments that were engaged in the Tenant Associations election process. - Engaged a total of 21 residents with the mold booklet and collected information for follow up with development staff. - Mold Busters website (https://on.nyc.gov/mold-busters) is being promoted through social networks weekly to ensure residents are continuously aware of NYCHA efforts to tackle mold and leaks. - All of the mold collateral is made available on the website for residents to review.
6.7 Perform lead outreach and remediation		
6.7.1	Develop a project execution plan that will take a phased systematic approach to remove lead	<div style="background-color: #fcf8e3; padding: 5px; text-align: center;">In Progress</div> <p>NYCHA is development of a plan to perform lead remediation.</p>
6.7.2	Remove lead-based paint in 50% of apartment units and common interior areas	<div style="background-color: #fcf8e3; padding: 5px; text-align: center;">In Progress</div> <p>See 6.7.1.</p>
6.8 Complete XRF testing and lead-based paint reporting		
6.8.1	Perform X-ray fluorescence (XRF) testing of 134,084 units built before 1978	<div style="background-color: #fcf8e3; padding: 5px; text-align: center;">In Progress</div> <p>On December 1, 2021, the New York City Department of Housing Preservation and Development (HPD) issued a regulation changing the definition of lead-based paint from paint with lead content measured at 1.0 mg/cm² to paint with lead content measured at 0.5 mg/cm² for purposes of New York City's Local Law 1. The XRF testing initiative was based on the old standard of 1.0 mg/cm².</p> <p>To date, LHCD has attempted 5,285 units and complete an inspection in 5,080 units out of the 32,225 child under 6 units.</p>



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Strategy 6 Ensure healthy and hazard-free indoor environments		
6.9 Perform gut rehabs to address mold and lead comprehensively		
6.9.1	Renovate entire developments to bring them to a state of good repair at sites where mold is pervasive	In Progress Resident Engagement has started for both Saint Nicholas and Todt Hill.
6.10 Eliminate elevator outages		
6.10.1	Replace 275 of the worst-performing elevators	In Progress NYCHA is in progress of replacing its elevators.
6.10.2	Repair or replace 1,000 elevators through the PACT program	In Progress Elevator modernization is a requirement of the PACT program and assumed for all projects that enter the PACT program. 209 elevators have been replaced/being replaced: 112 elevators have been installed, and 97 are under construction.
6.10.3	Study solar power, battery storage, and regeneration measures to ensure service continuity and reap energy savings	In Progress NYCHA is prioritizing backup power to elevators in its study for solar plus battery storage at Borinquen Plaza.
6.11 Adopt Integrated Pest Management		
6.11.1	Adopt Integrated Pest Management	Complete <p>Enhance IT Systems - In November 2021, NYCHA launched a Handheld Enhancements webinar for staff. The webinar focused on improving efficiency of executed Extermination Work Orders in Maximo and obtain compliance with federal mandates.</p> <p>Provide Guidance to all staff - Quarterly, the Pest Control department hosts an Introduction to Integrated Pest Management to newly hired staff across the Authority in an effort to bring awareness to the Authority's approach to Pest Management.</p> <p>Quick reference guides - The department has launched a Toolkit in the NYCHA Portal that is accessible to all staff. The portal provides reference guides on the following:</p> <ul style="list-style-type: none"> - Integrated Pest Management Overview - Door Sweep Installation - Burrow Collapsing - Moveouts - Frequently asked Questions - Preventing Pests at Home - Pesticide labels - HEPA Vacuum Guidance - IPM supplies <p>IT fixes and training are continuous, but the commitment is complete.</p>



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Strategy 6 Ensure healthy and hazard-free indoor environments			
6.12 Reduce exposure to secondhand smoke			
6.12.1	Promote resident leaders and activate the Smoke-Free NYCHA Liaison team	In Progress	<p>Expanded Smoke-Free Liaison services to all 5 boroughs</p> <ul style="list-style-type: none"> - 83 on site events - Hosted 5 virtual resident leadership events with partners - Conducted proactive outreach to 194 households with a recorded smoke-free policy violation <p>Closed out installation of approx. 8,000 signs in support of Smoke-Free policy and goals</p> <p>Retrained 360 property management staff members in policy enforcement</p>
6.13 Ensure every NYCHA family with a newborn or infant has a safe home and is connected to available supportive resources			
6.13.1	Implement a program to identify and address potential hazards in apartments of expecting families or with a child under one	Complete	The Healthy Start @ NYCHA program was launched at a Baby Shower Resource Fair event held on March 5, 2022.
6.13.2	Evaluate the conditions of apartments for key environmental hazards	Not Started	Not started.
6.13.3	Provide educational information on best practices for maintaining a hazard-free environment, babyproofing tips and other additional resources	In Progress	Starting in January 2022, NYCHA residents who are expecting can voluntarily disclose a pregnancy via the Authority's Self-Service Portal. This information helps NYCHA create safer homes for children and keep families up to date with information and available resources.
6.14 Partner with health care and community based health organizations to improve asthma outcomes of NYCHA residents			
6.14.1	Expand targeted collaboration with health partners to ensure residents are optimally connected to education and services	In Progress	<p>NYCHA is advancing a series of community health worker partnerships under the NYCHA Health Works initiative umbrella.</p> <p>NYCHA Health Works helps create pathways for NYCHA residents into preventive health careers and brings partner-led health resources to targeted NYCHA developments.</p> <p>NYCHA will launch recruitment for a Health Care Partnership Manager in April 2022. The person in this role will be responsible for implementing this commitment.</p>



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Goal 2 Cultivate healthy and resilient communities based on design excellence		
Strategy 7 Expand the Green Infrastructure program		
7.1 Continue to expand green infrastructure investments in CSO areas		
7.1.1	In Progress	<p>Phase I</p> <ul style="list-style-type: none"> - All sites continue to receive routine bi-weekly maintenance. The bioretention area at Hope Gardens will be replanted in spring 2022. <p>Phase II</p> <ul style="list-style-type: none"> - 15 of 19 sites have reached substantial completion and are in the closeout phase. - 1 site is in active construction. Substantial completion is expected in Spring 2022. - 3 sites are in pre-construction and expected construction kickoff is in Spring 2022. <p>Phase III</p> <ul style="list-style-type: none"> - All 16 sites have reached 75% or 100% design - Design review meetings have been conducted at all but 3 sites - Bid packages for all sites are being developed and will be released by NYCHA
7.2 Address flooding beyond CSO areas		
7.2.1	In Progress	<p>South Jamaica Houses cloudburst</p> <ul style="list-style-type: none"> - 100% designs have been completed - Bid packager is being developed and will be released by NYCHA <p>Clinton House cloudburst</p> <ul style="list-style-type: none"> - PDM grant has been completed and submitted and NYCHA is in the process of receiving reimbursement from FEMA - Dewberry Engineering was hired by DEP to develop full project design - Dewberry Engineering and Grain Collective will work with NYCHA to conduct community engagement that informs final design
7.2.2	In Progress	NYCHA is working to ensure that USWR is incorporated into all green infrastructure projects - discussions have been underway with DEP.
7.2.3	Not Started	Not started.



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Goal 3 Empower residents through community activation and workforce development			
Strategy 8 Connect residents to workforce development and entrepreneurship opportunities			
8.1 Expand service-learning programs to connect youth to emerging jobs in sustainability			
8.1.1	Work with Green City Force (GCF) to expand youth workforce development opportunities	In Progress	<p>GCF is working with NYCHA Capital Projects, Energy Programs to on the potential to transition heat sensor work from Energy Service learning to workforce opportunities.</p> <p>In March 2022, GCF launched EmPower at NYCHA, developing a 10 site pilot with the goal of keeping a long-term partnership. Aiming to employ 12 GCF alumni for a 10 month period. Partnered with REES to place alumni in union apprenticeship with Local 1, had 2 referred and start, 1 successfully continuing beyond initial training.</p>
8.1.2	Place 80% of GCF participants employment opportunities within the green economy or advanced education opportunities, including either post-secondary degree programs, national certifications, or a combination of both	In Progress	<p>In the Sustainability Agenda, NYCHA and GCF committed to placing 90% GCF participants in clean energy roles. GCF is now committed to placing 80% of participants in employment opportunities in the green economy.</p> <p>Summer - Fall 2021 launched Cleanup Corps projects:</p> <ul style="list-style-type: none"> - Compost Power - increasing and improving composting capacity at EcoHubs, in addition to building and supporting community-led composting - Tree Inventory - completed another round of tree inventory and presented findings to key stakeholders. Leveraging funds from The Nature Conservancy to start another round of inventory in April 2022. Alumni received citizen pruner certification. Long-term, aiming to leverage ongoing support of The Nature Conservancy to support a fall tree inventory project focused on expanding NYCHA's tree canopy - providing training on tree planting and care, in addition to tree plantings and increased resident education
8.1.3	Double GCF's program offerings including AmeriCorps recruitment, employment opportunities, and national program placement	In Progress	See 8.1.2.
8.2 Expand resident hiring through Community Shared Solar workforce development program			
8.2.1	Increase resident hiring on solar projects as projects are added to pipeline	In Progress	No update.



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Strategy 8 Connect residents to workforce development and entrepreneurship opportunities			
8.3 Support resident-led businesses and entrepreneurship			
8.3.1	Connect resident-owned firms with business opportunities	In Progress	In partnership with the Fund for Public Housing, NYCHA engaged a consultant to create a framework for a future NYCHA Business School. NYCHA REES also resumed resident business development orientations to learn about resident business interests and to connect them to the appropriate services and continued to connect Business Pathways alumni with market access opportunities in the food and childcare industries.
8.3.2	Connect residents to business development programming to provide support with business planning and education to grow ideas	In Progress	NYCHA launched Construction Business Pathways, an accelerated business development program for NYCHA residents who seek to start or grow their construction business. The first cohort launched in October 2021 with 29 enrollees.
8.3.3	Revise NYCHA procurement language to improve access to opportunities for resident-owned businesses	In Progress	As per the Procurement Policy Manual (PPM) and in compliance with 24 CFR 963.10(d), NYCHA is permitted to solicit contracts with public housing resident-owned businesses, providing the business has not received one or more contracts with a total combined dollar value of \$1,000,000 as a result of the alternative procurement process to preference resident-owned businesses. NYCHA will look to create pre-qualified list of resident-owned businesses by category to solicit through this process.
8.3.4	Support resident entrepreneurship through cultivating and supporting GCF alumni entrepreneurs	In Progress	Continue to leverage the Social Enterprise to build capacity for the alumni-led entrepreneurship. Current example being Compost Power - accomplished in 2022 and ongoing. Collaborated with the Inner City Green Team at Wagner Houses to support increasing resident recycling - accomplished in 2022 and ongoing.
8.4 Establish a NYCHA Clean Energy Academy			
8.4.1	Work with partners to secure funding for the Clean Energy Academy	In Progress	NYCHA is working on finalizing a funding agreement for the Clean Energy Academy. NYCHA and FPH are developing a final scope of work and confirming additional funding support.
8.4.2	Implement the NYCHA Clean Energy Academy and train 250 residents in green jobs	Not Started	Not started.



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Strategy 9 Mobilize community activation through resident-led sustainability programming		
9.1 Implementation of a resident-led recycling program at Wagner Houses		
9.1.1	In Progress	NYCHA is in contract negotiation with ICGT and discussing drop off location options.
9.2 Implementation of a sustainability grant program for residents		
9.2.1	In Progress	In partnership with FPH, NYCHA is identifying funding to support resident sustainability projects.
9.2.2	In Progress	NYCHA is surveying and re-engaging current social infrastructure for climate action across NYCHA; reached out to Climate Action Network, Resident Green Committees, and Youth Leadership Council groups.
9.3 Implementation of a Campaign for a Clean NYCHA		
9.3.1	Complete	Evaluation completed December 2021 .
9.3.2	In Progress	Results are being drafted and post-evaluation resident survey being conducted. Results expected spring 2022, suggestions on edits to follow.
9.3.3	Not Started	Not started.
9.4 Improve transparency and improve resident engagement through public procurement		
9.4.1	Not Started	Not started.
9.4.2	Not Started	Not started.
9.4.3	Not Started	Not started.
9.4.4	In Progress	<p>NYCHA vendors are contractually obligated to adhere to Section 3 requirements. For certain types of vendors that are exempt from Federal Section 3 requirements and that do not project labor hours for Section 3 workers or Targeted Section 3 workers, NYCHA requires that they complete an Other Economic Opportunity (OEO) Plan.</p> <p>In addition, NYCHA will be implementing the Request for Qualifications procurement method to pre-qualify vendors for inclusion on a Pre-Qualified List (PQL) for various categories. This will provide an opportunity for vendors to submit qualifications earlier in the procurement process and if pre-qualified, receive both small and large contracting opportunities via solicitations released exclusively to PQL vendors. NYCHA intends to establish PQLs at the borough or neighborhood level and preference will be given to Section 3 and Minority-and Woman-owned Business Enterprises on small procurements solicited via the PQL.</p>



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Canceled	3

Commitment	Status	Progress (April 2022)
Goal 3 Empower residents through community activation and workforce development		
Strategy 10 Expand NYCHA farms, gardens, and urban agriculture programs		
10.1 Expand NYCHA farms and gardens		
10.1.1	Expand the number of farm sites to 15 ensuring at least two farms in each borough	In Progress
		<p>NYCHA currently has 7 operational farms. The 7 Farms at NYCHA sites have provided food security support throughout the pandemic. In 2021, farm achievements included the distribution of over 22,000 pounds of free, fresh produce grown by and for residents at farm sites, and collection of nearly 3,600 pounds of food scraps for composting.</p> <p>NYCHA is in discussions to create its first Farms at NYCHA in Queens in 2022.</p> <p>In April 2022, the Astoria Houses Hydroponic Lab/Classroom opened. This classroom will be in Astoria Houses' Community Center and was created by the Environmental Justice Program at NYPA, who worked with partners to create a new food production resource.</p> <p>NYCHA is currently working with public and private partners to secure funding and other infrastructure to support the planned Farms at NYCHA expansion.</p>
10.1.2	Expand GCF's programming at farm sites they operate to focus on "Eco-Hubs"	In Progress
		Continue to strengthen EcoHubs powered by GCF with closed looped operating systems and increasing community engagement. Developing a plan to bring WIFI and solar incrementally to each site along with expansion.
10.2 Construct urban agriculture education center		
10.2.1	Construct a new urban agriculture education center at Marlboro Houses	In Progress
		<p>Marlboro Greenhouse was funded by City Hall</p> <ul style="list-style-type: none"> - NYCHA has agreed upon terms with non profit operator, The Campaign Against Hunger (TCAH) - DDC and NYCHA are currently working out an interagency MOU. - DDC will be selecting the Design Builder during 2022 - Planned space to have Aquaponics and Hydroponics systems for growing vegetation and protein for local consumption and well as soil based green space for plant growth



**NYCHA's Sustainability Agenda
Progress Report 2022**

April 2022

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Commitment		Status	Progress (April 2022)
Goal 3 Empower residents through community activation and workforce development			
Strategy 11 Develop resident stewardship programs for NYCHA's resilient landscapes			
11.1 Develop Resilient Landscapes Stewardship program			
11.1.1	Develop a Resilient Landscapes Stewardship program	In Progress	In collaboration with the Resident Association, Bronx River Senior Center, and Youth Ministries for Social Justice, a butterfly garden is planned at Bronx River Houses. There will be a butterfly hatching and release event coordinated with the Bronx River Alliance.
11.1.2	Scale program to all sites with vegetative green infrastructure	Not Started	Not started.
11.2 Adapt groundskeeping procedures to meet new staffing models			
11.2.1	Improve soil health and resiliency of existing lawns by raising awareness among residents and staff	Not Started	Not started.
11.2.2	Adapt groundskeeping procedures to meet new staffing models	In Progress	NYCHA and DSNY are collaborating to create a Caretakers Recycling Guidebook to centralize recycling processes and procedures and to inform staff of the importance of recycling. The document is currently being drafted with anticipated release in 2022.



**NYCHA's Sustainability Agenda
Progress Report 2022**

April 2022

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Commitment		Status	Progress (April 2022)
Goal 4 Ensure efficient building operations and resource management			
Strategy 12 Ensure proper maintenance and longevity of investments			
12.1 Enroll staff in training programs			
12.1.1	Continue to encourage and enroll staff in DCAS training programs	Not Started	Not started.
12.1.2	Enroll staff in NYSERDA's Energy Efficiency and Clean Technology Training program	Not Started	Not started.
12.1.1	Track training outcomes, as part of NYCHA's reporting to HUD	Not Started	Not started.
12.1.2	Train staff on using new waste management equipment	In Progress	NYCHA's Waste Management Department is in the process of reviewing janitorial and supervisors Standard Procedures - recycling procedures and new equipment procedures (cardboard balers) will be incorporated.
12.2 Continue sustainability-focused recognition programs for staff			
12.2.1	Create an annual sustainability-focused recognition program for staff	In Progress	<p>NYCHA's Sustainability team and Waste Management Department held a cardboard baler competition for the participating sites in Fall 2021. NYCHA held two pizza parties for the Sedgwick and Dyckman Houses for generating the most cardboard bales.</p> <p>NYCHA is working on future recognition programs - such as competitions, staff of the month, and shout-outs in the Waste Management quarterly newsletter.</p>
Strategy 13 Re-envision waste management and recycling at NYCHA			
13.1 Increase capacity for effective waste management			
13.1.1	Increase the capacity for effective waste handling and to improve recycling rates	In Progress	NYCHA is working on improving staffing procedures for managing multiple waste streams.
13.1.2	Purchase and manage rearloading compactor trucks	In Progress	NYCHA's Waste Management department (WMD) bought 2 trucks for Brooklyn collection. The WMD team is in discussion with Fleet to weigh leasing compared to purchasing of trucks.
13.1.3	Negotiate enhanced bulk waste removal procedures	In Progress	New bulk contracts to be expanded to 6 day, to include Saturday pickup, currently with borough contract admins.



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Progress Report 2022**

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Goal 3 Empower residents through community activation and workforce development			
Strategy 13 Re-envision waste management and recycling at NYCHA			
13.2 Develop tools for accountability to assure cleanliness of grounds and buildings			
13.2.1	Implement a waste management and recycling scorecard	In Progress	
Data collection and analysis is ongoing from the recycling programs and initiatives currently in place at NYCHA, including the Recycle First initiative, cardboard baler and cardboard compactor usage, and the mattress recycling program. Further analyzing with DSNY data will provide a preliminary NYCHA recycling diversion rate.			
13.2.2	Update existing recycling infrastructure inspections to reflect industry best practices and lessons learned	Not Started	
Not started.			
13.2.3	Integrate building management systems (BMS) to acquire real-time data on waste management equipment usage	In Progress	
Pilot connection to 2 interior compactors at Farragut Houses currently out to bid, proposals due April 2022. Pilot connection of 1 hydraulic compactor at Vladeck Houses under way. Estimated connection by Fall 2022.			
13.2.4	Implement waste management planning tools based on data	In Progress	
A management tool utilizing a scoring matrix is in the process of being created to prioritize site selections for infrastructure upgrades and better allocate waste management assets. Various sources of data include the HUD Individualized Waste Management Action Plans, NYCHA's Performance Tracking & Analytics Department, DSNY Collections, waste & recycling programs and initiatives, and the waste management scorecard.			
13.3 Re-envision waste infrastructure			
13.3.1	Install new convenient outdoor recycling centers at all developments	In Progress	
Request for Information for a mechanical collection pilot released in March 2022; responses received in April 2022.			
13.3.2	Overhaul the centralized waste yards at 107 developments	In Progress	
NYCHA has selected a vendor for its Design-Build Waste Yard Redesign project at 7 developments. Additionally, 16 sites are in design procurement with anticipated award in 2022.			



NYCHA's Sustainability Agenda Progress Report 2022

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Goal 3 Empower residents through community activation and workforce development		
Strategy 13 Re-envision waste management and recycling at NYCHA		
13.4 Invest in innovative approaches to waste management		
13.4.1	Retrofit Polo Grounds Towers and Rangel Houses with a pneumatic waste collection system	In Progress
NYCHA has selected a vendor and anticipated award is Spring 2022.		
13.4.2	Assess the cost and scalability of retrofitting campuses with pneumatic collection	In Progress
Rough order of magnitude (ROM) estimates for best-value clusters across portfolio completed.		
13.5 Establish a Zero Waste NYCHA program		
13.5.1	Implement a Zero Waste NYCHA (ZW) program to create meaningful improvements in recycling for all waste streams	In Progress
NYCHA launched Recycle First in Fall 2021 at all 10 Staten Island developments, a stepping stone towards a Zero Waste program, with the goal to shift staff mentality and update procedures on managing recyclables.		
13.5.2	Expand ZW Program to 30 developments	In Progress
The program will expand to Queens in 2022.		
13.5.3	Deploy ZW Program to entire portfolio	Not Started
Not started.		



**NYCHA's Sustainability Agenda
Progress Report 2022**

April 2022

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Goal 4 Ensure efficient building operations and resource management			
Strategy 14 Design for circularity and recycle construction and demolition waste in Capital Projects			
14.1 Implement tree reuse program			
14.1.1	Explore potential ways to identify opportunities to reuse tree wood	In Progress	NYCHA has reached out to local mills to assess interest in re-using NYCHA trees. City Bench, a maker of wooden benches made from reclaimed urban trees, milled several oak trees that had to be removed at NYCHA's Red Hook campus. To facilitate larger scale reuse, NYCHA is coordinating with members of the Forest For All coalition working on developing a citywide urban tree reclamation program.
14.1.2	Investigate opportunities to sell or donate trees and reuse them as part of garden beds and mulch	In Progress	See 14.1.1.
14.1.3	Incorporate tree reuse into pre-construction planning in parallel with C&D waste management plans	Not Started	Not started.
14.2 Construction and demolition waste requirements for Capital Projects			
14.2.1	Revise NYCHA Division I specifications to require that projects meet a C&D waste diversion rate of at least 75% by weight	Not Started	Not started.
14.2.2	Investigate C&D waste tracking through project management tools and incentivizing certified recycling facility usage	Not Started	Not started.
14.3 Design for circularity			
14.3.1	Raise awareness of circular economy principles among staff	Not Started	Not started.
14.3.2	Identify opportunities to minimize waste during projects and throughout the life of the building	Not Started	Not started.
14.3.3	Identify for circularity opportunities in operational work	Not Started	Not started.



**NYCHA's Sustainability Agenda
Progress Report 2022**

April 2022

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Goal 4 Ensure efficient building operations and resource management			
Strategy 15 Improve water management in buildings			
15.1 Install water-saving fixtures			
15.1.1	Install high efficiency fixtures at 63,743 units	In Progress	Water saving fixtures will be installed as part of the next batch of EPC work. See 1.1.1 for more information.
15.1.2	Retrofit 60 spray showers with push buttons	Not Started	Not started.
15.2 Stop and prevent building plumbing systems leakage			
15.2.1	Advance efforts to stop and prevent building plumbing leaks to improve water management and reduce instances of mold	In Progress	NYCHA is working to pilot the installation of cure in place piping to cost-effectively seal roof drain pipes and stop leaks
15.2.2	Submeter make-up water usage	Not Started	Not started.
15.2.3	Connect to BMS to monitor both boiler make-up water, condensate tanks, and pumps to identify leaks	In Progress	Current BMS sites are monitoring make up water.
15.3 Conserve water through reclamation and reuse			
15.3.1	Implement scalable water reclamation and reuse projects	In Progress	NYCHA is studying the potential to reuse groundwater at sites where groundwater is expressing itself in basements, and will begin further studies on graywater reuse in 2023.
15.3.2	Identify a delivery method and complete water reuse systems installations	Not Started	Not started.
15.3.3	Replicate the water reuse application in substantial renovations	Not Started	Not started.
15.4 Complete a water monitoring study			
15.4.1	Complete a water monitoring study to understand water consumption patterns, help identify leaks, reduce utility costs, decrease consumption, and streamline operations	In Progress	NYCHA is conducting a water monitoring study at Vladeck building 24.
15.4.2	Develop a measurement and verification report	Not Started	Not started.
15.5 Identify and remedy laundry facility "deserts" across the portfolio			
15.5.1	Identify "laundry deserts" or locations lacking convenient access to a laundromat	In Progress	NYCHA has started research.
15.5.2	Plan investments in new in-building laundry facilities or upgrades to buildings to accommodate in-unit appliances	Not Started	Not started.



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Progress Report 2022**

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Goal 5 Leverage all funding and financing toward healthier and decarbonized buildings		
Strategy 16 Retain ownership of energy and water savings		
16.1 Access full rate reduction benefit from all utilities		
16.1.1	In Progress	Work with HUD to retain all rate reduction savings NYCHA began discussions with HUD. Awaiting official response from HUD OGC.
16.2 Establish water usage baselines		
16.2.1	In Progress	Use newly installed meters to establish water baselines to inform financing decisions for projects that will reduce water leakage An EPC has been submitted to HUD with water baseline methodology and includes an ECM for identifying and repairing water leaks.
16.3 Change policies around energy and water consumption and operational funding		
16.3.1	In Progress	Work with HUD to retain the full financial benefit of utility and waste reduction projects NYCHA began discussions with HUD. Awaiting official response from HUD OGC.
16.4 Use savings from reduced operations and maintenance costs to fund sustainability projects		
16.4.1	In Progress	Fund labor-saving and innovative technologies from reduced operations and maintenance costs NYCHA began discussions with HUD. Awaiting official response from HUD OGC.
16.5 Remove restrictions on EPC incentives		
16.5.1	In Progress	Work with HUD to remove restrictions on EPC incentives NYCHA began discussions with HUD. Awaiting official response from HUD OGC.
16.5.2	Not Started	Establish a new financing instrument that integrates EPC work with PACT projects/Trust Not started.
16.6 Extend the Maximum Allowable Term for the EPC Program from 20 to 25 Years		
16.6.1	In Progress	Extend the Maximum Allowable Term for the EPC Program to 25 Years NYCHA began discussions with HUD. Awaiting official response from HUD OGC.
Strategy 17 Bring in more funding through the Preservation Trust		
17.1 Generate funding through the establishment of the Public Trust		
17.1.1	Not Started	Procure and expedite large capital works Not started.
17.1.2	Not Started	Gain access to federal Tenant Protection Vouchers (TPVs) Not started.



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Goal 5 Leverage all funding and financing toward healthier and decarbonized buildings		
Strategy 18 Bring in more funding through PACT		
18.1 Attract financing through PACT		
18.1.1	In Progress	NYCHA is currently in PACT Round 12.
Strategy 19 Earn revenue through energy and sustainability incentives and demand management programs		
19.1 Participate in demand response programs		
19.1.1	Complete	See 3.2.1.
19.1.2	In Progress	NYCHA received approximately \$ 1.7 million in incentive and demand management programs from utilities.
Strategy 20 Establish Green Revolving Fund		
20.1 Establish the Green Revolving Fund		
20.1.1	Complete	NYCHA has established the green revolving Fund with incentives and demand management programs from utilities.
20.1.2	In Progress	See 20.1.1.
Strategy 21 Advocate for equitable investment in NYCHA		
21.1 Shape the development of equitable investment		
21.1.1	In Progress	NYCHA is a part of the LL97 Advisory Board and the Multi-Family Working Group advocating for streamlined implementation and equitable investment in NYCHA properties.
21.1.2	Canceled	After further review of available options, NYCHA will not pursue the carbon trading market.
21.1.1	Canceled	After further review of available options, NYCHA will not pursue the carbon trading market.