



City of Kingston 2020 Sustainability Report



Staff

Since 2005, the City of Kingston’s sustainability staff have helped the City become a leader in environmental awareness and stewardship. The City's Environmental Program's mission is to:

- develop and facilitate unique programs designed to educate the public about the local environment
- focus on creating a more positive energy to solve environmental issues while saving tax payer dollars and leveraging public and private investments
- coordinate sustainability projects among and between municipal departments
- strive to make Kingston a more sustainable and healthy community through programs, capital projects, education, stewardship and environmental services

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Environmental Specialist (position filled by Sean Koester until 10/30/2020 , being refilled 1/1/2021)

Education and Outreach

The City of Kingston’s Parks and Recreation Department offers residents and visitors a variety of Environmental Education opportunities, including experiences and programming through the [Forsyth Nature Center](#), one of the only municipal nature centers in New York State. Kingston’s **Environmental Education program** offers both indoor and outdoor experiences for school and youth groups, as well as adults, plus summer camps and a summer Junior Naturalist Program. To learn more visit the [Environmental Education/Nature Center](#) page.

Additionally, sustainability staff, in collaboration with community partners, developed, planned, organized, and executed several major public outreach events. Each of these events drew community members and regional visitors to the Kingston Parks System.

2020 Environmental Education Participation

Number of School/Afterschool Students: (Most cancelled for COVID- previously 2712)

Number of Junior Naturalist Camp Program participants: (Cancelled for COVID-previously 100)

Number of Public Program participants: (Most programs cancelled due to COvid- previously 1325)

Kingston Kayak Festival attendees: (Cancelled for COVID-previously 175)

Forsyth Nature Center Fall Festival attendees: n/a (Cancelled for COVID- previously 3500)

Kingston Earth Fair and Expo attendees: (Cancelled for COVID- previously 500)

Amount of trash collected at Kingston Clean Sweep: (Cancelled for COVID- previously 1.2 tons trash, 1.95 tons yard waste)

Energy and Renewables

A [Climate Smart Community](#) – The New York State Climate Smart Communities (CSC) Program is a network of New York [communities](#) engaged in reducing greenhouse gas emissions and improving climate resilience. Municipalities become involved with the CSC Program by adopting the [CSC Pledge](#), which includes 10 elements that lead to a reduction of greenhouse gas emissions, and provide guidance on climate change adaptation. Municipalities can opt to participate in the [Climate Smart Certification Program](#), which has four certification levels: certified, bronze, silver and gold. Communities can access technical support and funding opportunities to reach their certification goals.

The City of Kingston achieved Bronze Climate Smart Community certification in 2014, and **Silver Climate Smart Community certification in 2018 and recertified in 2020**, the highest level achieved by any municipality in New York State. Kingston has completed a variety of adaptation and mitigation strategies to achieve this level, including appointing a commission, conducting a [Greenhouse Gas Inventory](#) and creating a [Climate Action Plan](#). The Climate Action Plan outlines strategies and actions for the city to take to reduce greenhouse gas emissions and set a goal for energy use reduction of 20% by 2020. For more information, visit the Climate Smart Kingston webpage, and view Kingston's [Climate Smart Communities Profile](#). **In 2020, the City updated our Greenhouse Gas Emissions Inventory, tracking our progress, and understanding the road ahead toward achieving our goals.**

[2030 Climate Action Plan](#)- In 2020, the City began the process of updating the 2020 Climate Action Plan. With support from the Novo Foundation, and in collaboration with Cadmus Group and Citizens for Local Power, a new Climate Action Plan, with goals for 2030, will be complete in the Fall of 2020. This process will be robust and include widespread community engagement to guide the next 10 years of sustainable progress for the city.

[Commitment](#)- To take the City's commitment even further, in 2017, the City adopted Resolution #179 of 2017: Resolution of the Common Council of the City of Kingston, NY committing to 100% Clean Energy by 2050 and Continuing Support of the Principles of the Paris Agreement. Further, in April 2018, the City joined the 100% Committed campaign in partnership with The Climate Reality Project. Through this commitment, the City pledged to help our community shift to 100% renewable electricity.

[Property Assessed Clean Energy Financing](#)- Since 2016, the City of Kingston has been a member municipality of the Energize NY Finance Program, New York State's Property Assessed Clean Energy (PACE) finance program. PACE financing is made available to eligible property owners in order to provide attractive financing for property improvements that lower energy consumption. In 2018, the City's renewed its commitment to this critical program by adopting Local Law #4 of 2018, a local law enabling Kingston to maintain our participation in the program. As a function of this program, commercial property owners have the financing available for installations of renewable energy systems and energy improvement measures, with funds repaid through the property taxes.



[Greening Our Street Lights](#)- Kingston's street lights consume **1.9 million kWh of energy annually**. In April 2018 the City authorized the New York Power Authority (NYPA) to proceed with the City of Kingston LED Street Lighting Project. **In 2020, the project construction resulted in upgrade to all of our non-LED street lights to LEDs with a proposed annual savings of over \$100,000 per year.** This project, led by Wendel Energy Services as the implementation contractor for NYPA, was completed, under budget, in December 2020.

A project website was established at www.kingston-ny.gov/streetlights, where the public could learn about the process and follow along with construction as it progressed. Further, as a result of this project, the Bill of Sale for the City's lighting inventory will be trued up with Central Hudson to accurately reflect ownership and billing moving forward, **saving the city even more. Operations and Management moving forward will also be more efficient** as a detailed GIS data set was created to have direct access to each lighting data point and its installation and history.

Greening Our Municipal Building Lights- In 2019 and 2020, the City of Kingston took a big step to walk the walk by **retrofitting our municipal building lights with energy efficient LED lighting**. This work, was done under the Central Hudson Small Business Direct Install Lighting Program working with Lime Energy Services Company, includes retrofitting lighting in the following municipal buildings:

- Andy Murphy Neighborhood Center
- Central Fire Station
- City Court
- DPW Administration Building
- DPW Garage
- DPW Wilbur Avenue Campus
- Everette Hodge Community Center
- Kingston Heritage Area Visitor Center
- Police Station
- Rondout Fire Station (Building Safety)
- Transfer Station
- Wiltwyck Fire Station (Frog Alley)
- City Hall
- Rondout Neighborhood Center
- Waste Water Treatment Plant Complex

These retrofits will result in an **estimated annual savings of more than \$50,500 and more than 420,000 kWh savings**. This is equal to the equivalent of the electricity use of 51 homes in one year.

Land Use

Green Infrastructure – The City of Kingston has been actively integrating Green Infrastructure techniques and practices into municipal infrastructure. In 2020, the City continued its commitment by installing a variety of **green infrastructure treatments**, including porous pavers, bioswales and street tree pits, as part of the Broadway Streetscape Project. The project, set for completion in 2021, will help to reduce the amount of storm water flowing into the combined sewer system. Sustainability staff were part of the design and aesthetics review team for this project. Additionally, staff worked with the project consultants to design interpretive signage for installation along Broadway, to inform the public about the new installations.

As the number of green infrastructure installations around the city has increased, it has become increasingly apparent that the City would benefit from the development of a comprehensive and cohesive **Green Infrastructure Management Plan**. In 2020, the Sustainability staff worked across city departments, with Engineering, DPW, Grants Management, Planning to develop a detailed city wide plan. This plan includes best practices, detailed descriptions and images of each green infrastructure technique, design guidelines, a management plan and schedule for each individual site, and a budget for each practice. This plan will be finalized in 2021.

Sustainability staff also annually assists the Engineering Department with the completion of the City of **Kingston Annual Storm Water Report**, measuring the City's adherence to the Municipal Storm Water Regulations (MS4) also documenting any illicit discharges into the storm water system.

In December 2018, the City of Kingston was awarded **\$1.2 million for Midtown Parking Lots Green Infrastructure Upgrades** (\$1,200,000) from the NYS Environmental Facilities Corporation Green Infrastructure Grant Program. This project really got into full swing in **2020 with planning and design of three major municipal parking lots**: Prince Street, Cornell Street and the Sea Deli Lot on Broadway. This project will retrofit these three parking lots with green infrastructure, incorporating porous pavement, bioswales, tree pits, electric car charging stations, and bicycle parking and fix-it stations. Street storm water run-off will be directed into the green infrastructure elements and remove water from entering the combined sewer system, which could otherwise overflow with untreated sewage into the rivers during storm events.

Open Space Planning - Conservation of natural landscapes, such as forests, streams and wetlands, can help to reduce damaging floods. Forests naturally reduce storm water by slowing the movement of runoff and absorbing rain into the ground. Wetlands allow water to slow down and spread out during heavy precipitation events, reducing flood volumes. In tidal areas, wetlands may buffer upland areas from storm surge. Protection of stream corridors can reduce flood vulnerability.

In 2018 the City of Kingston completed a [Natural Resources Inventory](#) and Open Space Index and in 2019, completed an [Open Space Plan](#) for the city. Data layers were collected and mapped for the City's natural resources by consultant John Mickelson and the Open Space Plan was written by Behan Planning and Design. Public input on prioritization and conservation interests were a crucial component of the process. In 2020, the Sustainability staff, with the Kingston CAC, undertook the SEQRA process for approval of the final Open Space Plan.



In **fall 2020, the Common Council unanimously adopted the Open Space Plan** for Kingston as part of the City's Comprehensive Plan.

2020 was a significant year for protection of open space in the City of Kingston. In 2020 Scenic Hudson announced the acquisition, in collaboration with NYS, of the [Quarry Waters](#) property (formerly owned by AVR Realty), and in doing so, committed to transformation of this land into **a new 520 acre State Park in Kingston**. Additionally, the Kingston Land Trust protected **six acres of forest and an historic quarry and lime kilns** in the City of Kingston's hamlet of Wilbur in late 2020. Both of these projects directly meet the vision of the Open Space Plan and get us closer to our goals. Implementation of the vision and goals of the Open Space Plan are underway and staff will continue to follow, monitor, strategize and advance the vision of the Open Space Plan.

Cultivating Street Trees – Kingston has earned the Arbor Day Foundation's "**Tree City USA**" designation for nearly two decades, and celebrates Arbor Day with an annual event. The [Kingston Tree Commission](#) oversees an annual tree planting initiative and coordinates street tree management for the City.

In 2017, the City received funding from the NYS DEC to conduct an inventory of street and park trees and to update and strengthen local ordinances related to management of trees. In 2018, City of Kingston contracted with ArborPro, Inc. to conduct a [tree inventory](#) of the City's street trees and park trees. These inventories are used as a tool by the tree commission when reviewing tree removal and pruning permits, as well as identifying locations for future tree plantings. In 2019, the City received additional funding to remove the Priority 1 trees that had been identified in the Tree Inventory and were dead or diseased or dangerous. In 2, the City engaged Lee Winnie Tree Services to complete the removals.

Transportation

Kingston on the Move and Kingston Greenline-

The Kingston Greenline is a vision for a network of urban trails, bikeways, water-trails, walkable sidewalks and complete streets. The project is a partnership initiative of the City of Kingston, [Kingston Land Trust](#) and Ulster County. To learn more visit the [Kingston Greenline](#) page. For full, up to date information on Kingston's Transportation Projects, see: [Kingston on the Move](#). These infrastructure improvement projects lead Kingston to a more sustainable and healthy future by reducing vehicle miles travelled through improved pedestrian and bicycle access, reduced vehicle idling by increasing travelling efficiencies, reduced pavement runoff through increased use of green infrastructure, increased quality of life and air quality from increased green space, increased tourism and visitor use, and more. 2020 Projects included:

- I-587 Intersection Project
- Hurley Ave. Pavement and Complete Streets Project
- Henry Street Safe Routes to School Project
- Kingston Waterfront Resiliency
- Rondout Riverport Shoreline Stabilization and Public Access
- Franklin Complete Streets Project
- Empire State Trail Development

In late 2018, the City of Kingston received a grant from the NYS Department of Environmental Conservation Climate Smart Communities Program to complete a **Kingston Pedestrian and Bicycle Master Plan**. This plan will improve conditions for non-motorized travelers throughout the City and on key roads and pathways in and out of the City. The plan will inventory existing conditions for pedestrians and bicyclists and develop a realistic and actionable recommended set of prioritized improvements over the next ten years. It will complete Kingston's ADA transition plan and create a vision for a cohesive walking and biking network that connects neighborhoods, businesses, the Kingston Greenline, and the Empire State Trail. In 2020, project planning advanced.



Green Fleet – Kingston is advancing efforts to reduce greenhouse gas emissions of municipal vehicles by purchasing hybrid and full electric vehicles, installing electric vehicle (EV) charging stations and hiring an Environmental Asset Manager who is managing the fleet and updating the greenhouse gas inventory.

The City has been working towards a goal of retrofitting the municipal fleet to have 20% comprised of alternative fuel vehicles by 2020. In 2020, additional **EVs were purchased** for the Building Safety Division bringing the total up to 12 Electric Vehicles in the City's fleet: 4 Chevy Volts, 3 Nissan Leafs, 3 Mitsubishi Outlander PHEVs, and 2 Ford Police Interceptor Hybrids. Further, in the Summer of 2020, the City installed a **new public Electric Vehicle Charging Stations** in a municipal lot on Garraghan Drive. This is the 4th municipal charging station installed for public use.

In 2021, two new EV Charging Stations will be installed in city municipal lots: Prince Street and at Dietz Stadium complex.

Additionally, in 2020, worked with the CAC to develop a **green fleet policy** as well as an **anti-idling policy**, to address procurement and policy related approaches to ensuring reduced GHG emissions from vehicles in the municipal fleet. This policy will be reviewed for completion in 2021.

Recycling and Solid Waste Management



Dual Stream Recycling and Composting –

In late 2018, the City of Kingston received a grant from the NYS Department of Environmental Conservation to fund a **year of enhanced Recycling Education and Coordination in 2019** to support the city’s mandated shift in recyclables collection to a new system beginning in the first quarter of 2019. This funding will aid in effective transition of recycling collection. This funding continued into 2020 and recycling education and coordination continued with streamlining of recycling data collection and increased enforcement with compliance.

Organics Diversion - To further reduce our emissions and tipping fees, the City of Kingston is exploring the feasibility of instituting a **citywide food waste collection system**.

Since 2019, the City of Kingston, in partnership with the Kingston Conservation Advisory Council, the Climate Smart Kingston Commission, and the Hudson Valley Regional Council, has undertaken a feasibility study for diverting food waste produced at municipal buildings as well as by residents and small businesses. This project, called the **Kingston Organics Diversion Plan**, will take the results from the study and propose a methodology for rolling out food waste diversion.



This work, which is funded by the NYS DEC, puts Kingston at the forefront of innovative efforts that save municipalities money while helping our environment. Reducing the amount of food waste that goes to the landfills can save hundreds of thousands of dollars in avoided tipping fees. Reducing the number of trips sanitation trucks take to the landfill also reduces the emissions of greenhouse gases. When the financial benefits from implementing such a program exceed the implementation and operating costs, it is a win all

around. Kingston’s goal is to discover if the City can get this win like other like-minded communities have nation- and state-wide.

In 2020, this project advanced, with public input, data gathering and analysis complete and the authoring of the final plan underway through the winter of 2020-2021.

Adaptation and Resiliency

Resilient Design and Development on the Waterfront - The City of Kingston is participating with stakeholders and partners on Kingston's waterfront to **improve the resiliency and sustainability of the shoreline, implement an economic development strategy, and develop better access to the river**, parks and open space on the waterfront for people on foot, on bicycle, and in boats. Several grants have been secured to implement elements of these plans.

For up to date information, waterfront plans and projects are listed on the City's [Weaving the Waterfront](#) page.

Additionally, in 2019, staff worked with city emergency personnel and Cornell Cooperative Extension to produce and distribute a **Flood Preparedness Guide** to residents in flood prone areas, which included information about emergency contacts, shelters, evacuation routes, and how to best prepare for flooding.



[Hosting the Cornell University Climate Adaptive Design Studio](#) -The Climate-Adaptive Design (CAD) Studio links Cornell students in landscape architecture with Hudson Riverfront communities to explore design alternatives for more climate resilient, beautiful and connected waterfront areas. The studio is an effort in partnership with Cornell Landscape Architecture Department, Cornell Water Resources Institute, the NYS DEC Hudson River Estuary Program and the City of Kingston. The CAD Studio **envisioned a more resilient Rondout waterfront**, focusing on the parcel level on Kingston's tidal water front, hosting a third studio on Kingston's Rondout Waterfront in Spring 2018.

Following the Studio, in 2019 and 2020, the City was the recipient of the award of the NYS DEC and NEIWPC's Climate Adaptive Design Project, which funded Supermass Studio and partners to take one of the designs from the CAD Studio and advance that project to Preliminary Design. Community members and key stakeholders participated in design development and in the Fall of 2020, the final Preliminary Design was presented to the community as well as in a state-wide professional level webinar. The full Design can be found at <https://engagekingston.com/kingston-point-climate-adaptive-design> .



Boards and Commissions



[Conservation Advisory Council](#) – Per NYS General Municipal Law, each municipality is sanctioned to create a Conservation Advisory Council (CAC) to advise local government on environmental matters and review development proposals with potential environmental impact in an advisory capacity. Since 2009, the Kingston CAC has worked as a volunteer board to ensure the conservation of the City's natural resources and the enhancement and protection of its environment, while fostering unified actions on environmental matters.

Key Conservation Advisory Council focus for 2020 included:

- Open Space Plan approvals and implementation
- Wood Smoke Reduction/Air Quality Improvement Initiative
- NY NJ Harbor and Tributaries Storm Surge Barriers Review
- USGS Rondout Creek Streamgage evaluation
- Esopus Creek Blue Trail development
- Kingstonian Development Review
- Street Tree and Canopy Cover advocacy
- Pedestrian Street Policy review
- Green Amendment policy advocacy
- Community Preservation Fund research



The Kingston CAC meets the second Tuesday of each month at 6:00 pm, and in 2020, these meetings were held virtually after March. The meetings are open to the public. For more information, visit the [Kingston CAC webpage](#). The Environmental Education and Sustainability Coordinator serves as the Chair of this Council and in this role, acts as a liaison to the City for the Council.



[Climate Smart Kingston Commission](#) - The Climate Smart Kingston Commission convenes monthly to strategize, plan, and implement the goals of Kingston's [Climate Action Plan](#). The Commission is comprised of residents and officials who want to take action to assure a sustainable future for the city.

Key Climate Smart Kingston Commission goals and achievements for 2020 included:

- A robust initiative to understand, address and reduce the impact of refrigerants in the city
- Expansion of the Repair Café initiative
- Climate Smart Communities Silver Recertification
- NYStretch Energy Code review, education and policy stewardship
- Transportation Climate Initiative Advocacy
- Supporting City of Kingston in resiliency and sustainability efforts

The Climate Smart Kingston Commission meets the 4th Wednesday of each month from 5:00-6:30 pm and in 2020, meetings after March were virtual. The Commission also hosts a [Climate Smart Kingston Commission](#) webpage, where community members can sign up for the Climate Smart Kingston Mailing List to be informed via email of updates on Kingston's sustainability initiatives, they can also follow Climate Smart Kingston on [Facebook](#). The Sustainability Coordinator serves as the Climate Smart Community Coordinator for the City of Kingston, and as such also serves as the Chair of this Commission, as an ex-officio member.



[Friends of Forsyth Nature Center](#) - The Friends of Forsyth Nature Center is a 501(c) 3 non-profit organization whose mission is to support the Forsyth Nature Center and to foster and inspire the exploration and conservation of the natural world in and around our urban community. The FFNC Board of Directors meets regularly throughout the year. This group provides scholarships for the Junior Naturalist Program and participates in the Kingston Earth Fair and the Fall Festival, fundraising for the FNC. All proceeds are dedicated to maintaining and improving the Forsyth Nature Center and its programs. The Sustainability Coordinator is the City liaison to this board, participates in monthly board meetings and at organization events.



[Climate Mayors](#)- In 2016, the City of Kingston joined Climate Mayors, a bipartisan, peer-to-peer network of U.S. Mayors working together to demonstrate leadership on climate change through meaningful actions in their communities and to express and build political will for effective federal and global policy action. Through 2020, the Sustainability Coordinator remained the liaison to Climate Mayors.

Professional Development

Sustainability staff regularly attends meetings, workshops and conferences annually to further professional development and to keep updated on regionally and locally relevant environmental issues. In 2020, most workshops and conferences were cancelled due to COVID.

Grants

In 2020, the staff was successful in the development and award of **various local and state funds** allowing the City to capitalize on the sustainability and efficiency movement. In 2020, staff managed the following grants.

Table 1: Grant Spreadsheet

Year Awarded/ Funding Agency	Original Funding Source State/Fed/ Other	Project Title	Timeline	Total Project Cost	Sustainability Staff on Project
2017 NYSERDA	State	Clean Energy Communities Grant- City Hall Window and Lighting Upgrades	01/01/18-06/30/19	\$ 100,000	Julie Noble Sean Koester
2017 DEC	State	Kingston Point Beach ADA Accessibility Improvements (River Access)	12/01/17-11/30/19	\$ 45,820	Julie Noble
2016 DEC	State	Environmental Asset Manager and Updated Greenhouse Gas Emissions Inventory	03/08/17-03/07/22	\$ 50,000	Julie Noble Sean Koester
2018 DEC	State	Prince Street Kingston Municipal Parking Lot EV Charging Station	6/25/18-6/24/20, ext 6/30/22	\$14,173.88	Julie Noble Sean Koester
2018 DEC	State	Garrahan Drive Kingston Municipal Parking Lot EV Charging Station	6/25/18-6/24/20, ext 6/30/22	\$ 13,611.20	Julie Noble Sean Koester
2018 DEC	State	Dietz Stadium Kingston Municipal Parking Lot EV Charging Station	6/25/18-6/24/20, ext 6/30/22	13,752.40	Julie Noble Sean Koester
2018 UC Youth Bureau	State- OCFS	Kingston Rec. Youth Development	1/1/18-12/31/18	\$ 10,000	Julie Noble KC Keegan-Twombly
2016 ZBGA	State-OPRHP	Forsyth Nature Center/Kingston Parks and Recreation	04/01/16-03/31/21	\$ 175,000	Julie Noble KC Keegan-Twombly
2016 OPRHP	State EPF	Kingston Point Park Infrastructure Improvements	12/08/2016-12/07/2021	\$ 262,645	Julie Noble
2017 HREP	State	Organic Waste Management Plan	03/15/2018-03/14/2023	\$ 62,960	Julie Noble Sean Koester KC Keegan-Twombly
2020 Novo	Private	Climate Action Plan Update	1/1/2020-9/30/2020	\$175,000	Julie Noble Sean Koester
2020 CDBG	Federal	Community Development Block Grant Park Improvement Projects Phase 1	1/1/2020-12/31/2020	\$169,594.36	Julie Noble Lynsey Timbrouck
2020 MWRR	State	Recycling Education and Materials	1/1/2020-12/31/2020	\$29,086	Julie Noble
2020 NYPA	State	Smart Tech, License Plate Readers	6/2020-6/2021	\$375,000	Julie Noble
	Total			\$1,496,643	
	2018 Total			\$ 810,896.14	