

2022 Erie County Climate Action Update

Key Takeaways

Since last year's report, Erie County has made substantial progress implementing the initiatives outlined in *Erie County Commits to Paris* and *Climate Action and Sustainability Plan – internal operations* (CASP), including the successful implementation of several large projects. This report gives an overview of the progress on these initiatives. The most recent greenhouse gas (GHG) inventory of Erie County's government operations, which captures 2021 emissions, shows a decrease of 31.4% compared to the 2005 baseline.

Much of 2022 was focused on continuing the development of an equity-centered *Community Climate Action Plan* (CCAP) to expand on earlier community climate action planning efforts. The actions outlined in the CCAP are directed at meeting the County's community GHG emission reduction goals and increasing our climate resiliency.

Background

The CASP, adopted by the Erie County Legislature in early 2019, focuses on internal strategies to reduce GHG emissions. This plan was developed by the Erie County Green Team: a committee with representatives from all Erie County Departments serving under the County Executive, as well as representatives from the offices of other County elected officials. Since the release of the CASP, the Green Team has continued to meet quarterly, with its Transportation, Energy, and Waste committees meeting quarterly or more frequently.

The CASP set aggressive greenhouse gas (GHG) emission reduction targets, including a 50% reduction from the baseline of 2005 by 2025 for the County's internal operations, and an 80% reduction by 2040. The GHG inventory for the County's internal operations for 2021 is included in this report. Notably, many of the CASP initiatives are nearing completion; consequently, the Green Team will begin revising the CASP in late 2023.

The County also committed in the CASP to procure all electricity for County operations from renewable sources by 2030. The Departments of Public Works (DPW) and Department of Environment and Planning (DEP) have investigated developing renewable energy to provide the Renewable Energy Credits (RECs) required to meet this goal, or alternately, purchasing RECs. Because of aggressive New York State goals announced in 2020, including a goal of 70% renewable energy statewide by 2030, the County will only need RECs to offset 30% of its energy consumption in 2030. Assuming current market conditions and energy consumption, and assuming the purchase of in-state Tier 1 RECs, this would add about 7% to the County's electric costs or about \$360,000 per year.

In 2018, the *Erie County Commits to Paris* report was released in response to the County's Executive Order 17. The Order committed the County to the U.S. GHG reduction goals stated in the Paris Climate Accord. Specifically, this sets a goal of 26-28% GHG reduction (from the 2005 baseline) by 2025 for both internal operations and the community as a whole. At the time of the initial report, the internal reductions had been met, but the GHG emissions in the community had only been reduced by 12% from the 2005 baseline.

To better address climate change, and reduce GHG emissions in the community, Erie County established the Community Climate Change Task Force as the official advisory board on the issue. The Task Force is a committee of the Environmental Management Council, which advises the County on environmental issues, and includes representatives from community-based organizations, not-for-profits, colleges, municipalities,

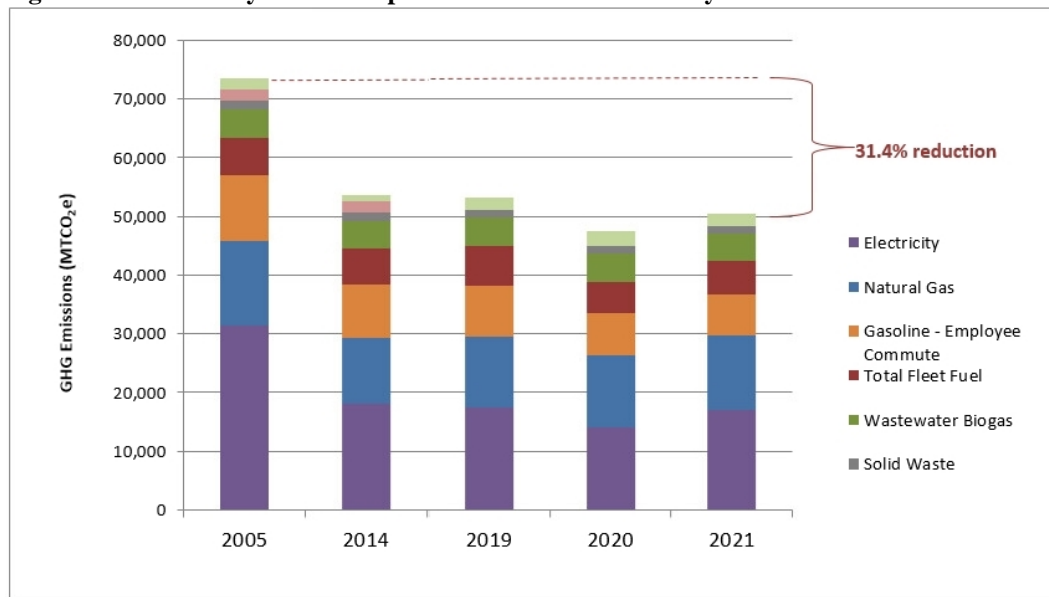
business representatives, NFTA, National Grid, the Greater Buffalo Niagara Transportation Council, the Buffalo & Erie County Public Library, the Buffalo Museum of Science, and the WNY Youth Climate Council. For more than a year and a half the Task Force has been working on creating an equity-focused Community Climate Action Plan (CCAP). Over 100 volunteers from throughout the County are participating on ten working groups to develop chapters of the plan. A website, www.erie.gov/climateaction, contains documents for public comment as well as several ways for community members to get involved in the development of the CCAP. A release of the draft Erie County Community Climate Action Plan is anticipated in spring 2023. The CCAP climate actions will expand on and replace the actions in the community-facing actions in the *Erie County Commits to Paris* report.

As the County initiated the community climate action planning process, New York State adopted the Climate Leadership and Community Protection Act (CLCPA) that specified new goals for the mitigation of climate change impacts. This specified an 85% reduction of GHG emissions from a 1990 level by 2040 and also 100% zero emission electricity by 2040. Moreover, the CLCPA calls for 35-40% of investment & benefits of the climate actions be directed to historically disadvantaged communities. The Task Force recommended to adopt these goals within its forthcoming Community Climate Action Plan (CCAP). With anticipated support from federal, state and other partners, the CCAP will put the County in an excellent position to bring investments to our community.

2021 Greenhouse Gas Inventory for Internal Operations

The 2021 GHG inventory for the County’s internal operations shows a 31.4% reduction in GHG emissions compared to the 2005 baseline. This is a slight increase from the 2020 inventory and appears to reflect a higher level of onsite work by Erie County staff, as the COVID pandemic subsided. Since the first GHG inventory in 2014, which was done as part of the CASP, the County’s largest emission reductions are from reduced employee commuting, elimination of a district heating system in 2016, utilizing less electricity, and less fleet fuel use.

Figure 1. Erie County Internal Operations GHG Emissions by Source



The County has implemented many energy conservation, waste reduction, and renewable energy projects, which have resulted in GHG emission reductions. Those projects are described below and in the attached tables. It is important to note that key projects, including the Energy Performance Contract, were only partially implemented by the end of 2021. Thus, they are not fully captured by the 2021 GHG inventory.

The County set a goal of 50% greenhouse gas reduction by 2025. Additional building performance savings, including from the Energy Performance Contract and fleet savings from purchase of electric vehicles, will help move us toward that goal, but it will be challenging to achieve this near-term goal. Deeper reductions later this decade will be achieved as the state implements its Clean Energy Standard for renewable energy in the grid, as electric vehicles become more available, and as we revise and implement additional actions from the CASP.

Progress on Initiatives

Tables with updates on initiatives in the *Erie County Commits to Paris* and the CASP are attached. Below are several significant projects and achievements that were accomplished over the past year.

Remote Work – The COVID pandemic accelerated policies and investments that allowed remote work by some County staff, which has resulted in significant reduction in commuting related emissions. Policies have now been put in place to allow remote work to continue where appropriate, including negotiating remote work provisions into some civil service contracts. Since 2014 emission reductions from employee commuting have resulted in a 4% reduction of the County’s overall GHG inventory.

Energy Performance Contract – The first phase of the Energy Performance Contract was completed in 2022 and involved more than 100 projects at 40 County-owned buildings. These projects have improved the energy efficiency of the buildings; some examples include installing energy-efficient heating and cooling systems, installing high-tech digital controls for building equipment, and installing power-saving LED fixtures. The energy savings are projected to save the County over \$400,000 per year and GHG emissions from County buildings will be reduced by over 13%. Energy savings are guaranteed by the contractor. The success of this first phase has prompted the County to pursue more energy savings projects with a second phase Energy Performance Contract.

Electric Vehicles - In 2022 the County leased its first electric vehicles (EVs), which are less expensive to maintain and operate than traditional vehicles and result in substantial emission reductions. Five Ford E-Transit cargo vans and three Chevrolet Bolt EVs were purchased, and chargers were installed at county facilities. Furthermore, the County purchased a fleet of electric bicycles for the Sheriff’s office to add to their fleet of 30 hybrid electric Ford Interceptor patrol vehicles. The County anticipates more EV leases in 2023, especially as EVs like pickup trucks become more available.

Building Electrification – In 2022, the Ellicott Creek Park Superintendent’s Building was upgraded to air source heat pump heating. This building was previously heated with propane, and the project is resulting in significant cost savings and GHG emission reductions. Additionally, DPW broke ground on upgrading the Sprague Brook Park Casino to a ground source heat pump heating system. This will be the first ground source heat pump installed at a County property.

Climate Action (Paris) Fund – This fund, established in the 2020 budget, reinvests half of cost savings achieved through energy conservation and waste reduction projects into additional sustainability initiatives. Due to how the Energy Performance Contract is structured, the fund does not include the

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savings from those projects. The fund is overseen by the Core Green Team, the steering committee of the Green Team, which includes representatives from DPW, DEP, Parks, Social Services, and Budget. The fund is utilized to implement action items identified in the CASP, as well as other projects identified by the Green Team. Whenever possible the fund is used to leverage additional funding through grants and rebates. In 2022, the Climate Action Fund supported the purchase of electric vehicles and battery powered landscaping equipment, energy conservation projects, electric bicycles for Sheriff's personnel, EV chargers for County buildings, the Sprague Brook Park Casino ground source heat pump project, a solid waste study, and editing and graphics support for of the CCAP.

State and National Recognition – Erie County is one of only four counties to receive Silver Certification, currently the highest level, in NYSDEC's Climate Smart Communities program by demonstrating the extensive work being done across the county to reduce greenhouse gas emissions and prepare for the changing climate. In 2022, Erie County also became the first large community in NYS to achieve the highest progress tier in the New York State Energy Research and Development Authority's (NYSERDA) Clean Energy Communities program. This achievement resulted in the County receiving a \$250K grant award from NYSERDA for additional energy conservation projects. Finally, the National Association of Counties recognized the CASP with a 2022 Achievement Award.

Conclusion

With the passage in 2022 of the federal Inflation Reduction Act, the Infrastructure Investment and Jobs Act, the state Environmental Bond Act and the release of the NYS Climate Action Council Draft Scoping Plan, we have entered an exciting time when for the federal, state, and county government are all pulling the same direction on this important issue. However, as we can see in headlines every day, the impacts from climate change are increasing and we have much work ahead of us. Thanks to the leadership of the County Executive Mark Poloncarz, the support of the Erie County Legislature, and the hard work of County staff from many departments, stakeholders and community volunteers, substantial progress has been made on this critical work.

What's Next in 2023

In the next year our focus will include completing the equity-centered Community Climate Action Plan, developing a Heat Emergency Plan, and rolling out the Erie County Low Income Program for Sustainable Energy. We also will be aggressively pursuing eligible sources of funding from the federal Inflation Reduction Act, the Infrastructure Investment and Jobs Act, the state Environmental Bond Act, and via the NYS Climate Action Plan to advance our climate related initiatives.

As we continue this work, our guiding principles remain the same: to do our part as a community to reduce greenhouse gas emissions, strengthen Erie County's economy and create good jobs as we transition to clean energy, and above all protect businesses and residents from the impacts of climate change, especially those who are most vulnerable.

Summary Table of Paris Report Initiatives and Partnerships

Number	Sector	Lead Dept.	% complete	2022 Update
I-1	Bldgs/Energy	DPW	100%	GHG emissions reductions and cost savings were included in the original report.
I-2	Bldgs/Energy	DPW	100%	GHG emissions reductions and cost savings were included in the original report.
I-3	Bldgs/Energy	DEP - DSM	100%	GHG emissions reductions and cost savings were included in the original report.
I-4	Bldgs/Energy	DEP - DSM	100%	GHG emissions reductions and cost savings were included in the original report.
I-5	Transportation	DPW	30%	In 2022 the County leased its first fully electric vehicles. Five Ford eTransit electric vehicle (EV) cargo vans were leased to replace gasoline-powered vans, and three Chevrolet Bolt EVs replaced Chevrolet Volt plug-in hybrids. Last year the Sheriff's Office added 20 hybrid Ford Interceptors to their fleet.
I-6	Bldgs/ Renewable Energy	DPW	100%	2 MW solar array is in place. GHG emissions reductions were already included in the original <i>Erie County Commits to Paris</i> report.
I-7	Bldgs/Energy	DPW	100%	The first phase of the Energy Performance Contract has been completed. The energy savings are projected to save the County over \$400,000 per year and greenhouse gas emissions from County buildings will be reduced by over 13%. Through the Energy Performance Contract, the County conducted more than 100 projects at 40 County-owned buildings. These projects update heating and cooling equipment to modern energy-efficient technology, upgrade lighting to power-saving LED fixtures and improve the control over building equipment by adding high-tech digital controls. The energy savings are guaranteed by the contractor. The success of this first phase has prompted the County to pursue further energy savings with a second phase Energy Performance Contract.
I-8	Bldgs/Energy	DPW	100%	The remaining lights within the County have been switched to LED completing the transformation to high-efficiency lighting. Due to advances in LED technology, the Rath building is undergoing a 2nd retrofit to save even more energy.
I-9	Bldgs/Energy	DEP	100%	The County has continued to pursue the solar projects with the consortium of partners, led by UB, as part of the "REV Campus Challenge." A 445 kW array was constructed on County property. The array has been producing clean energy since March 2022, and has saved the County nearly \$20,000 in electric costs since that time.

Summary Table of Paris Report Initiatives and Partnerships

Number	Sector	Lead Dept.	% complete	2022 Update
I-10	Methane/ Waste	DEP	100%	The composting project, which includes a compost site and a food waste collection program, is in full operation at the Erie County Correctional Facility. The project, which is supported by a NYS Department of Environmental Conservation Climate Smart Community Grant, composts 90% of the food waste at the facility. A second NYSDEC grant has been awarded to expand the collection of food waste to other County facilities. That project is scheduled to begin in 2023.
I-11	Transportation	DPW	30%	The Transportation Committee of the Green Team has created a draft fleet efficiency policy, which establishes goals for reducing excess idling in the fleets. This policy will be reviewed by DPW. It is anticipated that the idling policy will be implemented in stages, after the baseline is created from monitoring AVLs. A new AVL system has been piloted with plans to be in place later this year.
I-12	Policy	DEP	15%	The Procurement and Waste Committee has discussed and outlined the procedures to review bids and specs to identify products being purchased by the County that are not environmentally preferable and determine alternative products. The Committee will meet in 2023 to discuss implementation strategy.
I-13	Transportation/Policy	DEP	50%	Currently, because of IRS rules about transit pass distribution by employers, the Niagara Frontier Transportation Authority's fare system does not readily allow the County to offer pre-tax bus and train passes to County Employees. The NFTA is updating to a smart card based system very shortly, which will allow for this benefit, and Personnel and DEP are investigating options for offering this benefit. The County is also considering participating in NFTA's Corporate Pass program, allowing County staff to receive a \$20 discount off of monthly transit passes.

Summary Table of Paris Report Initiatives and Partnerships

Number	Sector	Lead Dept.	% complete	2022 Update
I-14	Transportation/ Policy	DEP/DPW	65%	<p>Erie County has worked with partners such as GObike Buffalo and GO Buffalo Niagara to make alternative commuting a safer and viable option for employees. The secure bicycle parking garage that was constructed in front of the Rath building for employees for convenient, safe and free bike storage is used frequently. Currently 124 employees participate in the NY511 rideshare program, which is an on-line resource for employees to find easy, affordable, and sustainable alternatives to driving alone. In 2022, GO Buffalo conducted outreach to County employees to educate them about alternative commute options.</p> <p>The County has added 14 charging stations at 10 locations throughout the county. These locations include Sprague Brook, Isleview, Emery, Elma Meadows, Ellicott Creek, ECC South (2), Bennet Beach, Grover Cleveland, ECC North (2),and ECC City.</p> <p>The Greater Buffalo Niagara Regional Transportation Council (GBNRTC) Regional Bicycle Master Plan was finalized in 2021 and Erie County has developed implementation procedures to assist municipalities in the implementation of the plan. Municipalities will coordinate with GBNRTC for bicycle infrastructure on County-owned roads within their community.</p>
I-15	Bldgs/ Renewable Energy	DPW	50%	<p>The County completed the construction of a 450kW system to add to its 2 MW portfolio.</p> <p>The County continues towards its goal of 100% renewable energy through energy conservation, renewable production and REC purchasing.</p>
I-16	Bldgs/ Renewable Energy	DPW	60%	<p>The County has defined the criteria for placing solar panels onto County buildings. A review is currently being conducted to determine prime candidates.</p>
I-17	Renewable Energy	DPW	65%	<p>Erie County recognizes the benefits of switching from fossil fuels to electrified heating and cooling. In 2021, four small buildings were retrofitted with air-source heat pumps which eliminated their fossil fueled heating equipment. in 2022, further progress has been made in switching buildings to clean heating and cooling when legacy equipment reaches the end of its lifespan. Erie County has evaluated the cost effectiveness of removing propane as a heating fuel source and is actively replacing equipment ahead of schedule. Several buildings have been identified as candidates for similar technologies and strategies are being examined to address multi-story buildings.</p>

Summary Table of Paris Report Initiatives and Partnerships

Number	Sector	Lead Dept.	% complete	2022 Update
I-18	Funding Mechanism/ Policy	Budget	100%	The Erie County Green Team and DEP oversee a funding mechanism for clean energy and sustainability projects originally called the Paris Fund, and since renamed the Climate Action Fund. DEP documents ongoing cost savings from energy conservation and waste projects (not including the Energy Performance Contract), and requests 50% of these savings are included in the County budget for the Climate Action Fund to be used for additional sustainability projects. Funded projects to date include heating and cooling projects in Parks' buildings, electric vehicles, electric vehicle chargers, and electric landscaping equipment, electric bicycles for the Sherriff's Office, energy conservation projects, support for a County waste study, and support of the Community Climate Action Plan.
I-19	Policy	DEP	60%	The County has implemented low-mow and no-mow areas as outlined in the Parks Master Plan Update. A tree planting policy has been established. The need to update the Forest Management Plan remains.

Summary Table of Paris Report Initiatives and Partnerships

Initiative	Number	Sector	Lead Dept.	% complete	2022 Update
WNY Sustainable Business Roundtable	C1	All	DEP	100%	This initiative is ongoing. The Roundtable continues to work with businesses to reduce their environmental impact, including GHG reductions. In early 2019 the Roundtable directly hired a Coordinator for the first time, and began charging member dues, both of which are important steps as this organization matures.
Solarize Campaign	C2	Renewable Energy	DEP	100%	Erie County partnered with WNY Sustainable Business Roundtable to offer Solarize to its member businesses including Erie County employees. The campaign was completed in February 2018, with 185 kilowatts of solar energy installed on employee homes, resulting in 66 tons of avoided GHG emissions annually.
ECLIPSE: Erie County Low Income Program for Sustainable Energy	C3	Energy/ Policy	DEP	35%	Low and moderate income households spend a disproportionately larger percentage of their income on energy bills, and are often unable to take advantage of the cost savings from renewable energy alternatives. The Erie County Low-Income Program for Sustainable Energy (ECLIPSE) will address these impacts on Home Energy Assistance Program (HEAP) eligible families. Funded by the New York State Energy Research & Development Authority (NYSERDA) and an in-kind County match, this program is currently analyzing community needs and intervention strategies, and will then implement the most effective solutions. ECLIPSE will focus on bulk energy and green-energy purchasing, access to community solar and related energy efficiency and resiliency improvements. The program involves many County Departments including Environment and Planning, Social Services and Public Works. The program will release a feasibility study in spring 2023, comparing options for the community energy program.
Climate Smart Communities - Certification & Community Climate Change Task Force	C4	All	DEP	100%	Through the work of its Green Team and Sustainability Coordinator, Erie County has implemented and submitted actions to the program and achieved Climate Smart Communities Silver Certification - currently the highest level in the program. The Erie County Community Climate Change Task Force was created as a subcommittee of the Environmental Management Council (EMC) to provide expert guidance and community input to the County as it makes decisions about its climate change mitigation, resilience, and other sustainability actions. The group meets monthly to discuss pertinent topics/categories that affect climate change. The group is now guiding the creation of the Erie County Community Climate Action Plan which will be released in 2023, and is helping with community outreach.
PACE - Property Assessed Clean Energy Financing	C5	Funding Mechanism	DEP	100%	PACE (Property Assessed Clean Energy) is a financing mechanism for energy conservation and renewable energy projects in commercially owned buildings. In NYS, PACE is operated by the Energy Improvement Corporation (EIC). The most current version of PACE is called Open C-PACE. To enable Open C-PACE, municipalities pass a local law and sign an EIC municipal agreement. EIC bills the property owner and directs them to remit the funds to the capital provider, removing any collection obligation from the municipality. As the program administrator, EIC reviews and approves each financing, ensuring it conforms with the enabling legislation and NYSERDA C-PACE guidelines. Erie County completed all the necessary items to bring PACE to all towns and villages in Spring 2021.

Summary Table of Paris Report Initiatives and Partnerships

Initiative	Number	Sector	Lead Dept.	% complete	2022 Update
Property Tax Exemptions	C6	Policy	DEP	100%	After investigating the experience of the program in Niagara County, this initiative is on hold. Negative findings from their program include lack of support from other taxing jurisdictions, underutilization of the program and backlash regarding equity issues. This will be looked at again as we work with municipalities within the County.
Revolving Loan Fund	C7	Funding Mechanism	DEP	25%	The County will look into ways to establish a revolving loan fund through the ECLIPSE project.
Community Solar	C8	Renewable Energy	DEP	25%	Erie County worked with the WNYSBR to procure and offer community solar for Erie County employees. The selected contractor offered two webinars for County employees, and more than 40 employees signed up. Participating employees will save about \$120 per year in electric costs while supporting the County's community greenhouse gas reduction goals. Because this program satisfied criteria for a NYSERDA Clean Energy Communities grant, Erie County will receive a grant \$15,000 to for climate action work in our community. Erie County is working on a community solar program focused on low and moderate income residents (see Initiative C-4, ECLISPE)
Renewable Heating and Cooling	C9	Renewable Energy	DEP	100%	In 2018, DEP partnered on a successful grant application led by PUSH Buffalo for a NYSERDA grant to run a Thermalize campaign in Erie County. The project is facilitating low-cost ground and air source heat pump installations, and includes a component focused on low- and moderate-income residents.
Purchasing Renewables through Utilities Aggregation	C10	Renewable Energy	DPW	35%	The County has continued to investigate methods for acquiring Renewable Energy Credits. Also, the ECLIPSE Project (C-3) is investigating using the utility fund as a vehicle for providing low-cost renewable energy to HEAP recipients.
Parking Lot Policy: Public Electric Vehicle Charging Stations, Green Infrastructure & Solar Installations	C11	Policy/Renewable Energy	DPW	60%	The County has established 14 Level 2 charging locations throughout the County. These new locations include numerous parks and County-owned golf courses, and ECC campuses. The County is planning to develop its first high-speed Level 3 EV charging sites in 2023.
Carbon Pricing	C12	Policy	DEP	10%	This is being considered at the state level as part of the NYS Climate Leadership and Community Protection Act. The County will follow this development.
Energy Performance Ratings	C13	Policy	DEP	0%	DEP has had informal discussion with NYSERDA about this action, but nothing has materialized. DEP will continue to look for opportunities to move this forward.

Summary Table of Paris Report Initiatives and Partnerships

Initiative	Number	Sector	Lead Dept.	% complete	2022 Update
Intra-County	P1	All	DEP	ongoing	A Community Climate Change Task Force, as a committee of the Environmental Management Council, has been active since January 2019. The Task Force includes municipal representatives from Tonawanda, Buffalo, and Clarence. The Task Force is advising the County on developing a Community Climate Action Plan that has equity as its focus and is aligned with the New York State Climate Leadership and Community Protection Act.
Inter-County	P2	All	DEP/DPW	ongoing	The New York State Association of Counties' Climate Resiliency Committee, which was initiated and chaired for more than a year by County Executive Poloncarz, meets regularly and is now a standing committee. Deputy Commissioner Bonnie Lawrence serves as co-vice chair. This committee has provided a format for counties across the state to learn from each other, as well as from state agencies that participate on the committee.
Regional Transportation	P3	Transportation	DPW/DEP	ongoing	The Greater Buffalo Niagara Regional Transportation Council (GBNRTC) Regional Bicycle Master Plan was finalized in 2021 and Erie County has developed implementation procedures to assist municipalities in the implementation of the plan. Municipalities will coordinate with GBNRTC for bicycle infrastructure on County-owned roads within their community.
Utility Infrastructure	P4	Energy	DEP	ongoing	Erie County continues to work with its utility partners. For example, National Grid is a member of the Community Climate Change Task Force. Moreover, through work with the WNY Sustainable Business Roundtable, Erie County has helped to promote the utilities' energy conservation and electric vehicle programs.
Outreach & Training Partnerships	P5	All	DEP	ongoing	Erie County continues to work with its partners to coordinate outreach and training events. For example, the County has worked with UB Regional Institute on a variety of learning sessions. The County also worked with the WNY Sustainable Business Roundtable to coordinate workshops related to climate change. The County has also hosted clean energy trainings for local governments in recent years. In the spring of 2022, Erie County worked with NYSERDA and the NYS Department of State to host a four-part Clean Energy Communities Learning Series. The trainings were for local government leaders, board members and staff, and covered battery Storage and solar for comprehensive plans, and battery storage and solar energy permitting.

2022 Summary Table of Initiatives - Erie County Climate Action and Sustainability Plan - Internal Operations - Priority Tier 1

Initiative	Sector	Lead Dept.	% complete	2022 Update
C-1 - Reducing Single occupancy Vehicle Commuting	Transportation - Commute	Personnel	65%	DEP is working with GoBuffaloNiagara to strategize new approaches to influence employee commuting at the County. Currently, because of IRS rules about transit pass distribution by employers, the Niagara Frontier Transportation Authority's fare system does not readily allow the County to offer pre-tax bus and train passes to County Employees. The NFTA is updating to a smart card based system very shortly, which will allow for this benefit.
C-2 - Employee Education on Commute Alternatives	Transportation - Commute	DEP	On-going	Erie County has worked with partners such as GObike Buffalo and GOBuffaloNiagara to make alternatives to single occupancy vehicle commuting a safer and viable option for employees. Currently 124 employees participate in the NY511 rideshare program, which is an on-line resource for employees to find easy, affordable, and sustainable alternatives to driving alone. In 2022, GOBuffalo conducted outreach to County employees to educate them about alternative commute options.
C-3 - Construct Buildings and Parking to Support Alt. Transportation	Transportation	DPW	65%	The County has added 14 charging stations at 10 locations throughout the county. These locations include the following parks and ECC locations: Sprague Brook, Isleview, Emery, Elma Meadows, Ellicott Creek, ECC South (2), Bennet Beach, Grover Cleveland, ECC North (2), and ECC City. The Greater Buffalo Niagara Regional Transportation Council (GBNRTC) Regional Bicycle Master Plan was finalized in 2021 and Erie County has developed implementation procedures to assist municipalities in the implementation of the plan. Municipalities are coordinating with GBNRTC for bicycle infrastructure on County-owned roads within their community.
F-1 - Preventative Fleet Maintenance Program	Transportation	DPW	65%	The fleet inventory is continually updated by DPW to identify older, less efficient vehicles to target for replacement. Maintenance records of non-leased vehicles are kept at the department level. Information is shared through the Green Team Transportation Committee.
F-2 - Reducing Vehicle Idling	Transportation	DPW	25%	The transportation committee has created a draft fleet efficiency policy which establishes goals for reducing excess idling in the fleets. This policy will be reviewed by DPW. It is anticipated that the idling policy will be implemented in stages, after the baseline is created from monitoring automatic vehicle locators (AVLs). A new AVL system has been installed, but idle times have not been reviewed. Transportation committee to discuss policy and departmental next steps in 2023
F-3 - Increase Use of Alternately Fueled Vehicles	Transportation	DPW	On-going	In 2022 the County leased its first fully electric vehicles. Five Ford eTransit electric vehicle (EV) cargo vans were leased to replace gasoline-powered vans, and three Chevrolet Bolt EVs replaced Chevrolet Volt plug-in hybrids. Last year the Sheriff's Office added 20 hybrid Ford Interceptors to their fleet.
F-4 - Improve Fleet Deployment and Monitoring	Transportation	DPW	60%	New AVL system installation is essentially complete. Department heads will need to be instructed on how to utilize the technology.
W-1 - Departmental Waste Plans	Waste Management and Recycling	DEP	15%	Departments will be reengaged in this topic after the waste audit of County facilities, being paid for by the Climate Action Fund, is conducted in the first half of 2023.

Initiative	Sector	Lead Dept.	% complete	2022 Update
W-2 - Paper Reduction	Waste Management and Recycling	DISS	40%	We continue to reap the benefits of the paper reduction efforts that took place four years ago. The Green Team will look at ways to reengage employees on the topic in 2023.
W-3 - Construction & Demolition Waste Policy	Waste Management and Recycling	DPW	5%	This action will continue to be discussed at committee meetings in 2023.
W-4 Meeting & Event Guidelines	Waste Management and Recycling	DEP	60%	This action will continue to be discussed at committee meetings in 2023.
W-5 - Organic Waste Reduction Compost Program	Waste Management and Recycling	DEP	65%	Through much of 2022, we were unable to move forward with implementing the plans from the NYSDEC grant which includes collecting kitchen scraps from the Holding Center due to Coved-related restrictions and severe staffing shortages. However, plans are in place to start this program in early 2023.
E-1 - Building Performance and Operations Improvements	Buildings and Energy	DPW	75%	The County utilizes Building Management Software (BMS) to operate many of the electrical and mechanical operations in County Buildings. Several buildings have incorporated a Real-Time Energy Management System into the BMS system to improve operations. Further work is being conducted through the Energy Performance Contract (see E-2) to coordinate scheduling with hours of operations and eliminate energy use during unoccupied hours. Further digitization of equipment will allow more operations to be tracked and optimized. The County utilizes EPA Portfolio Manager to enter energy data from utility accounts to track electric and natural gas consumption over time. This allows the County to identify trends and address anomalies.
E-2 - Building Energy Efficiency Improvements	Buildings and Energy	DPW	On-going	Through the Energy Performance Contract (EPC), the County is addressing more than 100 projects at over 40 County-owned buildings. These projects update the heating and cooling equipment to modern energy-efficient technology, upgrade the lighting to power saving LED fixtures and improve the control over building equipment by adding high-tech digital controls. The first phase of the EPC is estimated to reduce GHG emissions from County buildings by over 13%. A second EPC has been approved which will continue to reduce greenhouse gases by switching to electric fuel sources and reducing energy consumption at additional sites.
E-3 - Renewable Energy	Buildings and Energy	DPW	50%	The County completed the construction of a 450kW system to add to its 2 MW portfolio. The County continues towards its goal of 100% renewable energy through energy conservation, renewable production and REC purchasing.
L-1 - Landscape Management Guidelines	Land Management	DPW	40%	The County has implemented low-mow and no-mow areas as outlined in the Parks Master Plan Update and wildflower areas are being designated throughout County Parks. A tree planting policy has been established. The need to update the Forest Management Plan remains.
L-2 - Natural Resource Inventory	Land Management	DEP	100%	The Erie County Natural Resource Inventory has been completed and is available on the Erie County website for internal and public use.
L-3 - Native Plant Policy	Land Management	DEP	40%	The Native Plant Policy has been drafted. A list of native and invasive plants exists, but needs to be scaled down and sorted by availability. To assist in this task, a survey may be created for local nurseries.

Initiative	Sector	Lead Dept.	% complete	2022 Update
Wa-1 - Implement Green Infrastructure Projects	Water Conservation and Stormwater	DEP	On-going	This is an ongoing initiative that will be completed on a project by project basis.
Wa-2 - Educate Employees on Water Conservation and Protection	Water Conservation and Stormwater	DEP	On-going	Employee education consisted of 9 employee trainings on the following topics: NYS stormwater permit regulations, illicit discharge detection, sampling and elimination, stormwater management practices/inspection, erosion and sediment control, construction site inspection, pollution prevention/good housekeeping, facility self-assessments. The Lake Erie Watershed Protection Alliance (LEWPA), which Erie County participates in, developed watershed training videos for municipal officials and promoted them through local government training channels and the Erie County Earth Day Challenge. LEWPA conducted outreach at the Roaming Gnome Festival in downtown Buffalo in July 2022 on impervious vs. pervious surfaces and the impacts on water quality. LEWPA also assisted in planning a local government training on watershed and coastal resiliency issues in November 2022. LEWPA held four septic system maintenance workshops in fall 2022 throughout the tri-county area.
S-1 - Investigate alternative means to manage biosolids at County owned water resource recovery facilities	Sewerage Management	DSM	30%	There has been no progress on evaluating alternative biosolids disposal methods as there are presently numerous unknowns due to pending Federal/State regulations. Improvements continue with regard to optimizing biosolids dewatering/stabilization. Design is in progress regarding the use of alternative fuels in the incineration process at the Southtowns Advanced Wastewater Treatment Facility (AWTF). Additionally, work has been bid for the anaerobic digester improvements at the Lackawanna Water Resource Recovery Facility (WRRF) and construction started in 2022.
S-2 - Address GHG Impacts at Water Resource Recovery Facilities	Sewerage Management	DSM	75%	The Strategic Energy Management pilots have been completed at the Southtowns AWTF and Big Sister Creek WRRF. Several initiatives have been implemented, with others in progress. There has been no progress on potential combined heat/power - likely this will be considered after the anaerobic digesters at the Lackawanna WRRF are upgraded.
S-3 - Triple Bottom Line Decision Making Process for Large Capital Projects	Sewerage Management	DSM	100%	A triple bottom line analysis was developed for evaluating options associated with major upgrades at the South towns facility.
P-1 - Environmentally Friendly Procurement	Purchasing	DEP	15%	The Procurement and Waste Committee has discussed and outlined the procedures to review bids and specs to identify products being purchased by the County that are not environmentally preferable and determine alternative products. The Committee will meet in 2023 to discuss implementation strategy.

Initiative	Sector	Lead Dept.	% complete	2022 Update
P-2 - Financial Mechanism for Climate Actions	Budget	DEP	100%	The Erie County Green Team and DEP oversee a funding mechanism for clean energy and sustainability projects originally called the Paris Fund, and since renamed the Climate Action Fund. DEP documents ongoing cost savings from energy conservation and waste projects (not including the Energy Performance Contract), and requests 50% of these savings are included in the County budget for the Climate Action Fund to be used for additional sustainability projects. Funded projects to date include heating and cooling projects in Parks' buildings, electric vehicles, electric vehicle chargers, and electric landscaping equipment, electric bicycles for the Sherriff's Office, energy conservation projects, support for a County waste study, and support of the Community Climate Action Plan.

2022 Summary Table of Initiatives - Erie County Climate Action and Sustainability Plan - Internal Operations - Priority Tier 2

Initiative	Sector	Lead Dept.	% complete	2022 Update
C-4 - Expand Current Commuter Programs	Transportation	DEP	25%	Currently, because of IRS rules about transit pass distribution by employers, the Niagara Frontier Transportation Authority's fare system does not readily allow the County to offer pre-tax bus and train passes to County Employees. The NFTA is updating to a smart card based system very shortly, which will allow for this benefit.
C-5 - Employee Schedule - Implement and promote a comprehensive flexible work schedule	Transportation	Personnel	75%	A Work From Home Policy was developed and adopted by the County. A compressed work week policy is being rolled out in 2023.
F-5 - Strategies to promote walking & Bicycling	Transportation	DPW	40%	Erie County participated in the development of the Greater Buffalo Niagara Regional Transportation Council (GBNRTC) Regional Bicycle Master Plan, which was finalized in 2021. Erie County has developed implementation procedures to assist municipalities in the implementation of the plan. Municipalities will coordinate with GBNRTC for bicycle infrastructure on County-owned roads within their community. DEP is on the Live Well Erie (LWE) Older Adult Transportation sub-committee discussing walkability and has started conversations with the Health Department as they are looking at Complete Street infrastructure to improve walkability in Erie County.
W-7 - Divert Waste from Landfill, Increase Recycling & Reuse	Waste Management and Recycling	DEP	On-going	Co-mingled or single-stream recycling has returned on a limited basis in the Rath Building and other sites as deemed possible by Buildings and Grounds. No progress on reviving the printer cartridge recycling program. A compost program for coffee grounds is being rolled out in 2023.
E-4 - Increased Standards for Building Design and Construction	Buildings and Energy	DPW	On-going	All newly constructed buildings are evaluated for LEED eligibility with the Erie Community College STEM building and the Botanical Gardens Expansion being recent examples of LEED certified projects. Smaller construction projects are subject to the NYS 2020 Energy Code to maximize energy efficiency.
L-5 - Reuse/repurpose underutilized properties for sustainability projects	Land Management	DEP	On-going	Erie County completed the construction of a 445kw solar array on the existing brownfield located at 303 Woodward Avenue. DPW and the solar contractor worked with DEC to create a plan that would minimize soil disturbance to the area.

Initiative	Sector	Lead Dept.	% complete	2022 Update
Wa-3 - Conserve Water in County Owned Buildings	Water Conservation and Stormwater	DPW	On-going	Erie County upgraded all sink faucets and bathroom flush valves to touchless fixtures. These modern fixtures have reduced the consumption of water by an estimated 6 million gallons per year.
Wa-4 - Erosion and Flooding Control using Natural or Organic materials	Water Conservation and Stormwater	DEP	on-going	The Lake Erie Watershed Protection Alliance (LEWPA) has continued implementing riparian buffers in Erie County. Additionally LEWPA is continuing to conduct stream assessments that include bank assessments. Approximately 61 miles of streams in the Headwaters Cattaraugus Creek Sub-watershed have been mapped.
S-4 - Assess Sewer Collection System Carbon Footprint	Sewerage Management	DSM	on-going	The Division of Sewerage Management is continually investing in the collection systems of the Erie County Sewer Districts to eliminate infiltration/inflow (I/I) to decrease the amount of flow that must be pumped and treated.

Acronyms

AVL	Automatic Vehicle Locator	kW	Kilowatt
AWTF	Advanced Wastewater Treatment Facility	LED	Light Emitting Diode
CASP	Climate Action & Sustainability Plan - Internal Operations	LEED	Leadership in Energy and Environmental Design
CCAP	Community Climate Action Plan	LEWPA	Lake Erie Watershed Protection Alliance
CLCPA	Climate Leadership and Community Protection Act	LWE	Live Well Erie
DEP	Department of Environment and Planning	MCO2E	Metric tons of carbon dioxide equivalent
DISS	Division of Information Support and Services	MW	Megawatt
DPW	Department of Public Works	NFTA	Niagara Frontier Transportation Authority
DSM	Department of Sewerage Management	NRI	Natural Resource Inventory
DSS	Department of Social Services	NYSDEC	New York State Department of Environmental Conservation
EC	Erie County	NYSERDA	New York State Energy Research and Development Authority
ECC	Erie Community College	C-PACE	Commercial - Property Assessed Clean Energy
ECCF	Erie County Correctional Facility	REC	Renewable Energy Certificate
ECLIPSE	Erie County Low Income Program for Sustainable Energy	RFP	Request for proposals
ECMC	Erie County Medical Center	SOP	Standard Operating Procedure
EIC	Energy Improvement Corporation	STEM	Science, technology, engineering and math
EMC	Environmental Management Council	SUNY	State University of New York
EPC	Energy Performance Contract	SWPPP	Stormwater pollution prevention plan
EV	Electric Vehicle	UB	University at Buffalo
GBNRTC	Greater Buffalo Niagara Regional Transportation Council	WFH	Work from home
GHG	Greenhouse gas	WNY	Western New York
HD	Heavy Duty	WNYSBR	Western New York Sustainable Business Roundtable
HEAP	Home Energy Assistance Program	WRRF	Water resource recovery facilities
HVAC	Heating, ventilation, and air conditioning	YD	Youth Detention
I/I	Infiltration/inflow		
IRS	Internal Revenue Service		