



MEMORANDUM COUNTY OF ERIE DEPT. OF ENVIRONMENT & PLANNING

TO: Mark C. Poloncarz, County Executive
Maria Whyte, Deputy County Executive
Hon. April N.M. Baskin, Chairwoman
Hon. Timothy Meyers, Chair, Energy & Environment

CC: Thomas R. Hersey, Jr., Commissioner

FROM: Bonnie Lawrence, Deputy Commissioner *BLL*

DATE: December 23, 2020

RE: *Erie County Commits to Paris – 2020 Annual Report*

Introduction

Since the release of the *Erie County Commits to Paris* report in January 2018, substantial progress has been made on the 37 initiatives that are outlined in the report. A review of the significant sources of greenhouse gas (GHG) emissions from Erie County government operations for calendar year 2019 shows a 29.7% decrease in emissions since 2005, and a 3.0% decrease since 2014.

2020 brought about many unprecedented challenges and changes due to the COVID-19 global pandemic. Through this trying time, Erie County was able to continue to move forward with sustainability work. Although some progress was slowed or stalled, for example completion of the greenhouse gas inventory for this report was delayed due to factors related to the pandemic, the majority of the action items progressed. This memo summarizes the progress on the initiatives outlined in both the *Erie County Commits to Paris* report and the *Climate Action and Sustainability Plan* for internal operations, as well as the findings regarding the GHG emissions inventory for internal operations. Please find attached spreadsheets with information about the status of the initiatives outlined in those two documents, as well as a list of acronyms.

Progress on Initiatives

The members of the Erie County Commits to Paris work group provided the updated reports on the initiatives outlined in the *Erie County Commits to Paris* report for the time period of October 1, 2019 – September 30, 2020. The members of the Erie County Green Team provided updates on the Tier One Priority Initiatives and select Tier Two Priority Initiatives that are outlined in the *Climate Action and Sustainability Plan* for internal operations (CASP), which was finalized in January 2019 and adopted by

the legislature in February 2019. Please refer to the attached spreadsheets for a complete listing of the initiatives and the status of each.

- *Completed Initiatives*

Erie County Commits to Paris: To date, ten initiatives have been fully completed, representing 27% of the total. A major project completed this year was the construction of a food waste composting site and rolling out a composting program at the Erie County Correctional Facility.

Climate Action and Sustainability Plan for internal operations: Two of the 25 Tier One Priority Initiatives and zero of the 14 Priority Tier Two initiatives have been completed, representing 5% of the total. Many of the action items are listed as ‘on-going’, and will never reach the completion phase. These action items are typically educational campaigns for the employees, such as encouraging behavior change to reduce building energy usage.

- *In Progress Initiatives*

Erie County Commits to Paris: Of the remaining 27 initiatives, 26 are in progress. There are initiatives in progress in all three categories of initiatives - internal operations, community-wide, and partnership. It is also important to note that five of the in progress initiatives are classified as “on-going” or “annual” obligations and are unlikely to ever be classified as completed.

Climate Action and Sustainability Plan for internal operations: Of the remaining 23 Priority Tier One initiatives, all 23 are in progress. Many of the initiatives are nearing completion, while others are in the beginning phases. It is also important to note that four of the in-progress initiatives are classified as “on-going” or “annual” obligations and are unlikely to ever be classified as completed. In addition, this year there was progress in seven of the 14 Priority Tier Two initiatives.

- *Initiatives Not Yet Begun*

Erie County Commits to Paris: One initiative has not yet begun, representing 2.7% of the total. That initiative hasn’t been started because it is dependent on the progress of other initiatives.

Climate Action and Sustainability Plan for internal operations: Seven initiatives have not yet begun, representing 18% of the total. The initiatives that haven’t been started are all Priority Tier Two initiatives.

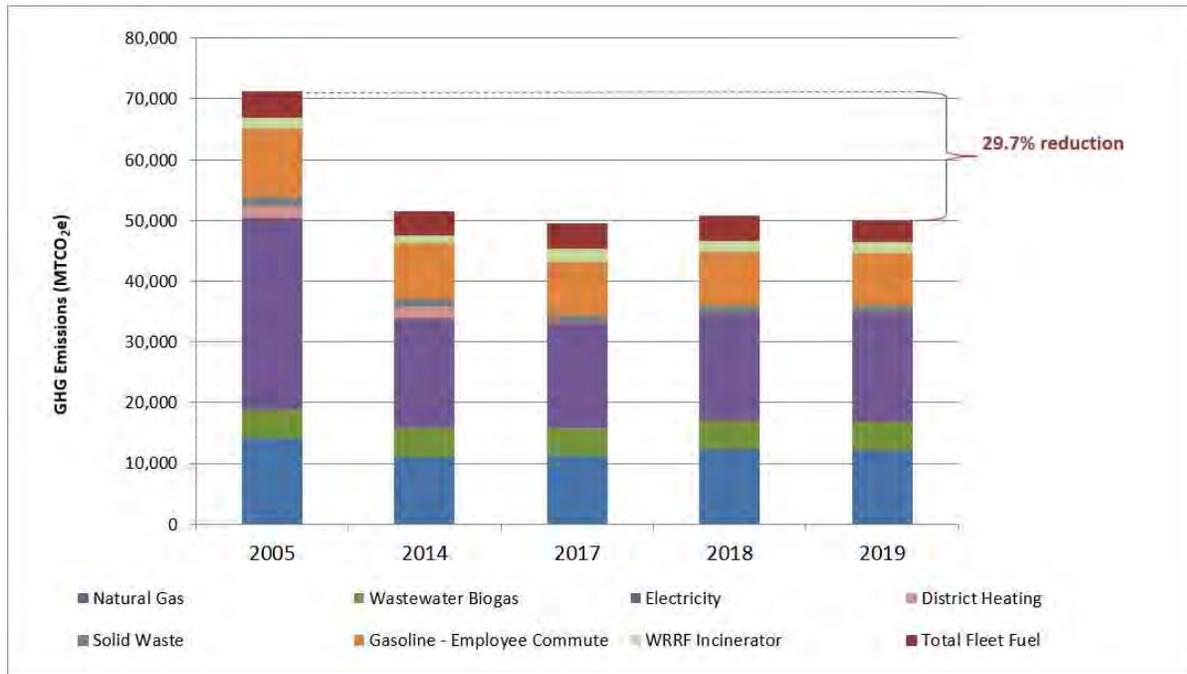
Greenhouse Gas Emissions from Erie County Operations

In the *Erie County Commits to Paris* report, 2014 greenhouse gas (GHG) emissions were inventoried for both internal County operations and for the larger community and compared to the baseline year of 2005. In subsequent years additional GHG inventories have been conducted, including most recently the inventory for 2019. These inventories are shown on Figure 1 below.

2019 GHG emissions have decreased 29.7% since 2005, and 3.0% since 2014. There was a 1.1% emissions decrease between 2019 and 2018, which is mostly because of a reduction in fleet fuel use. Since 2018, the Department of Public Works has updated the County fleet using a lease model, and many older, less fuel efficient, vehicles have been replaced by more fuel efficient models, which likely explains this reduction.

In 2020 Erie County will begin work on a large energy performance contract that will reduce natural gas and electricity use in many County buildings. That project will wrap up in 2021 or early 2022, and the improvements will reduce total County internal operations GHG emissions by about 7%. We expect those improvements to start to show up in the 2020 GHG inventory when it is reported in 2021. We also anticipate that in 2020 and 2021 we will see significant temporary reductions in employee commute emissions precipitated by the pandemic.

Figure 1. Erie County Internal Operations Emissions by Year and Source



Conclusion

Substantial progress has been made on the initiatives outlined in both the *Erie County Commits to Paris* report and the *Climate Action and Sustainability Plan* for internal operations. Erie County is laying the groundwork for large projects that will make a significant difference in its GHG inventory in the coming years. Substantial progress is expected by the next report, which will be issued in October 2021.

Summary Table of Initiatives - Erie County Commits to Paris - Internal Operations

Initiative	Number	Sector	Lead Dept.	% complete	2020 Update
Rath Building	I-1	Bldgs/Energy	DPW	100%	GHG emissions reductions and cost savings were included in the original report.
134 West Eagle	I-2	Bldgs/Energy	DPW	100%	GHG emissions reductions and cost savings were included in the original report.
Big Sister Creek Water Resources Recovery Facility	I-3	Bldgs/Energy	DEP - DSM	100%	GHG emissions reductions and cost savings were included in the original report.
Gravity Sewer Projects	I-4	Bldgs/Energy	DEP - DSM	100%	GHG emissions reductions and cost savings were included in the original report.
Electric Vehicle Purchase	I-5	Transportation	DPW	25%	Five of nine pool vehicles have been converted to plug-in, hybrid gas-electric vehicles. We are working on electrifying other parts of the fleet.
Solar Installation at the Correctional Facility	I-6	Bldgs/ Renewable Energy	DPW	100%	2MW solar array was brought on line earlier this year. GHG emissions reductions were already included in the original report.
Energy Performance Contract	I-7	Bldgs/Energy	DPW	60%	The Energy Performance Contract has progressed into the construction phase where 109 Facility Improvement Measures will provide over \$417,000 in annual savings and reduce greenhouse gas emissions by more than 4,000 MTCO ₂ e. This project will drastically improve the energy efficiency of the 40 buildings in the program with the improvements paying for themselves in under 13 years.
Strategy for Future Re-Lamping Projects	I-8	Bldgs/Energy	DPW	85%	The County has continued to upgrade lighting in its buildings with energy efficient LED bulbs. Many of the buildings being upgraded are included in the Energy Performance Contract (EPC (I-7)). Buildings not in the EPC have been catalogued and are following a replacement schedule.
REV Campus Challenge	I-9	Bldgs/Energy	DEP	90%	The County has continued to pursue the solar projects from the REV campus challenge and is in the final stages of contracting a 445 kW array on County property.
Composting Project at Jail	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 2021.
Erie County Fleet Policies and Standards	I-11	Transportation	DPW	30%	The transportation committee has created a more detailed fleet inventory to enhance management of the fleet and improve efficiency. A fleet efficiency policy is being developed by that same committee to set fuel-efficiency standards for vehicle acquisitions.

Initiative	Number	Sector	Lead Dept.	% complete	2020 Update
Other Procurement Policies	I-12	Policy	DEP	15%	In early 2020, the Procurement Committee met with DEP's Office of Agriculture to discuss food procurement in County facilities, with focus on waste reduction and local vendors. This work was stalled due to the pandemic, but will resume this fall.
Tax Incentives for Public Transportation for Employees	I-13	Transportation /Policy	DEP	30%	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 in 2021 which may allow the County to pursue this program. Once details are clear, the Department of Environment and Planning will work with Personnel to evaluate this opportunity.
Support Alternative Transportation through Infrastructure and Policy	I-14	Transportation / Policy	DEP/DPW	60%	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. A secure bicycle parking garage has been constructed in front of the Rath building for employees to use for convenient, safe and free bike storage. Additionally, two workshops were offered to employees to learn about general bike safety and rules of the road. The County has also joined NY511 rideshare program which is an on-line resource for employees to find easy, affordable, and sustainable alternatives to driving alone. Through NYSERDA's Charge Ready NY program, the County has added 12 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.
Erie County Utilities	I-15	Bldgs/ Renewable Energy	DPW	40%	The County is developing a comprehensive strategy that will reduce energy, develop renewable energy projects and offset the remaining brown energy with Renewable Energy Credits.
Assess Solar on Roofs of County Buildings	I-16	Bldgs/ Renewable Energy	DPW	50%	After a preliminary assessment, the County is refining the criteria for roof-mounted solar systems. Once the criteria has been finalized, a systematic evaluation and schedule will be prepared and procured.
Create Renewable Thermal Targets within Erie County Operations	I-17	Renewable Energy	DPW	40%	Erie County recognizes the benefits of switching from fossil fuels to electrified heating and cooling. A pilot project has been initiated to examine buildings that can benefit immediately from air-sourced heat pumps and heat pump water heaters. Erie County will be developing a comprehensive strategy to address more demanding heating/cooling situations.

Initiative	Number	Sector	Lead Dept.	% complete	2020 Update
Paris Fund	I-18	Funding Mechanism/ Policy	Budget	50%	The Green Team has documented the savings from energy conservation and waste reduction projects implemented in the County's internal operations. A Paris Fund based on 50% of these savings was included in the 2020 budget to be used for sustainability projects. Due to the budget crisis caused by the COVID-19 pandemic, this fund has been drastically reduced and will likely be eliminated in 2021.
Tree Management and Habitat	I-19	Policy	DEP	50%	The County is implementing low-mow and no-mow areas as outlined in the Parks Master Plan Update. The County is also considering pursuing a partnership with The Nature Conservancy's Working Woodland project, which can provide a resource to create a forest management plan. The County funding that had been budgeted for such a plan was eliminated due to the budget crisis caused by the COVID-19 pandemic. In addition, the Green Team has continued to work on a draft Native Plant Policy.

Summary Table of Initiatives - Erie County Commits to Paris - Community-Wide

Initiative	Number	Sector	Lead Dept.	% complete	2020 Update
WNY Sustainable Business Roundtable	C-1	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	C-2	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	C-3	Energy/ Policy	DEP	15%	Low and moderate income households spend a disproportionately large 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 three-year program will first analyze community needs and intervention strategies, and 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. An ECLIPSE Coordinator has been hired and an internal kick-off was held in October.
Climate Smart Communities - Certification & Community Climate Change Task Force	C-4	All	DEP	91%	Through the work of its Green Team, Erie County continues to implement and submit actions to the program through additional funding received from NYSDEC to support the Sustainability Coordinator to pursue Silver Certification. Four additional actions have been submitted through the portal. The Erie County Community Climate Change Task Force (C3TF) 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 continues to meet monthly to discuss pertinent topics/categories that affect climate change. The group has drafted an outline of an Erie County Community Climate Action Plan and is working on a plan for community outreach.
PACE - Property Assessed Clean Energy Financing	C-5	Funding Mechanism	DEP	90%	In February 2019, Erie County passed a local law which would have brought PACE financing to all communities in Erie County with the exception of the 3 cities which are required to pass it separately. Unfortunately, soon after that local law was passed, EnergizeNY was advised by their bond counsel that a new local law would need to be passed to bring a revised version of this program to Erie County. In 2020, Erie County passed the revised local law, and is now entering into an MOU with the Energy Improvement Corporation.

Initiative	Number	Sector	Lead Dept.	% complete	2020 Update
Property Tax Exemptions	C-6	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	C-7	Funding Mechanism	DEP	20%	After PACE and ECLIPSE are established, the County will look into ways to fund a revolving loan fund that might work well with one or both of those two programs.
Community Solar	C-8	Renewable Energy	DEP	15%	The ECLIPSE project specifies a 700 kW community solar program as part of actions to provide affordable green energy to low and moderate income County residents. Additionally, Erie County is working with NYSERDA to help promote their Solar for All program, which allows qualified low-income residents to apply directly to NYSERDA to obtain a bill credit supported by community solar.
Renewable Heating and Cooling	C-9	Renewable Energy	DEP	30%	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 will facilitate low-cost ground and air source heat pump installations, and includes a component focused on low- and moderate-income residents. The project has recently begun and Erie County stands at the ready to help PUSH with this project
Purchasing Renewables through Utilities Aggregation	C-10	Renewable Energy	DPW	30%	The County has continued to investigate methods for acquiring Renewable Energy Credits. The County continues to work with its utility fund consultant to develop a strategy for meeting its renewable energy goals. Also, the ECLIPSE Project (C-3) will investigate 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	C-11	Policy/Renewable Energy	DPW	50%	Through NYSERDA's Charge Ready NY program, the County has added 10 new charging locations throughout the County. These new locations include numerous parks and County-owned golf courses, and ECC campuses. The County is also looking at developing high-speed charging infrastructure.
Carbon Pricing	C-12	Policy	DEP	10%	Erie County is advocating for County representation on the state-wide advisory board for the Climate Leadership and Community Protection Act which will influence such state-wide policies.
Energy Performance Ratings	C-13	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 Initiatives - Erie County Commits to Paris - Additional Partnerships

Initiative	Number	Sector	Lead Dept.	% complete	2020 Update
Intra-County	P-1	All	DEP	65%	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 Evans, 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	P-2	All	DEP/DPW	100%	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. 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	P-3	Transportation	DPW/DEP	85%	As a result of the groundwork that was done to reestablish the Bicycle Pedestrian Committee at the Greater Buffalo Niagara Regional Transportation Council and pursue a regional bicycle plan, the County Departments of Public Works and Environment & Planning are actively participating on the regional bicycle plan committee. The draft of which has been recently released.
Utility Infrastructure	P-4	Energy	DEP	60%	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 programs.
Outreach & Training Partnerships	P-5	All	DEP	85%	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 learning sessions related to solar development and clean streets. The County also worked with the WNY Sustainable Business Roundtable to coordinate workshops related to climate change including the NYS Climate Leadership and Community Protection Act, greenhouse gas inventories and creating a climate action plan.

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

Initiative	Number	Sector	Lead Dept.	% complete	2020 Update
Rideshare Matching	C-1	Transportation	Personnel	60%	The NY511 rideshare program currently has 117 Erie County employees participating. However, rideshare programs have paused due to COVID 19 and will resume when it is safe to do so.
Commuter Outreach Programs	C-2	Transportation	DEP	50%	Education and outreach regarding alternative transportation continued throughout the year. Erie County has been an active participant in the development of the GBNRTC Bike Buffalo Niagara Regional Bicycle Master Plan, which is in the final phase of adoption. 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 in 2021 which may allow for this benefit, and once details are clear DEP will work with Personnel to evaluate this opportunity.
Infrastructure for Alternative Transportation	C-3	Transportation	DPW	50%	Erie County has established 10 charging stations at its Parks and Community College Campuses. There are 2-3 more locations planned for 2021. Research and language around Complete Streets Policy has been initiated.
Preventative Fleet Maintenance Program	F-1	Transportation	DPW	60%	The County continues to replace vehicles through the leasing program, improving fleet fuel economy. Currently approximately 43% of the fleet is part of that program. Additionally, the fleet inventory has been completed, which will help identify older, less efficient vehicles to target.
Reduce Vehicle Idling	F-2	Transportation	DPW	20%	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 AVLS.
High-efficiency and Alternative Fuel Vehicles	F-3	Transportation	DPW	60%	Additionally, the County has added hybrid electric vehicles to the general fleet and four charging stations will be installed for internal use. The Fleet Manager completed a Fleet Inventory of all county vehicles. The inventory will be used along with the efficiency policy, once finalized, to identify less efficient vehicles as well as to track the progress of the County's goals to improve the fleet. Due to COVID-19, DPW does not plan on new leases in 2021.
Fleet Deployment and Monitoring	F-4	Transportation	DPW	45%	DPW is currently able to accurately track vehicles AVL usage and will begin creating a baseline of usage as new vehicles are deployed. This baseline will be used to identify areas of improvement. In late 2019, DPW and DISS rolled out the new on-line fleet reservation system. This system encountered accessibility problems and has been stalled due to COVID-19.
Departmental Waste Plan	W-1	Waste	DEP	15%	Green Team representatives from the Department of Environment and Planning began presenting green initiatives to employees at departmental employee meetings. Similar to the New Hire Orientation, the presentation asked employees to look internally at their own procedures for things that can be made more efficient. DEP presented to Probation, DISS, DEP and the Sheriff. Next steps will be to create a 'report card' to evaluate departmental procedures.
Paper Use Reduction	W-2	Waste	DISS	20%	The paper reduction committee met in early 2019 and discussed starting a new paper reduction contest. It was slated to begin in March. Due to COVID, this program has been stopped. It is anticipated that a new contest could be organized for 2021. Email storage was increased and an improved archive system was implemented.

Initiative	Number	Sector	Lead Dept.	% complete	2020 Update
Construction and Demolition Waste Policy	W-3	Waste	DPW	5%	The Procurement and Waste Committee has discussed this measure, but a policy has not been developed. This action will continue to be discussed at committee meetings in 2021.
Meeting Waste Reduction	W-4	Waste	DEP	10%	Due to COVID-19, meetings and gathering rooms have been restricted to accommodate social distance rules. During the pandemic, the County ran an unplanned telecommuting experiment for more than 3 months from March through June forcing all communications to be done electronically. Virtual meetings have continued as the workforce returned to the office. Any greenhouse gas emission reductions due to telework and virtual meetings will be seen in the 2020 GHG inventory.
Organic Waste Reduction	W-5	Waste	DEP	60%	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.
Building Energy Performance	E-1	Bldgs/Energy	DPW	65%	The County has begun an Energy Performance Contract that is conducting numerous energy saving projects such as upgrading to LED lights, replacing inefficient heating and cooling equipment, adding controls to make equipment more efficient, and improving the building envelope. The project projects a 7% GHG emissions reductions from the project. In addition, the County is reinvesting funds saved from efficiency projects to switch select space and water heating to high-efficiency electric heat pumps.
Energy Efficiency Improvements	E-2	Bldgs/Energy	DPW	75%	The County has begun the construction process of the Energy Performance Contract. More than 100 projects were selected to update lighting and heating equipment, add building envelope improvements and increase equipment efficiency at over 40 buildings throughout the County. Construction will wrap up in 2021 or early 2022.
Renewable Electric Energy	E-3	Bldgs/Energy	DPW	40%	The County is finalizing a 450 kW solar array on County property and is investigating the options for developing a hydropower project. The County has also investigated numerous options from the REV Campus Challenge to working with NYPA to determine the best way to approach 100% renewable energy. The County continues to approach 100% renewable energy through energy conservation, renewable production and REC purchasing.
Landscape Management Guidelines	L-1	Land Management	DPW	30%	This year, Erie County Parks has begun to utilize alternative mowing techniques to return underused areas of parks to more natural/passive settings which in addition to the environmental benefits allow the resources used to manage these previously manicured landscapes to be redirected to other areas of need. The Parks Master Plan recommends three main general categories of mowing reduction treatment: Natural Regeneration, Wildflower/Meadow and Low-Mow Meadow. When fully implemented, the Master Plan recommends a total of 154 acres across six park locations (Akron Falls, Chestnut Ridge, Ellicott Creek, Emery, Como Lake and Wendt Beach) be reverted to one of these techniques which would reduce the mowing of approximately 1,700 acres per season and save as much as 400 gallons of fuel and as many as 280 man-hours annually.
Natural Resource Inventory	L-2	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.

Initiative	Number	Sector	Lead Dept.	% complete	2020 Update
Native Plant Policy	L-3	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.
Green Infrastructure Projects	Wa-1	Water	DEP	20%	This is an ongoing initiative that will be completed on a project by project basis. Recent Green Infrastructure projects have been pursued at County Parks and County Buildings. These projects have been delayed due to the pandemic and uncertainty of state and federal funding.
Water Conservation/Protection Outreach Activities	Wa-2	Water	DEP	ongoing	Although restricted due to COVID-19, education and outreach continued in 2020. Erie County assisted with the 'Story of Plastic' outreach presentation which touched on plastic pollution impact on water quality. The Lake Erie Watershed Protection Alliance, which Erie County participates in, also presented on two green infrastructure projects under construction to prevent stormwater runoff pollution at two beaches in the watershed and assisted the Town of Evans with general public education on the importance of staying off the dunes by developing a brochure and social media posts.
Biosolid Management	S-1	Sewerage Management	DSM	15%	There has been no progress on evaluating alternative biosolids disposal methods. Improvements continue with regard to optimizing biosolids dewatering/stabilization. An evaluation was completed analyzing the use of alternative fuels in the incineration process at the Southtowns Advanced Wastewater Treatment Facility.
GHG Reductions at Recovery Facilities	S-2	Sewerage Management	DSM	65%	Year 2 of the Strategic Energy Management pilot has been completed. Several initiatives have been implemented, with others in progress and NYSERDA's consultant managing this pilot completed the final report. There has been no progress on potential combined heat/power - likely this will be considered when anaerobic digesters are evaluated.
Triple Bottom Line Decision Making Process	S-3	Sewerage Management	DSM	100%	A triple bottom line analysis was developed for evaluating options associated with major upgrades at the Southtowns facility.
Procurement Process	P-1	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 2021 to discuss implementation strategy. In early 2020, the Procurement Committee met with DEPs Office of Agriculture to discuss food procurement in County facilities, with focus on waste reduction and local vendors. This work was stalled due to the pandemic, but will resume this fall.
Funding Mechanism/Policy	P-2	Purchasing	DEP	70%	The 'Paris Fund' was established at the end of 2019 utilizing savings from sustainability projects. This year

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

Initiative	#	Sector	Lead Dept.	% complete	2020 Update
Employee Commuter Programs	C-4	Transportation	DEP	20%	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 in 2021 which may allow for this benefit, and once details are clear DEP will work with Personnel to evaluate this opportunity.
Employee Schedule	C-5	Transportation	Personnel	20%	Due to the COVID-19 pandemic, the County ran an unplanned telecommuting experiment for more than 3 months from March through June. Lessons learned from that period were incorporated into a work from home policy that includes telecommuting, compressed work weeks and flexible work weeks. The policy was announced September 8, 2020. Greenhouse gas emission reductions from these policy changes will be seen in the 2020 GHG inventory.
Promote Walking and Biking	F-5	Transportation	DPW	25%	Erie County Departments of Environment and Planning and Public Works have been an active participant in the development of the GBNRTC Bike Buffalo Niagara Regional Bicycle Master Plan, which is in the final phase of adoption. This regional plan will help inform the County's complete street planning/policy.
Reuse/repurpose underutilized properties	L-5	Land Management	DEP	5%	Erie County is currently scoping the feasibility to add a solar array to the existing brownfield located at 303 Woodward Avenue. DPW and the solar contractor are working with DEC to create a plan that would minimize soil disturbance to the area.
Water Conservation	Wa-3	Water	DPW	25%	Because of the COVID-19 pandemic, Erie County is in the process of upgrading all sinks in County-owned buildings to operate via sensor. It is estimated that this will conserve 6 million gallons water per year.
Erosion and Flooding Control	Wa-4	Water	DEP	on-going	Erie County has been enhancing natural shorelines at its parks. For example, through a partnership with Buffalo Niagara Waterkeeper shoreline improvements have been made at Ellicott Creek Park. Shoreline improvements have also been made on the Buffalo River at the County's Natural Habitat Parks through funding from the federal government. Moreover, Erie County was recently awarded funding from the NYS Department of State to work on assessing streambanks as part of a partnership with Cattaraugus and Chautauqua Counties called the Lake Erie Watershed Protection Alliance.

Acronyms	
AVL	Automatic Vehicle Locator
C3TF	Community Climate Change Task Force
CASP	Climate Action and Sustainability Plan for internal operations
DEP	Department of Environment and Planning
DISS	Division of Information Support and Services
DPW	Department of Public Works
DSM	Department of Sewerage Management
DSS	Department of Social Services
EC	Erie County
ECC	Erie Community College
ECCF	Erie County Correctional Facility
ECLIPSE	Erie County Low Income Program for Sustainable Energy
ECMC	Erie County Medical Center
EMC	Environmental Management Council
EPC	Energy Performance Contract
GBNRTC	Greater Buffalo Niagara Regional Transportation Council
GHG	Greenhouse gas
HD	Heavy Duty
HEAP	Home Energy Assistance Program
IRS	Internal Revenue Service
Kw	Kilowatt
LED	Light Emitting Diode
NFTA	Niagara Frontier Transportation Authority
NRI	Natural Resource Inventory
NYSDEC	New York State Department of Environmental Conservation
NYSERDA	New York State Energy Research and Development Authority
C-PACE	Commercial - Property Assessed Clean Energy
REC	Renewable Energy Certificate
RFP	Request for proposals
SOP	Standard Operating Procedure
SUNY	State University of New York
UB	University at Buffalo
WNYSBR	Western New York Sustainable Business Roundtable
YD	Youth Detention