Erie County CLIMATE ACTION

Annual Update - Review of 2025 Progress

Clean Energy Hub outreach at Paddles Up Niagara

Key Takeaways

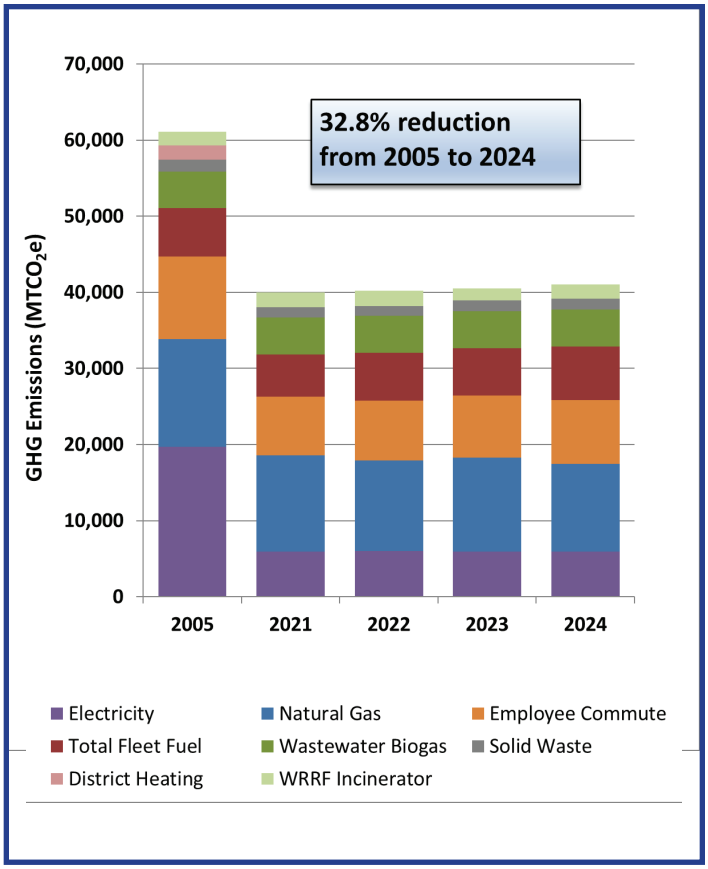
Erie County is dedicated to ensuring a healthy, vibrant future for all residents by safeguarding our shared environment and building community resilience against climate change. In 2025, the County continued implementation of both the Climate Action & Sustainability Plan for internal operations (CASP) and the Community Climate Action Plan (CCAP) that have resulted in significant greenhouse gas (GHG) emission reduction and cost savings through waste reduction and energy conservation projects. Since 2020, this climate action work has had financial benefit in addition to GHG emission reductions, including $7.5 million in cost savings, $1.2 million in awards, $1 million in rebates, and secured $23.6 million in competitive grant awards. Low- and moderate-income ECLIPSE households enrolled in 2025 will save $7.6 million over the life of their community solar projects.

2024 Internal Operations Greenhouse Gas Inventory

In 2024, the County's internal GHG emissions were 32.8% below the 2005 baseline. This was a slight overall increase in emissions relative to 2023, which was primarily driven by a 14% rise in fleet fuel use due to an exceptionally icy winter, requiring unprecedented road salting, and increased consumption by the Sheriff's Office. These increases were partially offset by a 7% reduction in weather-normalized natural gas use, supported by the heat pump conversion at the Board of Elections Building at 134 W. Eagle Street. The 2024 inventory is the most current available GHG emissions data due to standard lags in electric utility generation reporting.

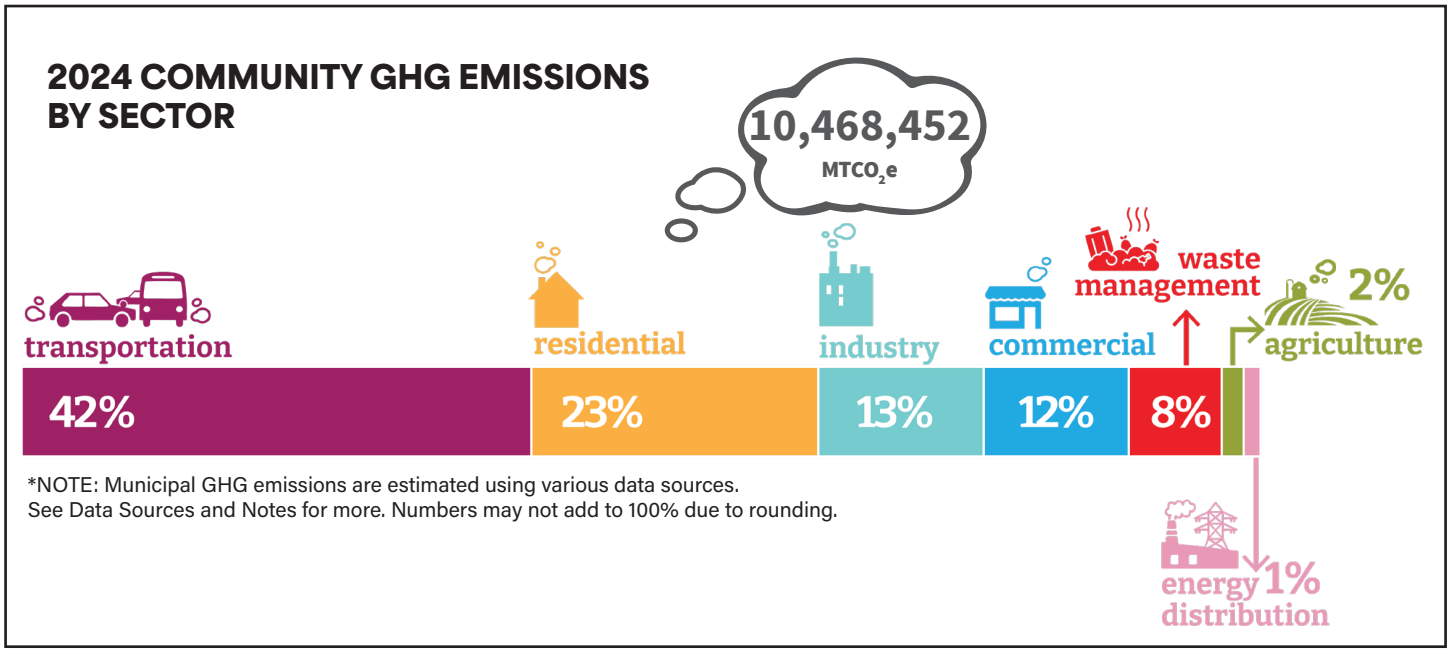
2024 Community Greenhouse Gas Inventory

As part of the One Region Forward initiative, the UB Regional Institute developed a 2024 Community GHG Inventory for Erie County with support from a federal grant. The inventory shows 10.5 million metric tons carbon dioxide equivalent (MTCO2e) total community-wide GHG emissions. The largest emission sector is transportation, followed by residential, industry, commercial, waste management, and agriculture.



Erie County 2025 Internal Operations GHG Emissions by Source

The 2024 inventory shows a 10% reduction from the 2005 baseline, mostly from a reduction in electricity related emissions in the residential, commercial and industrial sectors.



University at Buffalo Regional Institute, State University of New York at Buffalo, School of Architecture and Planning. 2025. "Buffalo Niagara 2025 Regional Greenhouse Gas Inventory: Erie County Local Summary."

2025 Heat Watch campaign

SUMMARY OF CLIMATE ACTION INITIATIVES

Climate Resiliency

Extreme Temperature Plan

Erie County is developing an Extreme Temperature Plan to improve readiness for extreme heat and cold events. Set for release in late 2026, the plan focuses on interdepartmental and stakeholder coordination and the protection of vulnerable populations. As the climate changes, cool-weather communities like Erie County are especially at risk from heat events due to a lack of protective behaviors and infrastructure.

Significant progress has been made through training exercises and a citizen science project designed to inform this plan. The **Extreme Heat Tabletop Exercise** in June represented the first County exercise focused on extreme heat, bringing together 50 participants from 16 agencies and 7 County departments to identify coordination gaps and preparation needs. Additionally, the August 2025 **Heat Watch Campaign** engaged over 50 volunteers to map local heat distribution, providing the data necessary to better prioritize and support populations most at risk during extreme heat events.

Transportation

Electric Vehicles: The County is replacing gas and diesel vehicles with electric alternatives to reduce emissions. In 2025, the Green Team worked with departments to identify vehicles and equipment for electrification initiatives supported by the Climate Action Fund. The Climate Action Fund is also supporting the development of a Fleet Electrification Plan for county operated vehicles. New acquisitions include F150 Lightning trucks for the Sheriff's Office, Sewer Management, and Weights & Measures, alongside electric utility vehicles, e-bikes, and mowers for Parks and the Emergency Medical Services.

Emergency Medical Services EV utility vehicle

Renewable Diesel: In 2025 the Concord Highway District conducted the County's first renewable diesel pilot project, using 3,600 gallons of 'R99' renewable diesel to test heavy-duty trucks and equipment. As a "drop-in" fuel, it required no engine modifications. Studies have shown that renewable diesel, which is primarily made from used cooking oil and inedible animal fats left over from processing meats, results in fewer emissions when compared with petroleum diesel. The pilot was successful and the County is exploring expanding the use of this alternative fuel.

Sustainable Commuting: The County promoted sustainable commuting through training at employee orientations and initiatives developed by the Green Team's Commuter Coalition committee, including guided employee bike rides, and other resources for bicycle, pedestrian, transit, and carpool commuters ***(www.erie.gov/commute)***.

Buildings & Energy

Rath Microgrid: In 2025, the County neared completion on a microgrid project that includes a 2MW natural gas generator, 655 kWh Battery Energy Storage System (BESS), and 80kW solar array for the Rath County Building. This system will fully power the building during outages and will significantly improve the County's ability to serve the community during extreme weather events. The project also includes adding 16 electric vehicle chargers to the building parking garage.

North Creek Pumping Station Backup Power System Replacement: Serving as pilot for the County's 20 smaller pumping stations, the Division of Sewerage Management (DSM) replaced a 40kW diesel backup generator at the North Creek Station with a 150kWh BESS, funded in part by the Climate Action Fund. By transitioning to the BESS, the County minimizes energy waste by powering pumps only as needed, avoiding the 90% energy loss typical of constant-run diesel generators, while eliminating fuel leak risks into the adjacent stream, reducing noise for residents, and greatly lowering operational costs.

DSM pump station battery backup power

Additional Projects: In 2025, Erie County laid the groundwork for three major sustainability projects slated for construction in 2026: the installation of a microgrid system at the Buffalo Convention Center, the construction of a new administrative building at the Botanical Gardens featuring solar arrays and energy-efficient heat pumps, and the addition of a 28,400 square foot green roof at the Central Library.

Board of Elections Building

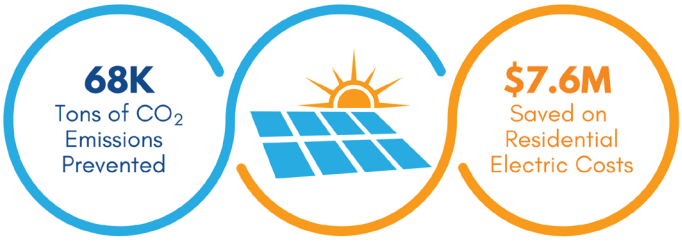
The Board of Elections building has officially transitioned to clean energy. In its first full year, the new heat pump system slashed natural gas consumption, demonstrating that high-impact electrification is affordable and can create a healthier, more comfortable environment for building occupants.

Housing and Neighborhood Resiliency

ECLIPSE Launch

Since its launch in February 2025, the Erie County Low-Income Program for Sustainable Energy (ECLIPSE) has enrolled over 2,300 households, helping income-qualified residents reduce their electric bills while supporting the clean energy transition. Participants receive guaranteed monthly bill credits of up to 10% without the need for equipment installations, upfront fees, or switching utility providers. These savings offer long term stability, remaining in effect for the solar project's lifespan, which is typically 25 years. During this timeframe, the 2025 subscribers are projected to receive $7.6 million in electric cost savings, with the solar projects avoiding 68 thousand MTCO2e (equivalent to using 7.7 million gallons of gasoline).

25-Year Projected Impact of ECLIPSE:



Based on 2025 program enrollment and a 25-yr lifespan of current solar technology

In 2025, ECLIPSE staff participated in over 100 community enrollment events with partner organizations including LiveWell Erie, the City of Buffalo, Independent Health, the WNY Clean Energy Hub, Evergreen Health, and the Buffalo Board of Block Clubs to reach residents where they live, work, and gather.

The WNY Clean Energy Hub

Through a NYSERDA-funded grant to PUSH Buffalo, Erie County is a subcontractor to the WNY Clean Energy Hub. In 2025, the County connected residents with programs that lower energy bills and improve home comfort by participating in 72 events and engaging with more than 4,000 households, including leading 9 Energy Literacy Workshops for over 250 attendees.

Infill Housing for First Time Homebuyers

Erie County is using $13.5 million of its American Rescue Plan Act (ARPA) funding to build 47 houses in existing neighborhoods in the City of Buffalo for low- and moderate-income homebuyers at or below 300% of the Federal Poverty Level. This program is being conducted jointly with the City of Buffalo, which has committed $10 million of their own ARPA funds for homes built in the City of Buffalo. These houses include heat pumps and are 100% electrified (no natural gas service) and capable of supporting EV Chargers and rooftop solar in the future.

This project was also supported by a $1 million grant from Empire State Development to cover the costs of water, sewer, and electric connections. In addition, Erie County has also funded the construction of five houses in the Town of Cheektowaga with ARPA funding, of which three have already been sold. Construction of all homes will be completed by the end of 2026. Belmont Housing Resources is administering the sales of these units, prequalifying candidates, and conducting the lottery system for selecting each house individually.

Consumption & Waste

Waste reduction and management are key ways the County can impact sustainability in our community. Building upon its established household hazardous waste, compost, and recycling programming, Erie County implemented the following initiatives in 2025:

- **Composting:** An organic waste program now diverts food scraps from the Rath County Building and the Erie County Holding Center to the compost site at the Alden Correctional Facility.
- **Municipal Partnerships:** Funded by a NYSDEC grant, the County partnered with the Village of Alden to collect municipal food waste and create an organics management plan. This program is scheduled to expand to four additional municipalities over the next two years.

- **Waste Reduction:** The County hosted a "Dare to Repair Cafe" at Ellicott Creek Park in November 2025. 58 residents brought items to be repaired by volunteers through The Tool Library.

Dare to Repair Cafe

Rain Barrel / Composter Sale

Since 2016, the County's partnership with the Western NY Stormwater Coalition has helped residents turn "waste" into a resource through annual sales of rain barrels and compost bins. In 2025 the program sold 925 rain barrels and 582 compost bins to County residents

- **Rain Barrels:** Capture runoff to prevent pollutants from entering local waterways, conserving water for gardening and cleaning instead of losing it to the sewer system.
- **Composting:** Recycles food and yard waste into nutrient-rich soil, stimulating plant growth while reducing landfill volume and the need for chemical fertilizers.

Economic & Workforce Development

ErieNet: Erie County committed $34 million of American Rescue Plan Funds for the construction of approximately 350 miles of open access high speed middle-mile fiber network connecting every town, village and city in Erie County. The ErieNet "middle mile" fiber backbone makes access for Internet Service Providers (ISP) more affordable to connect to homes and businesses in unserved and under-served areas of the County. ErieNet will connect directly with municipalities and local law enforcement, schools, emergency services, and many libraries, and the ISPs will be responsible for the "final mile" connections to individual homes and businesses. Securing reliable internet connection for these homes and businesses is important for many reasons, but notably because it can assist with reducing GHG emissions by decreasing the need to travel through virtual meetings and incorporating smart technology to conserve energy.

Green Workforce Training: As part of our Community Forestry Partnership Project, The Friends of Silo City implemented three workshops as part of their Career and Technical Education program for high school students from Buffalo Public Schools' Conservation and Horticulture programs. Participants learned best practices for native tree seed collection, propagation, and forest restoration, including species identification, seed handling and storage, nursery production methods, and site-appropriate planting techniques. The workshops emphasized ecological principles, regional restoration strategies, and practical skills that support successful forest habitat establishment. These workshops were designed to support workforce readiness and postsecondary pathways, fostering stewardship and skill development at a critical stage of student growth in Western New York.

Western New York
Sustainable Business Roundtable

WNY Sustainable Business Roundtable:

Erie County continues to partner with the Roundtable, which provides education to businesses on sustainable practices and green workforce development. The Roundtable currently has more than 70 business partners who have signed a pledge to implement these practices in their workplace.

Students visit riparian tree planting at Seneca Bluffs

Nature-Based Solutions

Parks & Community Forestry

Erie County and its partners continue to advance the Community Forestry Partnership Project through tree plantings, educational events, and workforce development. Trees improve air and water quality, reduce flooding, reduce cooling and heating energy needs, increase property values, and improve the quality of life for people and wildlife around them.

Key Accomplishments to Date:

- **Erie County Parks:** 495 trees cultivated in the nursery; 216 planted community-wide.
- **Buffalo Freedom Gardens:** 35 trees planted at the Gail V. Wells Freedom Food Forest (JFK Park).
- **Cornell Cooperative Extension:** 39 trees planted within the project area.
- **Town of Tonawanda:** 100 trees cultivated in the nursery.
- **Engagement:** Partnered with 10 churches via **Monarch of Infinite Possibilities** and reached nearly 700 residents through the **Black Rock Riverside Alliance**.

Agriculture & Food Systems

Agricultural and Farmland Protection Plan

The Agricultural and Farmland Protection Plan was accepted by the Legislature in November 2025 and has a chapter on water resources, environmental protection, and climate resiliency. Goals include supporting programs that fund climate resiliency, best management practices for farms, and educating the public on the County-wide sky lantern ban. The Plan also strengthens long-term sustainability by focusing on protecting farmland and formally supporting urban agriculture, both of which support local food systems, maintain carbon-sequestering open spaces, and prevent the environmental impacts associated with sprawling land use patterns.

Agribusiness Park

The Agribusiness Park in the Town of Evans will help localize Erie County's food supply through the attraction of food processor businesses and the expansion of available markets for local farms. In 2025, work continued on the construction of roads, utilities, and utility facility upgrades, with food processor facility construction anticipated in 2027.

Erie County Climate Action coordinates with Live Well Erie, a broad-based, data-driven initiative involving numerous partners in the public, private, and non-profit sectors collaborating to achieve greater health outcomes and improving the overall quality of life for its residents.

Erie Grown Passport

Created in partnership with the Cornell Cooperative Extension of Erie County and the Erie County Soil and Water Conservation District with support from the Erie County Farm Bureau, the Erie Grown Passport promotes the purchase of local farm products listed on the Erie Grown website by offering participants a chance to win prizes. The website has 150 locations listed and the Passport is now in its seventh year.

Erie County Leadership Across New York State

Clean Energy Communities - *Erie County stands alone as the only major metropolitan community to achieve 5-star status in the NYS Energy Research & Development Authority's Clean Energy Communities program, resulting in almost $1 million in grant awards.*

Climate Smart Communities - *Erie County has been recognized by the NYS Department of Environmental Conservation Climate Smart Communities program as Silver Certified, currently the highest level of the program.*

State-Wide Stewardship - *Erie County leads among peer communities through its co-chairing of the Climate Resilience Committee of the NYS Association of Counties, and leadership roles with the NY Meeting of Sustainability Staff and the NYS Association for Reduction, Reuse and Recycling. These roles foster shared learning and statewide collaboration to drive climate action.*

Major Grant Awards

In 2025, Erie County was awarded more than $9 million in state and federal grants

- **$4 million -** Shoreline stabilization and invasive species management at County Parks
- **$2.375 million -** Battery education and recycling initiatives.
- **$1.88 million -** Safe disposal program for refrigerant containing appliances
- **$767 thousand -** Lake Erie sub-watershed implementation plans
- **$197 thousand -** Compost site improvements at the Alden Correctional Facility