

Municipal Climate Action Plan 2025-26 Progress Update – April 2026

Executive Summary

This report provides an overview of the City’s Municipal Climate Action Plan (CAP) and an annual progress update on the **Plan’s 5 Focus Areas, 18 Objectives, and 96 Recommended Actions. The five Focus Areas include – Buildings and Facilities; Vehicles; Waste; Land Use & Resilience; Implementation.** Staff continue to advance key priorities through infrastructure planning and tracking, pursuing external funding opportunities, developing strategic partnerships, identifying sustainability projects, and improving fleet management practices.

Notable efforts include progress on energy performance contracting, expansion of electric vehicle (EV) infrastructure, participation in energy benchmarking programs, and completion of a comprehensive urban tree canopy inventory. These initiatives collectively support long-term fiscal responsibility, environmental stewardship, and operational efficiency.

Background

In April 2023, the city commission declared its commitment to climate action initiatives and to combat the impact of climate change on our community. The city is committed to reducing the risks of climate change by implementing actions that save money, improve productivity, and lower greenhouse gas (GHG) emissions from city-owned buildings, facilities, vehicles, waste and land.

To support these efforts, a baseline GHG inventory was conducted in 2024 to help inform the development of the CAP. The GHG inventory establishes an understanding of the quantity and sources of GHG emissions generated by city operations. Understanding which facilities are the highest contributors of GHG emissions can inform investments in energy efficiency, renewable energy, and operational improvements to maximize emission reductions.

Adopted by the city commission in June 2025, the CAP serves as a roadmap for achieving net-zero GHG emissions from municipal operations by 2040. Additional information on the CAP can be found [here](#).

The 18 objectives identified within the 5 Focus Areas include –

Buildings & Facilities

- Assess the energy performance of city facilities

- Reduce energy consumption by city facilities
- Reduce water consumption by city facilities
- Maximize renewable energy utilized to power city facilities

Vehicles

- Improve operational efficiency of city vehicle fleet
- Transition fleet vehicles and equipment to the most efficient models
- Enhance Muskegon's appeal as a place for city employees to live and thrive

Waste

- Reduce landfill waste from city facilities
- Reduce landfill waste from events hosted by the city or at city facilities

Land Use & Resiliency

- Increase carbon sequestration potential of city-owned land
- Improve resiliency of city-owned land
- Integrate climate risk considerations into city land use planning and management
- Improve government operations' resilience to the impacts of climate change

Implementation

- Leverage funding for CAP actions
- Build city staff capacity for CAP implementation
- Monitor and evaluate progression of CAP implementation
- Integrate CAP priorities into city operations and procurement
- Integrate climate considerations into the development, review, and implementation of all new city plans and policies

1. Energy Performance Contract (EPC) – Focus Area > Buildings & Facilities

The city entered into an arrangement with Johnson Controls, Inc, (JCI) an energy services provider, to establish an Energy Performance Contract (EPC). This initiative targets improvements to the city's DPW facility and other municipal assets. The goal is to increase energy efficiency, reduce operating costs, and address deferred maintenance through performance-based financing.

An EPC is a financing mechanism where an Energy Service Company (ESCO) installs energy-efficient equipment in a customer's (City) facility and is paid for the cost of the project with a portion of the energy savings generated. The ESCO guarantees a level of energy savings over a specific period, and the customer (city) pays for the project through those savings, often without upfront capital expenditures. The city and JCI split the savings generated by the energy-efficient equipment, and the city's portion would be available to defray the costs of a project(s).

JCI is performing a detailed energy audit, and based on those results and anticipated cost savings, will recommend specific projects for consideration by the Commission. One potential project includes preparing for the replacement of all residential water meters in the city (that have not already been replaced), which is anticipated to increase water system revenue by several percent due to reduced meter errors.

2. Building Energy Benchmarking – Focus Area > Buildings and Facilities

The city has entered into a one-year agreement with the Michigan Green Building Collaborative (MiGBC) to provide automated building energy benchmarking services, through ENERGY STAR Portfolio Manager, for the Water Filtration Plant, City Hall, and Public Works building.

A key strategy within the CAP is improving how the city tracks and manages energy use across municipal buildings. MiGBC will establish and manage the city's ENERGY STAR Portfolio Manager account and automate the upload of utility data from Consumers Energy and DTE for participating city facilities. This creates a consistent, data-driven way to understand building energy performance and associated GHG emissions without requiring significant ongoing staff time for data entry and tracking. MiGBC will prepare an annual report at the end of the calendar year summarizing energy consumption trends, key findings, and recommendations. Staff is currently working with the MiGBC to develop a schedule of uploading new data to the Energy Star Portfolio Manager.

This program will enhance the city's ability to monitor energy usage, identify inefficiencies, and support data-driven decision-making with goal of achieving net-zero municipal emissions by 2040. MiGBC has begun uploading new utility data consumption from these three facilities to the Energy Star Portfolio Manager account.

3. Grant Funding and External Resources – Focus Area > Implementation

City staff meets quarterly with our grants management services contractor, Wade Trim, Inc, to review and identify potential state and federal funding opportunities that can support implementation of key near-term action items. Near-term priority projects include:

- Roof replacement at City Hall and Central Fire Station
- Electric Vehicle charging stations

These efforts are focused on leveraging external funding sources to minimize impacts on the City's general fund and capital budgets.

4. Climate Action Plan (CAP) Implementation – Focus Area > Implementation

City staff meets internally on a quarterly basis to review progress and coordinate implementation of the Climate Action Plan. These regular reviews ensure alignment with established sustainability goals and provide accountability for ongoing initiatives.

5. EGLE Community Energy Management Grant – Focus Area > Vehicles

Of the original \$75,000 EGLE-Community Energy Management (CEM) grant, for the development of the CAP, approximately \$16,000 remains. These funds will be reoriented for the refurbishment and installation of additional electric vehicle (EV) charging stations in the downtown area and at the beach.

6. Electric Vehicle (EV) charging station installations and fees – Focus Area > Vehicles

As stated above, remaining grant funding and Consumers Energy rebates will be used install new and replacement EV charging stations at multiple locations in the city.

In 2020, three electric vehicle (EV) charging stations were installed on Western Ave near 7th Street, 1st Street near Western Ave, and at Pere Marquette near the crosswalk. These stations have now exceeded their life expectancy, and some chargers are no longer functioning. The cost to repair the existing units exceeded the cost of full replacement. The city has been able to secure eight new charging stations. Three stations will replace the existing units, with one additional station added at Pere Marquette. Two new stations will be installed in the parking lot at Third Street and Morris Avenue, and two additional stations will be located on Webster Avenue near 3rd Street. Each charging station includes two plugs/ports, bringing the total number of cars able to be charged within the city at a given time to 16, four at the beach and 12 downtown.

To date, charging has been offered free of charge to users. As a result, the city has absorbed all associated costs, including utilities, software, maintenance, and replacement. The utility cost averages approximately \$0.18 per kWh, and the software cost for the new stations is \$0.05 per kWh. Maintenance and replacement costs are variable.

In addition to recovering expenses per kWh, the commission approved implementing an idle fee for vehicles that remain plugged in but are no longer actively charging. In 2025, there were 272 sessions in which vehicles remained plugged in for more than four hours without charging, including 78 sessions exceeding 12 hours. An idle fee is intended to encourage turnover and improve access for other users. Revenue generated from this fee would also help offset long-term replacement costs.

Competitive pricing in communities similar to Muskegon ranges from \$0.25 to \$0.35 per kWh. The charging rate is now \$0.30 per kWh with a \$6 per hour idle fee for vehicles plugged in and not charging. The new fee structure would generate approximately \$25,000 annually. This revenue would cover utility and software expenses and provide an estimated \$10,000 per year to support maintenance and future replacement costs.

7. Urban Tree Canopy Inventory – Focus Area > Land Use & Resiliency

Staff have completed a comprehensive Urban Tree Canopy Inventory. Key findings include:

- A total of 14,140 trees were identified citywide. Estimated cumulative benefits over 20 years are valued at \$3,286,584.58
- Carbon dioxide uptake - \$1,978,552.03 in value; 9,144,560.55 pounds of carbon captured preventing it from contributing to global warming.
- Storm water mitigation - \$599,784.33 in value
 - Runoff avoided 67,119,987.38 gallons
 - Rainfall intercepted 372,818,791.06 pounds
- Air pollution removal - \$708,248.22 in value
 - Carbon monoxide 56,081.29 ounces; Ozone 3,221,199.88 ounces

As a note, the economic significance of carbon dioxide, storm water mitigation, or air pollution removal is measured by the monetary value of damages avoided by keeping pollutants out of the atmosphere. This analysis underscores the environmental, economic, and community value of the city's urban forest and provides a foundation for future planning and preservation efforts.

8. City earns 2025 Tree City USA, Growth Award – Focus Area > Land Use & Resiliency

The Arbor Day Foundation named the City of Muskegon a 2025 Tree City USA in honor of its commitment to plant, grow, and maintain trees to benefit its community. The city also received a Growth Award for demonstrating improved levels of tree care and community engagement. This program recognizes cities and towns that leverage urban forestry to enhance the livability and sustainability of their local area. The city has earned this recognition from 1999-2017 and 2019-2025. The city has also earned the Growth Award in 2000 and 2022-2025. More information about this recognition can be found [here](#).

9. MSU grant to develop self-sustaining source of new trees – Focus Area > Land Use & Resiliency

Staff received a **grant from Michigan State University to help offset the expense of purchasing tree plantings for use around the city**. Grant funds will be used to establish a self-sustaining source of new trees by developing tree root bulbs in pee gravel. A small area at the former Farmers Market is being used to cultivate these tree plantings.

10. Fleet and Asset Management – Focus Area > Vehicles

Staff are actively evaluating capital improvement needs, including development of a vehicle replacement schedule to guide long-term fleet management, and acquiring hybrid vehicles where possible to reduce fuel consumption. This effort is intended to optimize lifecycle costs, improve reliability, and ensure continuity of municipal operations.

11. U.S. Dept of Energy – Energy Efficiency and Conservation Block Grant (EECBG) – Focus Area > Vehicles

In 2023, received block grant funding from the U.S. Dept of Energy (USDOE) in the amount of \$76,450. The reimbursement grant was designed to help implement strategies to reduce energy use, reduce fossil fuel emissions, and improve energy efficiency. The city used the funds to purchase two Polaris Ranger XP Kinetic EV side-by-side utility vehicles for use by the Parks Department at a cost of approximately \$90,000. In 2024, the new federal administration, specifically the USDOE, has been reviewing these and other climate-related programs. To-date, the city has not been reimbursed for the amount of the grant. Staff continues to inquire to the USDOE as to when this review will be completed.

12. Police Department Field Training Officer (FTO) manuals – Focus Area > Waste

The Police Department has transitioned away from using paper Field Training Manuals and is now using digital versions of this information when conducting training sessions. This is expected to reduce the cost of hard copies and improves the portability of this information.

13. County-wide Recycling Center – Focus Area – Waste

Earlier this year the County applied for a grant through EGLE to establish a county-wide recycling center to fill a much needed gap in our area. The County applied for up to \$500,000 to establish the center at the Solid Waste facility. If awarded, the county would purchase two compactors for plastic and cardboard. The project would take place in 2027. The grant would request funds to add recycling compactors for city residents. City would look make 24/7 recycling drop-off space with compactors for plastic and cardboard at DPW. DPW already is the county-wide drop off for household hazardous waste and the site for two annual county events.

Conclusion

The City of Muskegon continues to make steady progress across multiple strategic priorities, including infrastructure investment, sustainability initiatives, and the pursuit of external funding. These efforts position the city to enhance service delivery, improve operational efficiency, and advance long-term environmental goals while maintaining fiscal responsibility.

What's Next for Climate Action

- Development of a public interactive progress dashboard
- Identifying strategic priorities within the CAP
- Identifying grant resources to offset the expense of implementing CAP Action Items
- Stay engaged at: mkgcity.com/cap