

July 2022 Progress Update and FY 2023 Outlook

The Mayor and Council adopted Rockville’s first Climate Action Plan (CAP) on January 10, 2022. In the 6 months since adoption, the City has redoubled its efforts to equitably reduce greenhouse gases, strengthen resiliency, and develop a framework to oversee and monitor progress. The FY 2023 budget includes more than \$4.2 million to support new or expanded initiatives involving flood mitigation, electric vehicle infrastructure expansion, LED streetlight conversion, storm drain analysis and spot repairs, residential food waste composting drop-off pilot program, and energy efficiency and renewable energy projects. These plans, programs, and projects are investments in Rockville’s future.

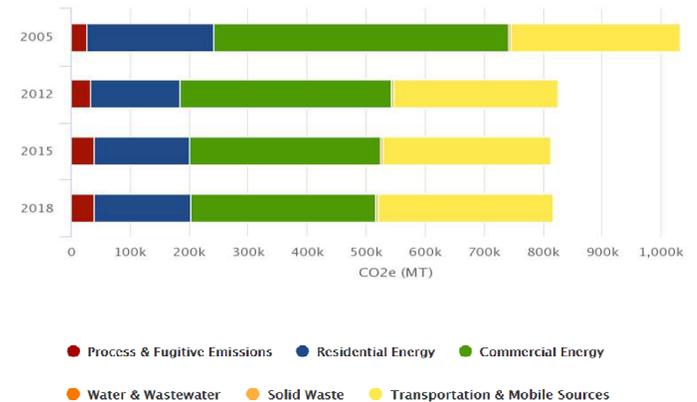
The Climate Action Plan describes 42 actions that involve working with partners and engaging the community to achieve actions in the seven categories shown below. The City’s greenhouse gas emissions goal is to reduce community and municipal government emissions by at least 50 percent below 2005 levels by 2030 and carbon neutrality by mid-century. In accordance with CAP Action C-26, which describes how the City will track and report progress to leadership and the public, the July 2022 Progress Update summarizes key action status updates and planned FY 2023 tasks. Learn more: <http://www.rockvillemd.gov/climate>

7 Categories, 42 Actions

 <p>Energy Efficiency (9 actions) Increase energy conservation and efficiency and reduce fossil fuel use in all existing and new buildings and infrastructure.</p>	 <p>Renewable Energy (5 actions) Increase the generation, use and access to affordable, reliable and clean energy systems.</p>	 <p>Transportation (9 actions) Expand safe, efficient, affordable, and equitable multi-model transportation options that utilize clean and efficient energy sources.</p>
 <p>Land Management (3 actions) Maximize the economic and social benefits of land while maintaining or enhancing natural systems and ecological health to ensure resiliency.</p>	 <p>Materials and Waste (3 actions) Manage solid waste by reducing, reusing, recycling, composting, and sustainable purchasing.</p>	 <p>Resiliency (9 actions) Improve the capacity of our community, homes, businesses, and natural environment to prevent, withstand, respond to, and recover from climate change impacts such as rising temperatures, more frequent and intense heat waves, heavy rainfall and severe storms.</p>
 <p>Public Education and Oversight (4 actions) Conduct inclusive and equitable public engagement and involvement and establish systems for monitoring and accountability to encourage participation and support plan success.</p>		

Rockville Greenhouse Gas Emissions Trends
 COMMUNITY GREENHOUSE GAS INVENTORY *

Rockville's community-wide greenhouse gas (GHG) emissions decreased by 21% between 2005 and 2018. An updated inventory with 2020 emissions is anticipated later in 2022.



*Source: Metropolitan Washington Council of Governments. Estimates based on ClearPath, an online greenhouse gas inventory tool. ClearPath is a product of ICLEI - Local Governments for Sustainability.

Rockville Climate Action Plan July 2022 Progress Update and FY 2023 Outlook

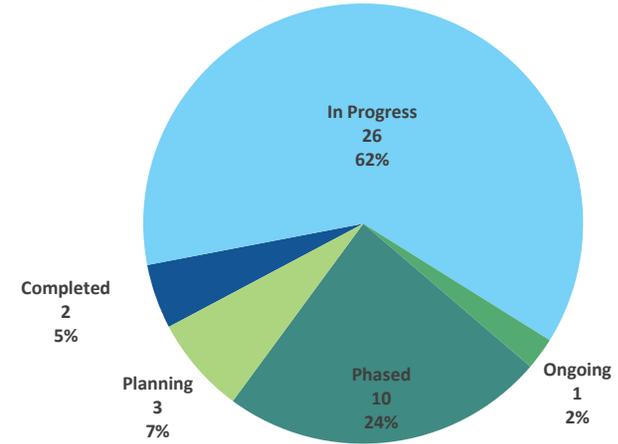
Highlights of Completed Tasks

- ☑ Adopted Climate Action Plan and Clean Fleet resolution on January 10, 2022
- ☑ FY2023 budget includes more than \$4.2 million for climate actions
- ☑ Montgomery County adopted Building Energy Performance Standards (C-01)
- ☑ Opted into Montgomery County's point of sale home energy disclosure law (C-04)
- ☑ Supported 1,000 EV Co-op pledges and 337 Solar Co-op members (C-09, C-13)
- ☑ Distributed 300 native trees and 348 packets of wildflower seeds (C-17)
- ☑ Weed Warriors engaged 656 volunteers to remove non-native invasive plants from parks (C-17)
- ☑ Converted 325 City Hall lights to LED with support from Maryland Energy Administration (M-01)
- ☑ Completed City Hall building energy tuneup (M-01)

FY 2023 Work Plan Highlights

- ❑ Hire Sustainability Program Manager to support CAP (M-01, M-04, M-05, M-06, M-07, M-11, C-26)
- ❑ Initiate updates of the building code and zoning ordinance (C-03, C-16)
- ❑ Develop Rockville EV Readiness Plan and start Fleet Charging Infrastructure CIP (C-11, M-06, M-07)
- ❑ Expand low-to-moderate income home energy program through partnerships (C-02)
- ❑ Draft Pedestrian Master Plan (C-15)
- ❑ Launch pilot food waste compost drop-off and education program (C-18)
- ❑ Launch Flood Mitigation Assistance pilot program (C-20)
- ❑ Initiate first phase of LED streetlight conversion CIP (M-02)
- ❑ Complete second phase of City Hall energy efficiency upgrades (M-01)
- ❑ Plan first solar installation at a City facility (M-04)
- ❑ Initiate Flood Resiliency Master Plan CIP (M-13)

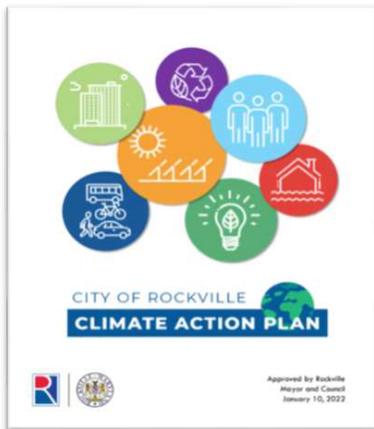
Overall Action Status*



***Status Definitions**

(Status, # of Actions, % of Total Actions)

- Completed:** Action is completed, no further action required by City.
- Ongoing:** Action is initiated and requires ongoing support.
- In Progress:** Action is initiated but not complete.
- Phased:** Action is initiated but needs further resources for expansion to meet action goals.
- Planning:** Action requires further planning for resource allocation and implementation.



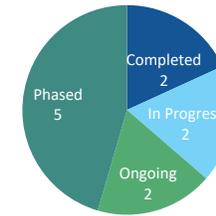
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Energy Efficiency

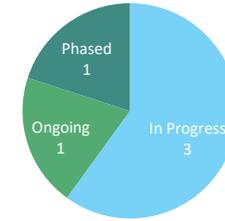
Energy Efficiency
 Action Status



Action ID	Action	Status	Completed Tasks	Future Tasks
C-01	Advocate for Montgomery County to adopt a Building Energy Performance Standard (BEPS) for existing commercial and multifamily buildings	Completed	2020: City staff participated in BEPs stakeholder workgroup. 2021: County briefed Rockville Environment Commission on BEPS and proposed BEPS legislation. 2022: Montgomery County signed Bill 16-21 into law to amend the County's Building Energy Use Benchmarking Law to include certain Building Energy Performance Standards (BEPS).	Track county and state regulations to be issued by Dec. 31, 2023. Plan for expanded City facility benchmarking and energy strategies to meet compliance deadlines (see Action M-1)
C-02	Expand low and moderate income (LMI) home repair and weatherization program to increase energy efficiency, resiliency, and renewable energy opportunities	Phased	Partnered with Building Change, Inc. to connect residents with MEA grant funded weatherization services. During FY 2019 and FY 2020, a total of 23 low-to-moderate income Rockville households were able to receive energy-efficiency upgrades to rehabilitate their homes and decrease energy bills through Building Change's work.	MEA awarded non-profits Building Change Inc. and Habitat for Humanity Metro Maryland grants to serve central MD. Building Change was awarded funding for solar installations as well. The City will refer residents and Rockville Housing Enterprises to these non-profits to access free energy audits, home upgrades and solar conversions. Habitat for Humanity will assess 14 RHE homes for eligibility in FY 2023. The city will research program needs for FY 2024 budget proposal to increase program reach.
C-03	Progressively strengthen green/energy efficiency building codes for new construction to reach net zero or equivalent	Phased	Supported Climate Solutions Now Act of Maryland. Monitored Maryland's Building Performance Standards and Maryland Performance Code 2021.	The 2021 codes are under review at the State level. Following the adoption of State codes, the City will work with stakeholders to update building codes.
C-04	Opt into Montgomery County's point of sale energy disclosure (Chapter 40, Real Property, Section 40-13B)	Completed	On July 18, 2022, the Mayor and Council adopted an ordinance to opt into Montgomery County's point of sale radon testing and home energy disclosure requirements.	Ordinance goes into effect on January 1, 2023.
C-05	Expand home energy efficiency outreach program to increase participation in utility energy audits and utility rebates	Phased	Promoted Montgomery County Energy Connection and hosted Climate Solutions virtual session on net zero homes.	Continuing outreach through FY23 Climate Solutions lecture series and Montgomery County Energy Connection.
C-06	Coordinate with Montgomery County on electrification incentives for existing buildings	Phased	Montgomery County's FY 2023 budget includes a new \$1 million program incentivizing residential, multifamily, and commercial buildings to replace fossil fuel equipment and appliances with electric ones.	Coordinate with Montgomery County on electrification programs.
M-01	Complete energy assessments of city facilities and develop a strategic plan to reduce facility energy consumption	Phased	2021: City Hall energy audit and energy optimization completed. 2022: Completed LED lighting upgrades on the second floor of City Hall with MEA grant.	Implement the next phase of City Hall energy efficiency upgrades (1st/3rd floor lighting, window film, thermostat controls) with funding from \$106,700 from ARPA, \$55,000 Maryland Energy Administration (MEA) grant and Pepco rebates.
M-02	Convert City-owned streetlights to energy efficient LED (light-emitting diode) (CIP TA22)	In Progress	MEA consultant completed assessment of LED streetlight conversions. FY23 budget funds phase one conversions.	Implement first phase of the LED Streetlight Conversion CIP (TA22) (\$1 million). \$449,750 will be reimbursed through a MEA grant awarded in June 2022.
M-03	Advocate for a Pepco-owned streetlight LED conversion agreement that serves the public interest	In Progress	Mayor and Council submitted comments to the Maryland Public Service Commission 5/2021.	Track Pepco proposed plans and PSC actions.



Renewable Energy
 Action Status



Renewable Energy

Action ID	Action	Status	Completed Tasks	Future Tasks
C-07	Advocate to increase the Maryland Renewable Portfolio Standard(RPS) by 2030	In Progress	2019: Advocated for Maryland's 50% RPS 2021: Advocated for Climate Solutions Now Act of 2021 2022: Advocated for Climate Solutions Now Act of 2022, which was enacted into law on April 9, 2022.	Monitor legislation in Maryland general assembly and Public Service Commission.
C-08	Coordinate with Montgomery County on development of the Community Choice Energy (CCE) Program to aggregate green power purchasing	In Progress	2021: Advocated for Community Choice Energy Act	Montgomery County is participating in Maryland Public Service Commission (PSC) workgroup to develop the regulatory framework for the program.
C-09	Promote private solar and geothermal installations (e.g., solar co-op, streamlined permitting, including expanding access for low-to-moderate income (LMI) residents)	Phased	2021: The inaugural Capital Area Solar Coop concluded in August 2021 with 235 signed contracts to install 2.1 MW of solar PV capacity on single-family homes in the region (26 of those are in Rockville). The Mayor and Council reduced solar permit fees and streamlined the permitting process.	Promote Capital Area Solar Co-op including new Montgomery County Green Bank Access Solar LMI financing program. The non-profit, Building Change Inc., received funding from MEA's pilot Low Income Solar Grants Program to serve low-to-moderate income households that participated in the energy efficiency program in central Maryland (see action C-2). The City plans to engage with eligible residents to promote this opportunity and explore other MEA LMI solar grant opportunities for RHE properties after energy efficiency work is completed. Following the adoption of State building codes, the City will work with stakeholders to update building codes (including solar requirements).
M-04	Identify and implement feasible opportunities for solar photovoltaic installations on City property	In Progress	Awarded MEA technical grant to evaluate solar/microgrid feasibility for 6 Taft Court and adjacent properties.	Review MEA solar/microgrid feasibility study for 6 Taft Court, the Rothgeb Maintenance Facility and City Hall and evaluate opportunities through a Solar Power Purchase Agreement.
M-05	Purchase renewable energy certificates (RECs) for municipal electricity	Ongoing	Montgomery County led a coalition of Montgomery County Agencies and municipalities to cooperatively purchase RECs. Elevated pricing required the County to explore alternatives to meet Tier One Renewable Energy Credits.	Coordinate with Montgomery County on FY 2023 RECs purchase that will offset 40% of municipal electricity consumption.



Transportation

Action ID	Action	Status	Completed Tasks	Future Tasks
C-10	Work with WMATA, MDOT, and Montgomery County to maximize transit accessibility and ridership and enhance mobility options	In Progress	DPW staff identified and prioritized sidewalk gaps near bus stops for feasibility studies and construction in FY23.	Continue to coordinate with developer and MCDOT on Pink Line in Phase I of Great Seneca Transit Network along Shady Grove Road. Coordinate with MCDOT and MDOT on 355 Bus Rapid Transit. DPW staff continue to update and upgrade bus stops throughout the City as part of an ongoing CIP project.
C-11	Develop a Rockville Electric Vehicle (EV) Readiness Plan	In Progress	The M&C approved up to \$100,000 in FY 2022 tax duplication funds to develop the plan. Established MOU with COG to provide EV planning services.	Coordinate with COG on regional EV plan and develop Rockville EV Readiness Plan to maximize grant eligibility and facilitate EV adoption. Initial briefing with Environment and the Traffic & Transportation Commissions July 28. Track implementation funding opportunities.
C-12	Require new developments and redevelopments to be electric vehicle-ready	Planning	Participated in Sustainable Maryland EV Readiness Cohort workshops on EV webpages and policies 2021-2022.	Following the adoption of State codes, the City will work with stakeholders to update building codes (including EV readiness requirements).
C-13	Promote a regional electric vehicle purchasing cooperative (EVPC)	In Progress	Promoted and hosted City booth at the 3/2022 "Go Electric" electrification event. The pilot reached the goal of 1,000 pledges.	Continue to promote the next phases of the Montgomery County EV Purchasing Co-op and cross-promote electrification events.
C-14	Expand active transportation and shared micro-mobility network by implementing improvements in the Bicycle Master Plan and Vision Zero Plan	In Progress	The FY 2023 budget includes more than \$8.4 million for bicycle, pedestrian, and safety projects.	Continue implementing bicycle, pedestrian, and safety projects, as indicated in the FY 2023 budget.
C-15	Adopt a Pedestrian Master Plan	In Progress	Survey posted online to gather public input.	Finalize Pedestrian Master Plan.
M-06	Convert the city fleet to cleaner and more efficient fuel sources	In Progress	Fleet now includes 1 hybrid electric, 1 battery electric, 2 charging stations. Completed MEA grant supported fleet study in 2021. Adopted Clean Fleet Resolution in January 2022. Updated fuel system to better track performance.	Implement clean fleet policy and EV replacements of light duty vehicles. The city is planning to lease approximately 13 electric sedan/light duty pickup trucks/SUVs in FY 2023; however, this may be subject to change given the the current unpredictable nature of the vehicle market. See also M-07.
M-07	Create a new Capital Improvement Project to expand electric vehicle charging infrastructure on City property to serve employees, fleet and the community	In Progress	FY 2023 budget includes \$792,500 for Electric Vehicle Infrastructure CIP (GA23).	Hire the Sustainability Program Manager to oversee CIP, track grant funding, and plan EV charging infrastructure to align with vehicle replacement cycle.
M-08	Update City teleworking and transit benefit policies to encourage City employees to reduce vehicle miles traveled (VMT)	In Progress	2021: Updated City telework policy and request form.	Explore transit benefit options. Survey employees on electric vehicle charging needs.

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Land Management

Land Management
 Action Status



Action ID	Action	Status	Completed Tasks	Future Tasks
C-16	Implement Comprehensive Plan to steer the most-dense development/redevelopment to mixed-use, transit-served locations to reduce VMT and conserve/restore environmental areas	In Progress	On August 2, 2021, the Mayor and Council adopted Rockville’s new Comprehensive Plan. The FY 2023 budget includes \$300,000 in funding for a two year consultant engagement to assist with a Zoning Ordinance update. Seven mixed-use or compact residential developments located near existing or planned community nodes moved forward in the development pipeline in FY22.	Advance community node developments. Incorporate climate change in the Zoning Ordinance update and Small Area Plans. See also Comprehensive Plan Implementation Table.
C-17	Expand education and incentives to support tree planting and maintenance, environmentally friendly landscape conversions, and management of non-native invasive plants on private property	Phased	The FY 2023 budget increased the Rainscapes Rewards by \$10,000 to meet increased demand. Purchased 400 wildflower seed packets to distribute to residents.	Oversee annual Rainscapes Rewards, tree give-away and Weed Warrior volunteer programs. Continue to promote environmental landscaping in the Environment & Sustainability Newsletter and Climate Solutions talks.
M-09	Develop a Green Space Management Plan for public lands to assess and restore trees, forests, meadows, stream valleys and wetlands	Planning	In FY 2022, the Rockville Weed Warrior Program engaged 656 volunteers in over 35 public workdays to remove non-native invasive plants from Rockville parks.	Participate in County Nature-Based Climate Solutions workgroup. Coordinate interdepartmental discussion of plan options and scope.

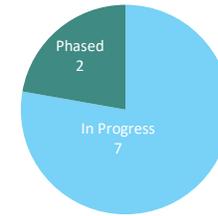


Materials and Waste
 Action Status



Materials and Waste

Action ID	Action	Status	Completed Tasks	Future Tasks
C-18	Develop a food waste composting program for residents	In Progress	The adopted FY 2023 Budget includes to \$23,500 to launch a pilot food waste drop off station.	Launch the City's first food waste composting drop-off center and provide education and outreach.
C-19	Expand recycling and waste reduction outreach program to increase recycling compliance and waste diversion	In Progress	Awarded new 5-year recycling processing contracts and updated recycling outreach materials.	Distribute new multilingual recycling education materials.
M-10	Develop a City sustainable procurement policy	Planning	City's current policy supports developing a sustainable procurement policy.	Host a meeting with the Environment Commission and Procurement to discuss opportunities and barriers.



 **Resiliency**

Action ID	Action	Status	Completed Tasks	Future Tasks
C-20	Incorporate climate resilient building and infrastructure design features in new buildings and retrofits	In Progress	2021: Received 45 responses to Hurricane Ida flood impact survey. Launched a Flood Relief Program offering compensation for flood damage and the reimbursement of insurance deductible payments associated with the impacts from the September 1, 2021, extreme rain event. Received 26 claims. The FY 2023 budgets includes \$300,000 for a pilot Flood Mitigation Assistance Program to provide education and incentives to floodproof homes.	Launch Flood Mitigation Assistance pilot program. Consider flood resiliency measures in the building code update.
C-21	Partner with Federal Emergency Management Agency (FEMA) to update the Flood Insurance Rate Maps (100-year Floodplain Maps) used to implement the National Flood Insurance Program (NFIP)	In Progress	Reviewed and commented on draft Flood Insurance Rate maps.	Coordinate with FEMA and Montgomery County on map updates. Update floodplain webpages and implement a communication plan when new maps are released.
C-22	Work with Montgomery County and state agencies to provide cooling centers, resilience hubs, and other services to strengthen community resiliency	Phased	Community Centers serve as cooling centers as needed. MEA provided a technical consultant to evaluate microgrid feasibility at 6 Taft Court and Rothgeb Maintenance Facility.	Work with solar power purchase agreement contractor to evaluate solar/microgrid feasibility at 6 Taft Court and the Rothgeb Maintenance Facility.
C-23	Work with Montgomery County and community partners to measure and map urban heat islands to mitigate exposure to extreme heat	In Progress	The County was awarded a NOAA urban heat mapping grant. The City shared a letter to partner in this effort.	Promote participation in Montgomery County's Urban Heat Mapping even in August 2022 and monitor progress.
C-24	Increase tree planting, green, cool and photovoltaic roofs, and cool pavements on public and private property	Phased	See C-17 and C-09. The city implemented a green roof project on the Police Station building.	Evaluate opportunities for cool roofs and cool pavements in next building code updates and future City facility and street upgrades.
M-11	Continue assessing the vulnerability of Rockville's critical infrastructure, facilities and services, and prioritize areas for improved climate resiliency	In Progress	The FY 2023 Budget includes \$180,000 for consulting support to update the City's Emergency Operations Plan (EOP) and Continuity of Operations Plan (COOP).	Initiate COOP and EOP planning efforts. Coordinate with Montgomery County OEMHS to integrate climate change during the next update to the county's Hazard Mitigation Plan in 2023. OEMHS is researching the next round of state Hazard Mitigation Grants to support its plan update.
M-12	Advocate for state and federal authorities to update stormwater infrastructure design, operations and maintenance standards to accommodate new rainfall/ storm event projections and help reduce projected flooding issues	In Progress	Monitored the Maryland Department of the Environment (MDE) for updates on the standard review process.	Continue to monitor the MDE's work on updating standards.
M-13	Assess Rockville's risk of flooding and develop a Flood Resiliency Master Plan to reduce or mitigate flooding impacts	In Progress	The FY2023 Budget includes \$1.5 million to develop a Flood Resiliency Master Plan (SA23), \$200,000 for the Storm Drain Analysis and Spot Repair: Potomac Woods (SB23), and \$450,000 for Stream Restoration Spot Repairs: FY21-FY25 (SB21).	Implement repairs. City staff is working with the U.S. Army Corp of Engineers (USACE) Planning Assistance to States (PAS) program to access a federal cost share of 50% to develop the Master Plan.
M-14	Develop and implement Heat Illness Prevention Plans for various City services and operations	In Progress	2021: Developed and implemented the Heat Illness Prevention Plan for Refuse and Recycling team	Coordinate with other divisions to evaluate if other plans are needed.

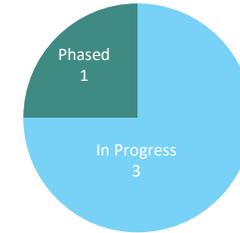
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Public Engagement and Oversight

Public Engagement and Oversight
 Action Status



Action ID	Action	Status	Completed Tasks	Future Tasks
C-25	Work with community partners to conduct an inclusive public engagement campaign to reduce emissions and adapt to the impacts from climate change	Phased	2022: Launched the Climate Solutions Speaker Series. 135 people attended the three virtual presentations on organic lawn care, sustainable home gardening, and a net zero energy home. Partnered with Montgomery County on solar co-op, EV co-op, and electrification public engagement campaigns. Environment Commission is conducting in-person outreach at the Farmer's Markets.	Continue and expand outreach campaigns. Incorporate more languages in outreach materials. Work with the new Diversity, Equity, and Inclusion staff and Public Information and Community Engagement on additional public engagement strategies to involve underserved communities. See also C-03.
C-26	Develop metrics and performance indicators for climate actions to establish a data-driven assessment and reporting process	In Progress	Rockville is embarking on a city-wide Performance Measurement Initiative to evaluate our current performance measures and help transform them into more meaningful metrics for the organization. The City tracks several CAP-related metrics internally and through COG.	Coordinate with the Performance Measurement consultant to include CAP actions in the assessment and identify system and program level metrics for future reports. Explore dashboard or other communication formats to report progress.
M-15	Incorporate climate mitigation and resiliency considerations into the City's budget prioritization process	In Progress	Environmental sustainability and the Climate Action Plan were featured as a budget priority in the FY 2023 budget. Included in the Department of Public Works is a new Sustainability Program Manager position that will be responsible for implementing and managing the various citywide initiatives recommended by the CAP. The FY 2023 budget includes \$4.2 million for flood mitigation, electric vehicle infrastructure, LED streetlight conversion, and storm drain analysis and spot repairs.	Continue to prioritize CAP measures in the FY 2024 budget process and incorporate CAP performance measures. Continue to track Infrastructure, Investment, and Jobs Act to fund climate priorities.
M-16	Develop an interdepartmental climate action team to implement and track progress	In Progress	Participate in Montgomery County Climate Leadership, MWCOG CEEPC, and the Maryland Coalition of Counties and Cities for Climate Action	EMD to contact potential partners in each department for CAP implementation.