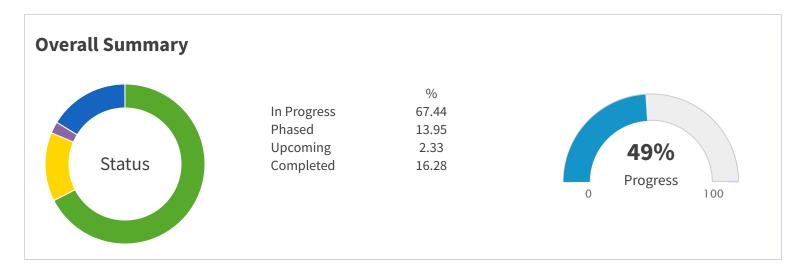


# **2023 Annual Report**

# **Climate Action Plan**

Report Created On: Apr 09, 2024

3	9	43
Goal	Category	Action



The legend below explains the various status and progress indicators using a color-coding system.

- Completed: Action is completed or institutionalized.
- In Progress: Action is on track and expected to be completed on time.
- Phased: Action is initiated but needs additional resources to meet goals.
- Upcoming: Action is planned for upcoming implementation.
- Disruption: Action has disruption that is preventing progress or causing a delay.
- Status Pending: Action update has not yet been provided.

## Background

The Mayor and Council adopted Rockville's first Climate Action Plan (CAP) on January 10, 2022 with goals to reduce greenhouse gas emissions, build resiliency, and incorporate equity in public engagement and oversight. The CAP sets a goal to reduce greenhouse gas emissions by at least 50 percent (from 2005) by 2030 and approach carbon neutrality by 2050. Since plan adoption, the Maryland General Assembly established a more ambitious goal to reduce greenhouse gas emissions by 60 percent (from 2006) by 2031 and net zero by 2045.

Rockville's CAP comprises 42 current actions and 8 actions for future monitoring in categories involving energy efficiency, renewable energy, transportation, land use management, materials and waste management, resiliency, and public engagement and oversight.

The annual report fulfills CAP Action C-26 to track and report progress to foster public transparency and accountability. The following highlights 2023 accomplishments within each category. The remainder of the report provides detailed action-level summaries of progress, issues, next steps, equity considerations, grants, and a description of performance metrics, when available. To learn more about the plan and what you can do to address climate change, visit www.rockvillemd.gov/climate.

In the two years since the plan was adopted, remarkable strides have been made to direct resources towards energy efficiency, clean energy, improved resiliency, and equitable outcomes. The FY 2024 budget appropriated more than \$3.7 million in operating and new capital programs to continue to support climate projects and initiatives. The city's fiscally responsible approach to execute the plan involved evaluating technology and markets conditions, leveraging partnerships, and pursuing grants and innovative funding strategies to serve more residents with expanded programs and advance the following climate initiatives.

## **Energy Efficiency**

- Approximately 643 homes participated in Pepco's residential energy efficiency programs. (C-05)
- Coordinated with Montgomery County on the launch of their new home electrification program, Electrify MC, that provides technical assistance and incentives to help homes transition from fossil fuel to electric home systems (e.g., cooking, hot water, heating, and cooling, etc.). (C-06)
- Completed the second phase of City Hall energy efficiency upgrades (1st/3rd floor lighting and window film) by leveraging \$93,543 from grants and rebates. (M-01)
- Awarded MEA grants to upgrade lighting at the Senior Center (\$100,000) and Twinbrook Community Recreation Center (\$50,000) to save energy and improve the visitor experience. (M-01)
- Converted 258 city-owned streetlights to energy efficient LED with funding from the Maryland Energy Administration (MEA). (M-02)

## Renewable Energy

- The Environment Commission dedicated more than 60 volunteer hours to promote the Capital Area Solar Switch (formerly the solar co-op); resulting in 210 registrations from Rockville addresses. (C-09)
- The cumulative total number of solar energy systems permitted by the city rose to 1,080; up from 987 the prior year. (C-09)
- MEA awarded Solar Canopy and Dual Use Technology grants to Rockville to install solar canopies over parking lots and electric vehicle chargers at the Rothgeb Maintenance Facility (\$250,000) and 6 Taft Court (\$144,000). The contractor completed initial site assessments and developed concept designs for each location. (M-04)

## **Transportation**

- Evaluated and improved 58 bus shelters and completed the first group of sidewalk feasibility studies. (C-10)
- Adopted Pedestrian Master Plan, completed 58% of Vision Zero actions, and received input from approximately 241
  residents, businesses and employees to inform the development of the Electric Vehicle Readiness Plan. (C-15, C-14 and C11)
- Montgomery County's EV Purchasing Co-op partnered with more than 20 dealers to offer incentives for electric vehicles and charging. (C-13)
- The number of electric vehicles and plug-in hybrid electric vehicles owned in Rockville zip codes more than doubled in two years to 4,345 and the number of EV charging ports available to the public increased by 24% to 184. (C-11)
- The City fleet includes 15 battery electric vehicles, 1 plug-in hybrid and 3 hybrid vehicles, 17 of which were acquired in the last two years. (M-06)
- Pepco began installation of public EV charging stations (9 ports) to serve on street parking on Vinson Street, Prettyman Drive and Bouic Avenue. (M-07).

## **Land Management**

- Weed Warriors engaged 481 volunteers in 38 workdays to remove non-native invasive plants from city parks. (C-17)
- Planted 431 trees on public property and right-of-way and distributed 200 free native trees to residents. (C-17, C-24)
- Launched the Stormwater Incentive Program, a comprehensive program with a total budget of \$300,000 that allocates funds between the RainScapes Program, Flood Mitigation Assistance Program, and a new competitive water quality grants program. The city also partnered with the Chesapeake Bay Trust (Trust) for program administrative assistance. (C-17, C-20, C-24)
- The RainScapes program issued \$32,733 in rebates to 23 properties to support 25 tree canopy, rain barrel, conservation landscaping, and permeable pavement projects. (C-17, C-24)
- The Chesapeake Bay Trust (CBT) awarded a \$199,930 grant to fund tree planting at RedGate Park (M-09).
- Montgomery County Council enacted Bill 18-22, Noise Control- Leaf Removal Equipment Amendments, to phase-out the sale and use of gas-powered leaf blowers and leaf vacuums in most areas of the county. (FM -03)

#### **Materials and Waste**

- Opened a second food waste compost drop-off station at the Senior Center, doubling collection capacity. The two drop-off stations collected a total of 97 tons of food scraps for composting. (C-18)
- Increased the amount of waste diverted from the landfill from 41% in 2022 to 44% in 2023. (C-19)

## Resiliency

- Initiated the first phase of the Flood Resiliency Master Plan. Entered into an agreement with the United States Army Corps of Engineers (USACE) to develop high-resolution stormwater flood models and flood mitigation options in two areas that received flood damage during Tropical Storm Ida in 2021. The USACE contributes 50% of project costs (\$179,000 of the total \$358,000). (M-13)
- The Flood Mitigation Assistance Program reimbursed a total of \$99,148 to 40 properties to support for 92 flood mitigation measures. (C-20)
- The city participated in the five-year update of Montgomery County's Hazard Mitigation Plan (HMP) and is updating Rockville's Continuity of Operations Plan (COOP) to keep core functions of city government operating during emergencies. (M-11)

## **Public Engagement and Oversight**

- Awarded \$1.2 million in grants and rebates to support LED streetlight conversions, facility energy retrofits, solar canopies, flood resiliency master planning, and tree planning at RedGate park. (M-15)
- Pursued grants and rebates from the State of Maryland, utilities, and the Inflation Reduction Act and Bipartisan Infrastructure Law, partnering with multiple levels of government and the private sector to apply. (M-15, M-16)
- Hired a full-time Sustainability Program Manager to oversee municipal capital projects, such as the installation of EV charging stations, solar on City facilities, and facility energy efficiency improvements. (M-16)
- Published 12 issues of the Environment & Sustainability newsletter, which rose to 3,115 subscribers. Hosted 2 virtual Climate Solution education sessions attended by 84 participants and 8 in-person outreach events. (C-25)
- Created a new interactive online dashboard to track and report Climate Action Plan progress. (C-26)

## **Definitions and Acronyms**

**Carbon Dioxide Equivalent**: A unit of measure used to compare the emissions from various greenhouse gases based upon their global warming potential. Carbon dioxide equivalents are commonly expressed as "million metric tons of carbon dioxide equivalents (MMTCO2Eq)." The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated global warming potential.

**Climate**: The "average weather," or the statistical representation of weather patterns over decades to thousands of years described by variables such as temperature, precipitation, and wind.

**Climate Change**: Climate change refers to any significant change in the measures of climate lasting for an extended period. Climate change includes major changes in temperature regimes, precipitation intensity, or wind patterns, among others, that occur over several decades or longer.

**Electric Vehicle (EV)**: A vehicle that gets all its power from batteries and electric motors. It contains no internal combustion engine (ICE). The electric motor uses batteries that are recharged by plugging in to an electric power source (a wall socket or EV charger).

**Electrification**: Converting appliances, HVAC equipment, vehicles, or landscaping equipment that run on fossil fuels to electricity-powered or rechargeable battery-powered versions. Due to Maryland's relatively clean energy grid, electric equipment produces fewer greenhouse gas emissions and allow for renewable energy substitution. Sometimes referred to as "decarbonization."

**Energy Use Intensity (EUI)**: The measurement of the energy used per square foot per year. It is calculated by dividing the total energy consumed by the building in one year (measured in thousand Btu, kBtu) by the floor area of the building.

**Fossil Fuels:** A general term for fuels derived from organic materials formed from decayed plants and animals such as coal, methane (natural gas), gasoline, diesel, heating oil, or propane.

**Greenhouse Gas Emissions (GHG)**: The atmospheric gases emitted by human activity (burning or leaking fossil fuels, land use change, and certain chemicals) responsible for causing the majority of recent observed climate change. The main human-caused GHGs are carbon dioxide (CO2), methane (CH4) and nitrous oxide (N20). Less prevalent -- but powerful -- are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF6). Greenhouse gas emissions are sometimes referred to as "carbon emissions" since carbon dioxide is the most prevalent.

**Heat Island**: The tendency for higher air temperatures to persist in urban areas because of heat absorbed and emitted by buildings and asphalt, tending to make cities warmer than the surrounding rural areas.

**LED**: Light-emitting diode. LEDs are a type of highly energy efficient light bulb that use about 50% less energy than fluorescent bulbs and 1/6th as much energy as incandescent bulbs.

**Mitigation**: In the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include energy efficiency for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, reducing leaks and switching to low GWP chemicals, and expanding forests and other "sinks" to remove greater amounts of carbon dioxide from the atmosphere.

**Plug-In Hybrid Electric Vehicle (PHEV) or Plug-In Hybrid**: Uses an electric motor and gas engine to operate. Its electric motor uses batteries that are recharged by plugging in to an electric power source (a wall socket or EV charger). The gas-powered motor can work together with the electric motor, or separately on its own, to power the powertrain.

**Racial Equity**: When race can no longer be used to predict life outcomes.

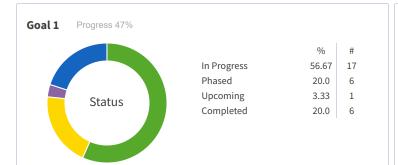
**Resilience**: Capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment.

**Historically Excluded Community**: A community that is not represented in City or local leadership proportionately to its demographic percentage of the total City population.

**Vulnerability**: The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity.

**Weather**: Atmospheric condition at any given time or place (wind, temperature, humidity, atmospheric pressure, cloudiness, and precipitation). In most places, weather can change from hour-to-hour, day-to-day, and season-to-season.

## **Plan Summary**



REDUCE GREENHOUSE (GHG) EMISSIONS Reduce GHG emissions from the community and municipal government operations to at least 50 percent below 2005 levels by 2030 to be on track to reach net zero by or before 2050.



RESILIENCY 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.



PUBLIC ENGAGEMENT AND OVERSIGHT Incorporate equity in implementation and conduct inclusive engagement to reduce environmental disparities and protect and empower vulnerable communities.

#### **REDUCE GREENHOUSE (GHG) EMISSIONS**

Reduce GHG emissions from the community and municipal government operations to at least 50 percent below 2005 levels by 2030 to be on track to reach net zero by or before 2050.

	%	#
In Progress	56.67	17
Phased	20.0	6
Upcoming	3.33	1
Completed	20.0	6

Category: 5

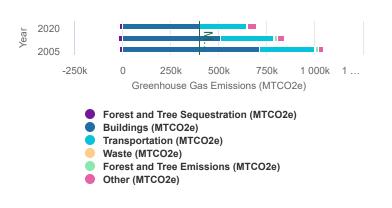
Action: 30

**Progress Highlights:** Although this is Rockville's first official Climate Action Plan, many projects, programs, and policies have been implemented over the past fifteen years to reduce greenhouse gas emissions from the community and municipal operations. Since plan adoption, the Maryland General Assembly established a more ambitious goal to reduce greenhouse gas emissions by 60 percent (from 2006) by 2031 and net zero by 2045.

- Community Greenhouse Gas (GHG) Emissions: The Metropolitan Washington Council of Governments (MWCOG) compiles regional data and generates greenhouse gas emissions inventories for 24 local governments. Due to the extensive data and resources needed to generate inventories for the region, MWCOG releases inventories approximately every three years. MWCOG released 2020 inventories in December of 2022. Rockville's largest sources of emissions are energy use from buildings and transportation. Rockville's 2020 greenhouse gas emissions inventory shows pre-CAP progress towards reducing emissions. These factors combined with other broader economic forces and state and federal policies helped Rockville achieve a 34 percent reduction in greenhouse gas emissions since 2005. MWCOG anticipates the next round of inventories for calendar year 2023 will be released in 2025 to align with the regional transportation plan and reflect post-2020 pandemic patterns.
- Municipal Building Greenhouse Gas (GHG) Emissions: Emissions associated with electricity and natural gas used by Rockville-owned and operated buildings, parks, streetlights, traffic lights and utilities decreased 3.7% between 2022 and 2023. Estimates do not include fleet emissions (tracked separately in M-06).

### (G-01) Rockville Community Greenhouse Gas Emissions Trends

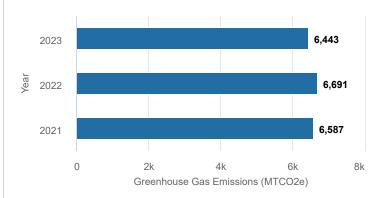
# (G-01) Rockville Community Greenhouse Gas Emissions Trends



 $Estimates \ from \ the \ Metropolitan \ Washington \ Council \ of \ Governments \ (MWCOG).$ 

## (G-01) Rockville Municipal Greenhouse Gas Emissions Trends

Action (G-01): Municipal Building and Property
Greenhouse Gas Emissions



Includes emissions from electricity and natural gas accounts for Rockville-owned and operated facilities, parks, streetlights, traffic lights and utilities. Does not include Fleet.

Category 1.1 Progress 35%

## **Energy Efficiency**

Increase energy conservation and efficiency and reduce fossil fuel use in all existing and new buildings and infrastructure.

	%	#
In Progress	55.56	5
Phased	33.33	3
Completed	11.11	1

Action: 9

#### Action 1.1.1 In Progress Progress 75%

#### Community - 01

Advocate for Montgomery County to adopt a Building Energy Performance Standard (BEPS) for existing commercial and multifamily buildings.

**Progress Highlights:** Montgomery County and Maryland approved separate Building Energy Performance Standards (BEPS) in 2022 that will apply to existing buildings in Rockville of a certain type and size. Both BEPS programs require buildings to employ electrification and energy efficiency to reduce carbon (greenhouse gas) emissions. In 2023, Montgomery County and Maryland engaged with stakeholders and issued proposed regulations for public comments. Upon adoption, the regulations will set the interim and final building energy performance standards and timelines for energy use intensity (EUI) -- energy used per square foot per year -- and/or net direct GHG emissions -- on-site combustion of building fuels such as natural gas, propane, or heating oil -- by building type.

**Next Steps:** Montgomery County and Maryland plan to adopt BEPS regulations in 2024. Owners of buildings covered by BEPS will then need to make energy improvements to meet the net direct GHG emissions, and/or site EUI standards by the interim and final deadlines. The city will evaluate the BEPS requirements for covered city-owned buildings and work with energy consultants and contractors to develop and implement strategies to meet compliance deadlines (see Action M-1).

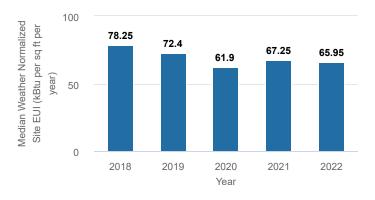
**Equity:** Montgomery County and Maryland are developing incentive and financing programs to help building owners invest in energy improvements, building on existing programs and leveraging federal funding sources. Programs include but are not limited to the MD PACE program, EmPOWER Maryland, the Department of Housing and Community Development energy programs, and the Montgomery County Green Bank. The Green Bank also provides a Technical Assistance Program to help building owners complete energy benchmarking, data verification, and building energy assessments. The County is exploring additional technical assistance programs as well as direct assistance for under-resourced sectors.

**Metric:** Approximately 209 buildings in Rockville are required to report building energy benchmarking data annually to Montgomery County to demonstrate energy performance over time. Montgomery County shares reported data, which typically lags by one calendar year. Key metrics for assessing building performance over time include:

- Energy use intensity, or EUI, expressed as energy used per square foot per year. Essentially, the EUI expresses a building's energy use as a function of its size or other characteristics. EUI is calculated by dividing the total energy consumed by a building in one year (including electricity, natural gas, heating oil, etc., measured in kBtu or GJ) by the total gross floor area of the building (measured in square feet or square meters). Weather Normalized Site Energy Use Intensity (EUI) normalizes a building's consumption using 30-year average weather conditions. Lower site EUI equals better performance; however, some property types are more energy intensive by nature of their operations. The median weather normalized site EUI for all reported Rockville buildings decreased by 15.7% between 2018 and 2022. While building operations and occupancy changed drastically in 2020 following COVID-19 shut-downs and likely account for much of the large decrease between 2019 and 2020, site EUI continued to decrease slightly in 2022.
- The ENERGY STAR score is a measure of how well a property is performing relative to similar properties, when normalized for local climate and operational characteristics. A higher ENERGY STAR score equals better performance. A score of 50 indicates that a building is performing at the national median, taking into account its size, location, and operating parameters. A score of 75 indicates that a property is performing in the 75th percentile and may be eligible to earn ENERGY STAR Certification. The 2022 median ENERGY STAR scores indicate which property types in Rockville are performing above (blue) or below (green) the national median.

## (C-01) Building Energy Use

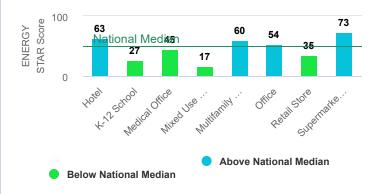
# Median Weather Normalized Site EUI - All Benchmarked Buildings in Rockville (kBtu per sq ft per year)



Energy Use Intensity (EUI) refers to the amount of energy used per square foot annually.

## (C-01) 2022 Average ENERGY STAR Score by Property Type

## 2022 Average ENERGY STAR Scores by Property Type



The ENERGY STAR score is a measure of how well a property is performing relative to similar properties. A higher score indicates better energy performance.

## Action 1.1.2 Phased Progress 20%

#### Community - 02

Expand the low and moderate income (LMI) home repair and weatherization program to increase energy efficiency, resiliency, and renewable energy opportunities.

Progress Highlights: After evaluating four Rockville Housing Enterprises (RHE) homes through the Maryland-funded Habitat Metro Montgomery LMI energy efficiency program, none of the homes met the criteria for the program and several needed repairs before any upgrades could be completed. Additionally, the City promoted low-moderate income home efficiency programs such as Building Change, Inc. and Habitat Metro Montgomery through newsletters, social media, and offered information at outreach events. Housing and Community Development Services conducted intensive targeted outreach to LMI communities in person and via email newsletters. Still, few residents registered for these programs. RHE established a Foundation program which may provide an avenue for needed repair funding. RHE also purchased a new development, Scarborough Square, which will expand its portfolio of affordable housing and involve major renovations. The City is continuing to seek potential funding opportunities offered by the Inflation Reduction Act (IRA) and the Bipartisan Infrastructure law for low and moderate income residents and small businesses, such as through discussions with partners Maryland, Montgomery County, and COG to form strategies to apply for funding under the Climate Pollution Reduction Grant (CPRG). Staff has proposed several projects, such as energy efficiency and electrification, to benefit these communities to be included in potential applications for funding.

**Issues:** Staff is analyzing potential barriers for residents to access existing energy efficiency and renewable energy programs, such as income requirements, limited funding for health and safety repairs, and split-incentives for landlords and tenants. Staff is also exploring different outreach and engagement approaches and coordination with landlord property owners.

**Next Steps:** Montgomery County is planning to launch the new Healthy, Efficient, Electrified, Climate-Adapted Pilot (HEECAP) Grant Program to retrofit homes of income-eligible community members. The program will be available to Rockville residents. The HEECAP program fills a gap by providing funding to implement critical health and safety projects so that the homes can become eligible for other energy upgrades. Starting in summer 2024, Maryland will offer two residential-focused IRA rebate programs - the HOMES Residential Energy efficiency Rebate Program and the High-Efficiency Electric Home Rebate Program, both of which offer much higher discounts for low income residents. The Montgomery County Green Bank offers special financing for LMI energy efficiency, solar, and battery installation. Maryland and Pepco have offered state funding for low and moderate income energy upgrades at multi-family properties. The City will work with partners to connect residents with these robust new funding opportunities.

**Equity:** This action is focused on programs for low and moderate income residents, which disproportionately also identify as Black, Hispanic, Indigenous, immigrant, English language learners, seniors, disabled, or other marginalized groups.

#### Action 1.1.3 In Progress Progress 25%

#### Community - 03

Progressively strengthen green/energy conservation building codes for new construction to reach net zero or equivalent.

**Progress Highlights:** Interdepartmental working groups met in 2023 to review Maryland-adopted 2021 international building codes and recommend amendments to Chapter 5 of the City Code, "Buildings and Building Regulations," to further strengthen green and energy conservation requirements for new construction and major renovations. Staff coordinated with Montgomery County to share code approaches for common goals. Amendments were presented to the Environment Commission. The strengthened codes would support the development of renewable energy and storage systems electric vehicle charging stations, climate resilience, electrification, and increased energy efficiency.

**Next Steps:** Public review sessions on the proposed building codes will be held in early 2024. Codes will be presented to Mayor and Council for consideration for adoption by the state's May 29, 2024 deadlines. The city will continue to review and adopt updated building codes on a three year cycle that involves three stages: the national model code publication by the International Code Council (ICC), State of Maryland code adoption, and finally local code adoption. Green/energy conservation building codes are intended to gradually strengthen during the amendment cycles that adopt the 2021, 2024, 2027 and 2030 ICC codes.

**Equity:** Development review permit fees were adjusted to incentivize redevelopment and to ensure equitable application. Efforts are ongoing to reduce the burden associated with the permitting process, improve communication of requirements, and provide education to constituents.

## Action 1.1.4 Completed Progress 100%

#### Community - 04

Opt into Montgomery County's point of sale energy disclosure (Chapter 40, Real Property, Section 40-13B).

**Progress Highlights:** The ordinance requiring Montgomery County's point of sale radon testing and home energy disclosure requirements went into effect on January 1, 2023. The City provided outreach and Montgomery County administers the program requirements. In recognition of Radon Action month, the City provided 150 free radon test kits to residents in 2023.

Next Steps: Continue outreach and education.

**Equity:** To address radon concerns in rental properties, the Mayor and Council also adopted an ordinance that requires specific rental properties to be tested for the presence of radon. The ordinance went into effect Sept. 27, 2023. The testing requirement applies to all units in a rental facility in contact with the ground, including basement apartments and any dwelling unit with a basement, crawl spaces or units built on a slab in contact with the ground.

Expand the home energy efficiency outreach program to increase participation in utility energy audits and rebates.

**Progress Highlights:** Promoted various home energy incentive programs available to Rockville residents to help them complete energy assessment and upgrades:

- Published multiple social media and Rockville Reports promotions involving Pepco's home energy programs, Montgomery County Energy Connection, and Montgomery County's new Electrify MC program for electrification discounts and Help Desk (see Action Community-06).
- Shared information on Inflation Reduction Act Tax Credits for solar, electric vehicles, chargers, and home energy efficiency in Rockville Reports and the Environment and Sustainability e-newsletter.
- Hosted a Climate Solutions virtual education session with Montgomery County staff on home electrification incentives (22 participants).

**Issues:** The County electrification program and IRA tax credits are available for market-rate homes in 2023, yet the more substantial rebate program to be managed by the Maryland Energy Administration will not be available until summer 2024 and may only apply to projects completed after they are published. The rebate and tax credit processes may also be perceived as complicated.

**Next Steps:** Continue to monitor new programs and promote electrification, utility home programs, rebates and tax credits programs.

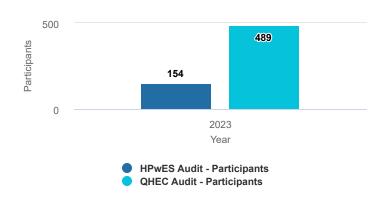
**Equity:** Energy program outreach materials feature information for Income Eligible Energy Efficiency Programs to assist low-to-moderate income (LMI) households. See Action C-02 for a special emphasis on LMI energy programs. Reducing energy use will help address climate change which disproportionately impacts low-income residents and Black, Indigenous, and People of Color.

**Metric:** Pepco reports zip-code level information for customer participation in their residential energy efficiency incentive programs. Data reported for zip codes primarily serving Rockville (20850, 20851, 20852) includes:

- Home Performance with ENERGY STAR Program (HPwES) 154 households, implemented 408 energy efficiency measures, receiving \$51,862 in incentives with an estimated energy savings of 12,550 MWh. This program provides a detailed home energy assessment and diagnostic testing with up to \$7,500 in rebates for completing eligible projects.
- Quick Home Energy Check-up Program (QHEC) 489 households, implemented 6,042 energy efficiency measures, receiving \$139,663 in
  incentives with an estimated energy savings of 178 MWh. This program provides visual inspections and installation of energy-savings
  projects (no-cost to Pepco customers).

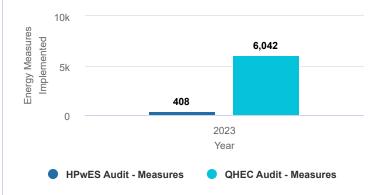
## (C-05) Pepco Home Energy Programs - Participants

Pepco Home Energy Programs - Participants



## (C-05) Pepco Home Energy Programs - Measures

Pepco Home Energy Programs - Measures Implemented



## (C-05) Pepco Home Energy Programs - Incentives

## Pepco Home Energy Programs - Incentives



## (C-05) Pepco Home Energy Programs - Energy Savings

# Pepco Home Energy Programs - Estimated Energy Savings



Action 1.1.6 In Progress Progress 30%

#### Community - 06

Coordinate with Montgomery County on electrification incentives for existing building systems.

**Progress Highlights:** Montgomery County launched the home electrification program, Electrify MC, in October of 2023. Rockville residents are eligible for County technical assistance and incentives to help transition home systems from fossil fuels to electricity (e.g., cooking, hot water, heating, and cooling, etc.). The program provides a convenient up-front discounts on equipment. Participants are also guided to conduct an energy audit through Pepco's Home Performance with ENERGY STAR and pursue Pepco energy efficiency rebates. Inflation Reduction Act (IRA) Tax Credits and MEA's IRA rebate programs will provide additional and higher financial incentives and can be layered with this program.

- Environmental Management and the Environment Commission hosted a free virtual Climate Solutions Speaker Session on the Montgomery County Electrification Incentives Program on November 2, 2023. Twenty-two people attended the session.
- Approximately two Rockville homes received discounts through the program in 2023.

**Issues:** Electrify MC currently only has one contractor and incentives require that the new electric appliances replace fossil fuel-powered appliances and levels of funding are limited. Pepco still provides rebates for gas-fired equipment, which provides a conflicting incentive.

**Next Steps:** Advocate for Pepco rebates for efficient electric-only appliances. Continue to promote the County's and IRA programs to reach new diverse participants.

**Equity:** Electrify MC provides upfront discounts which reduces the upfront cost and hassle of rebates. Materials are also provided in Spanish. Electric appliances particularly benefit the health of those living in smaller dwellings and people with asthma or other health problems.

#### Action 1.1.7 Phased Progress 10%

#### Municipal - 01

Complete energy assessments of City facilities and develop a strategic plan to reduce facility energy consumption.

Progress Highlights: As part of the Maryland Smart Energy Communities (MSEC) program, the Mayor and Council adopted Resolution 12-13 establishing an energy efficiency goal of reducing per-square-foot electricity consumption by 15 percent. The city has been making incremental energy improvements over time, prioritizing the largest and highest energy-consuming facilities to maximize energy savings and greenhouse gas reductions. In 2023, the city completed the second phase of City Hall energy efficiency upgrades (1st/3rd floor lighting and window film) by leveraging a Maryland Energy Administration (MEA) grant (\$50,000), Pepco LED lighting rebate (\$40,262), and Pepco window film rebate (\$3,281). The city was also awarded Maryland Smart Energy Communities grants to implement LED lighting upgrades at the Senior Center (\$100,00) and Twinbrook Community Recreation Center (\$50,000) in 2024. As required by Montgomery County's Building Energy Benchmarking and Performance Standards Law, the city submitted building energy benchmarking data for City Hall, Rockville Swim and Fitness Center, and the Senior Center. Montgomery County granted a benchmarking waiver to 6 Taft Court because the building is currently unoccupied.

**Issues:** Staff is monitoring proposed building energy regulations and outside funding opportunities to strategically plan future audits and improvements. In 2023, Montgomery and Maryland proposed regulations for the Building Energy Performance Standards (BEPS) that will apply to city facilities (see Community-01). The regulations are anticipated to be finalized in 2024 and will establish the net direct greenhouse gas emissions and/or site Energy Use Intensity (EUI) standards for different building types to be achieved by interim and final deadlines. After the regulations are finalized, the city will work with energy consultants and contractors to develop BEPS facility energy assessments for City Hall, Rockville Swim and Fitness Center, the Senior Center, and 6 Taft Court and develop compliance strategies for both the County and State programs.

**Next Steps**: Continue the different phases of facility energy audits and improvements; including monitoring BEPS regulations, seeking grant funding for future energy efficiency audits and projects, and implementing FY 2024 facility LED lighting projects at the following locations:

- Senior Center: Replace approximately 820 interior light fixtures with energy efficient LED fixtures and pair the fixtures with 437 occupancy sensors to modernize and improve occupant light controls and maximize energy savings.
- Twinbrook Community Recreation Center: Replace 200 interior light fixtures with 75 occupancy sensors. The lighting upgrades will also improve lighting in the gymnasium and reduce maintenance costs.
- Rothgeb Maintenance Facility: Replace 25 exterior lights with energy efficient LED fixtures on the fleet building. The lighting retrofit will improve outdoor lighting conditions for staff and reduce maintenance costs.

**Metric:** The table summarizes the largest, highest energy-consuming facilities, the status of energy efficient lighting assessments and upgrades, and the status of energy audits and plans for future BEPS compliance.

## (M-01) Facility Energy Audits and Projects

Facility	Size (sf)	Lighting Audit	LED Lighting Conversion	Building Energy Audit
City Hall	51,848	Completed	Completed 2023- Floors 1 and 3	Pepco Tune-up (2022)
			Completed 2022- Floor 2	Planning for BEPS
			Completed 2018 - Parking lot	compliance (Interim 2028)
Swim and Fitness	46,171	Phased	Future- Other interior spaces	Planning for BEPS
Center			Planned - outdoor pool	compliance (Interim 2030)
			Completed 2020 - Locker room	
			Completed 2016 - Indoor pools	
			Completed 2016- Parking lot	
Senior Center	39,170	Completed	Planned 2024	Planning for BEPS
				compliance (Interim 2030)
6 Taft Court	55,350	Phased	Construction 2024 (North Wing)	Planning for BEPS
			Future (South Wing)	compliance (Interim 2028)
Water Treatment Plant	8,100	Completed	Construction 2024	Completed in 2018 as part of
(main building)				building renovation
Lincoln Park	12,516	Completed	Completed 2021	
Community Center				
Twinbrook	15,740	Completed	Planned 2024	
Community Center				
Thomas Farm	18,086	Completed	Planned 2025	
Community Center				
F. Scott Fitzgerald	24,100	Phased	Phased with renovations	
Theatre				
Rothgeb Maintenance		Completed	Phased	
Facility (multiple				
structures)				
Glenview Mansion	24,483	Phased	Phased with renovations	
Recreation Services	17,000	Future	Future renovation (2033)	
Building				
Police Station - Annex	14,350	Future	Future	
Police Station- Old	11,848	Future	Future	
Post Office				
Croydon Creek Nature	7,250	Future	Future	
Center	•			

## Action 1.1.8 Phased Progress 13%

#### Municipal - 02

Convert City-owned streetlights to energy efficient LED (light-emitting diode) (CIP TA22).

**Progress Highlights:** The LED Streetlight Conversion Program (CIP TA22) has three phases to replace approximately 3,200 city-owned streetlights with energy efficient LED. Phase 1, underway now, will replace 2,000 lights, Phase 2 and Phase 3 involve 600 lights each. In 2023, the Mayor and Council awarded a construction contract to implement Phase 1. Phase 1 work began in November and 258 streetlights were converted by the end of 2023.

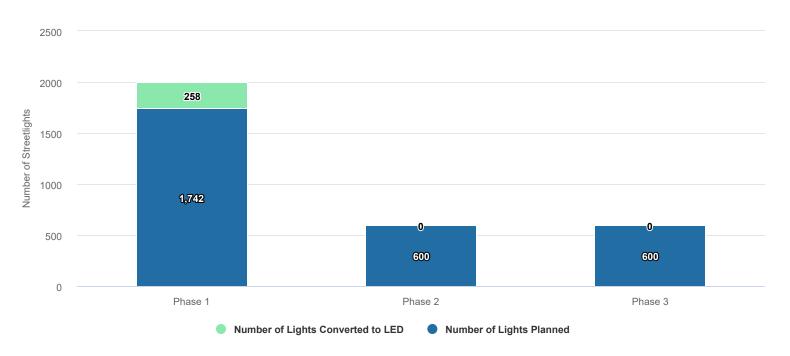
**Next Steps:** Phase 1 light conversions are anticipated to be completed in summer 2024. Initiate Phase 2 conversions with bid, contract awards and grant and rebate applications in 2024. Phase 3 requires budget appropriation in FY 2025.

**Grants**: Maryland Energy Administration (MEA) awarded Rockville a \$445,750 Streetlight and Outdoor Lighting Efficiency grant and Pepco approved \$224,875 in rebates to implement Phase 1. MEA also awarded a \$124,600 grant to offset costs for the second phase. The city applies for grant funding to support the third phase in 2024.

**Metric:** The number of streetlights converted during each phase is tracked over time to assess progress. By the end of 2023, approximately 258 streetlights (13% of phase 1) were converted to LED.

## (M-02) LED Streetlight Replacement Status

## Phased Plan for Converting City-Owned Streetlights to LED



#### Action 1.1.9 In Progress Progress 10%

#### Municipal - 03

Advocate for a Pepco-owned streetlight LED conversion agreement that serves the public interest.

**Progress Highlights:** Rockville currently billed for approximately 2,925 streetlights owned and maintained by Pepco. These streetlights are primarily overhead cobra-style fixtures with mercury vapor or high-pressure sodium light sources. The city continued to monitor the Maryland legislature, the Public Service Commission, and Pepco for proposals for Pepco-owned streetlight LED conversions to determined if they serve the public interest. Pepco has discussed their intentions to convert Pepco-owned streetlights to LED. However, no specific schedule or plans have been established.

**Issues:** Due to the high cost and poor condition of most of Pepco's equipment, staff has concluded that ownership of the equipment is not currently in the City's best interest.

**Next Steps:** Continue to track Pepco's proposed plans, Maryland legislation, and Public Service Commission actions and comment when appropriate.

## Category 1.2 Progress 48%

#### **Renewable Energy**

Increase the generation, use and access to affordable, reliable, and clean energy systems.

In Progress 80.0 Completed 20.0

Action: 5

## Action 1.2.1 In Progress Progress 50%

### Community - 07

Advocate to increase the Maryland Renewable Portfolio Standard by 2030.

**Progress Highlights:** Maryland's Renewable Portfolio Standard (RPS) was established to capture the economic, environmental, fuel diversity, and security benefits of renewable energy. The RPS seeks to establish a market for renewable energy in Maryland and lower the cost of obtaining electricity generated from renewable sources. The program does this by gradually increasing the amount of renewable energy electricity suppliers must procure from renewable sources by 2030 to 50 percent. The Mayor and Council continued to advocate for legislation in the 2023 Maryland General Assembly to support the increase of renewable energy and reduced greenhouse gas emissions. Bills supported and enacted into law in 2023 include the Community Solar Program, the Clean Cars Act, and the Equitable and Inclusive Transit Oriented Development Enhancement Act.

Next Steps: Continue to advocate for energy efficiency, renewable energy, and storage to support a clean-powered electric grid.

**Equity:** This action to reduce greenhouse gas emissions protects historically excluded communities since they bear higher burdens from climate change and air pollution.

## Action 1.2.2 In Progress Progress 33%

#### Community - 08

Coordinate with Montgomery County on development of the Community Choice Energy Program to aggregate green power purchasing.

**Progress Highlights:** After supporting the initiation of the Community Choice Energy (CCE) program, the city has been monitoring reports from the working group that was established to design the regulations to enable program implementation. The Community Choice Aggregation work group sent draft regulations to the Public Service Commission in late January, and the Commission held a rulemaking session in February to discuss the regulations. The Commissioners agreed with the County's proposed views regarding Commission oversight of the CCA's procurement activities, but noted a number of other areas where the work group needed to continue to work on the regulations and directed the work group to submit a revised set of regulations.

Issues: This is a complex program that impacts many customers that requires thoughtful program design.

**Next Steps:** Continue to monitor the program's development and coordinate as needed.

**Equity:** A county-wide purchase on behalf of customers would reduce supplier choice misinformation and simplify participation in green power programs. Any cost changes should consider equity in their structure. The County intends to conduct extensive outreach during the development of the CCE to ensure that it is informed by community values and that special attention is given to the needs to vulnerable communities.

Promote private solar and geothermal installations through the solar co-op program, streamlined permitting, and expanding access to low-to-moderate income residents.

Progress Highlights: Rockville expanded efforts to promote private solar and geothermal installations through the following:

- Promoted the Capital Area Solar Switch, which is the new name for the Solar Co-op hosted by the nonprofit Solar United Neighbors. The program leverages the power of groups to help residents and businesses throughout the Washington metropolitan area learn about and install rooftop solar panels, battery storage, and electric vehicle charging stations. In 2023, the Environment Commission invested 60 volunteer hours over 7 weekends at the Rockville Farmer's Market promoting the Solar and EV Co-op. The city hosted a lunch and learn about installing solar and the Solar Switch program in August.
- The Mayor and Council reduced permit fees for the installation of solar and EV chargers and streamlined the permitting process using an online application. As part of the Earth Month observance in April, the city waived all fees assessed by the Inspections Services Division that are directly associated with the residential installation of solar photovoltaic systems, electric vehicle charging stations and energy efficient heating and cooling systems, such as heat pumps.
- Staff coordinated with Maryland Clean Energy Center to apply for EPA's Solar For All grant which would fund solar systems and community solar for low-income residents in Maryland. Staff also coordinated with Rockville Housing Enterprises to add them as a potential grant recipient for Solar for All and for EPA's Climate Pollution Reduction Grants.

**Issues:** Residents and the Environment Commission have inquired about opportunities to proactively manage the growth of trees and prevent potential shading of solar systems. Suggestions include considering flexibility in tree species selection and planting locations to limit shading of solar installations.

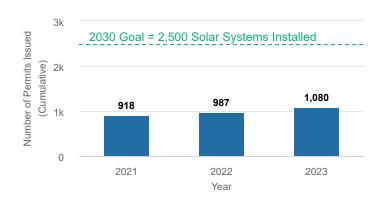
**Next Steps:** The Solar For All grant awards are expected to be announced in summer 2024. The 2024 Solar Switch will launch in April and outreach will highlight the 30% federal tax credit and low and moderate income solar opportunities through the Green Bank and community solar. Staff will continue ongoing coordination with RHE to support solar development on their properties. Further streamline plan review and permitting processes with the SolarAPP+ automated permitting system.

**Equity:** The Montgomery County Green Bank offers a special financing program for low and moderate income homeowners. Several community solar projects available to Rockville subscribers offer special discounted electricity rates for low income subscribers. These programs were advertised through social media, Rockville Reports, and in-person throughout the year and specifically promoted during the Solar Switch outreach campaign. These programs are seeking additional clients and staff continues to explore creative ways to bring solar to historically excluded communities.

**Metrics:** Interest in solar continued to grow. The 2023 Solar Switch program recruited 210 participants with a Rockville address, which accounted for more than 1/3 of Montgomery County's total of 608 participants. Participants indicated an interest in solar, but are not required to enter into a contract. The cumulative total number of solar permits issued in Rockville rose to approximately 1,080.

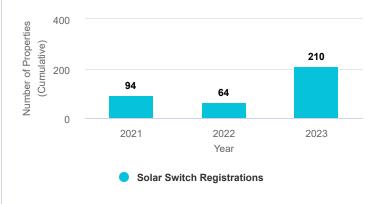
#### (C-09) Solar Permits

## Solar Permits (Cumulative)



## (C-09) Solar Switch

## Solar Switch/Co-op Participants in Rockville



#### Municipal - 04

Identify and install feasible solar photovoltaic systems on City property.

Progress Highlights: As part of the Maryland Smart Energy Communities (MSEC) program, the Mayor and Council adopted a Resolution 12-13 establishing 20 percent renewable energy goal for city facilities. The existing geothermal system at Thomas Farm Community Center contributes to this renewable energy goal. The city has worked with a variety of consultants to evaluate solar feasibility at other facilities and plan for future installations. In 2023, the Maryland Energy Administration (MEA) awarded Solar Canopy and Dual Use Technology grants to Rockville to install solar canopies over parking lots at the Rothgeb Maintenance Facility (\$250,000) and 6 Taft Court (\$144,000). The city is exploring developing a Power Purchase Agreement to install solar at both locations, using a Montgomery County Public Schools cooperative contract. The SPPA is a financial arrangement where a third-party finances, installs, owns, operates and maintains a solar system on the city's property and the city purchases the system's electricity for a predetermined period. Using a SPPA, the City avoids upfront capital costs, is guaranteed system performance, and establishes a known electricity rate during the term of the agreement.

#### Issues:

- Building and site conditions: The city has several lowrise facilities that are shaded by tree cover and/or contain rooftop mechanical equipment that require maintenance access paths and fall protection for safety. These systems compete for limited roof space for solar photovoltaic and solar thermal systems. The city explored solar feasibility with assistance from the U.S. Environmental Protection Agency, MEA, and other private contractors and have identified limited opportunities, as summarized in the table. As sites change, roofs are replaced, and technology changes, feasibility may change. For example, the solar contractor evaluated the roof of the north wing of 6 Taft Court and did not recommend rooftop solar because of orientation, space constraints, and conflicts with rooftop mechanical equipment, maintenance access and fall protection safety equipment. The roof of the main building of the Water Treatment Plant was evaluated and not recommended for solar by a consultant because of orientation, space constraints and conflicts with rooftop mechanical equipment, maintenance access and fall protection safety equipment, and the risk a roof leak could damage the electrical equipment and switchgear located on the third floor.
- Contract and permitting delays: Despite focused efforts to work through the permitting and procurement processes quickly, the complexity of the projects, legal and utility agreements, and detailed nature of the negotiations have resulted in longer lead times for the projects.

#### **Next Steps:**

- Park Lot Canopies: Staff will continue to coordinate with other departments and Standard Solar (co-grantee for MEA Solar Canopy Grant) for design, permits and installation of solar canopies at 6 Taft Court and the Rothgeb Maintenance Facility. Staff will continue explore the feasibility of installations at other facilities with large, unshaded parking lots.
- Rooftop: Two rooftop solar installations are planned at the Rothgeb Maintenance Facility. Additional rooftop installations would be coordinated with the roof replacement cycle. The city's roofing contractor is capable of evaluating the structural capacity of a roof to determine if a solar rooftop system can be installed, however, they do not conduct solar feasibility studies that consider other factors like the orientation, system sizing, electrical feasibility, shading from trees, location of mechanical equipment, economics, etc. As the city proceeds through the roof replacement cycle, staff will first assess the buildings for critical limiting factors that would prevent solar installations, such as orientation, shade by trees or mechanical equipment, future building changes, historic designation, presence of a curved/barrel or green roof, and restrictions from fall protection devices. Staff anticipates that when the largest roofs of the facilities, such as Lincoln Park Community Center (gym roof), Swim and Fitness Center (north pool), City Hall, and Recreation Services, come under review, staff will plan to coordinate with a separate solar contractor for a preliminary solar feasibility assessments.

**Metric:** The MSEC renewable energy goal translates to a generation capacity target of approximately 3,200 MWh per year. The City's geothermal system at Thomas Farm Community Center accounts for 461 MWh, approximately one-seventh of this goal. The table summarizes solar feasibility assessments and plans for evaluating solar installations at other facilities.

# Municipal Solar

Location	Solar Screening	Status	Rooftop Solar	Parking Solar Canopy	Notes
Rothgeb Maintenance Facility	Contractor Solar Assessment (2023)	Design	Designing rooftop for Fleet Services Building and Stockroom/Heated Storage Building	Employee parking lot	MEA awarded Solar Canopy and Duel Use Technology Grant (\$250,000)
6 Taft Court	Contractor Solar Assessment (2023)	Design	North Wing - Contractor assessed 2023. Not feasible due to orientation, size and conflict with rooftop equipment, maintenance access and fall protection. South Wing - Plan to assess during roof replacement.	Parking lot	MEA awarded Solar Canopy and Duel Use Technology Grant (\$144,000)
Water Treatment Plant	Contractor Assessment (planned 2024)	Reviewed - Not recommended	N.A. (limited space, conflicts with mechanical equipment, maintenance access and fall protection), risks to electrical equipment on the third floor).	Limited parking, forest shading	
Lincoln Park Community Center	Feasibility assessment planned to coordinate with roof replacement for gymnasium	Planned assessment			
Swim and Fitness Center	Feasibility assessment planned for rooftop of north pool and parking lot	Planned assessment			Evaluated for solar hot water
City Hall	Feasibility assessment planned for rooftop replacement	Planned assessment			
Recreation Services Building	Feasibility assessment planned during roof replacement	Planned assessment			
Senior Center	Feasibility assessment planned during roof replacement	Planned assessment			
Twinbrook Community Center	USEPA Contractor Screening (2012)	Reviewed - Not recommended	N.A. (conflicts with tree shading, roof orientation, mechanical equipment and fall protection)	N.A. (conflicts with tree shading, floodplain, and utilities)	

Thomas Farm	USEPA Contractor	Reviewed - Not	N.A. (conflicts with curved	N.A. (conflicts with	Building features
Community	Screening (2012)	recommended	roof and flat roof	natural gas easement	geothermal heating
Center			orientation, shading and	under parking lot and	and cooling system.
			size)	permeable pavement)	
Police Station	Initial screening	Reviewed - Not	N.A. (conflicts with green	N.A. (limited onsite	
		recommended	roof, mechanical	parking)	
			equipment and historic		
			designation)		
F. Scott	Initial screening	Reviewed -	N.A. (conflicts with tree	Parking lot may be	
Fitzgerald		property has	shading, roof orientation,	candidate, but may	
Theatre		historic	rooftop structures, fall	have restrictions from	
		designation	protection)	historic designated	
Glenview	Initial screening	Reviewed -	N.A. (historic designation)	N.A. (historic designated	
Mansion		property has		environmental setting,	
		historic		large parking lot with	
		designation		some tree shading)	
Croydon Creek	Initial screening	Reviewed - not	N.A. (conflicts with tree	N.A. (small parking lot,	

Action 1.2.5 Completed Progress 100%

## Municipal - 05

Purchase renewable energy certificates (RECs) for municipal electricity.

**Progress Highlights:** Since 2004, Montgomery County has led a coalition of County agencies and municipalities to cooperatively purchase wind Renewable Energy Credits (RECs) to support clean energy. Rockville continued to participate in this partnership in fiscal year 2023/2024. Rockville's annual wind RECs purchase offsets approximatley 40% of electricity consumption used for all municipal facilities, parks, streetlights, traffic lights and utilities.

**Issues:** Increased demand for renewable energy, as well as renewable energy project development challenges (such as unpredictable equipment prices, rising interest rates, permitting delays, congested interconnection queues, and supply chain constraints) raised the price of Green-e Certified renewable energy credits substantially. Higher REC prices make it harder for jurisdictions with a fixed budget to source their power with renewable energy. Rockville will continue to coordinate with Montgomery County to explore affordable ways to increase the portion of clean energy purchased.

## Category 1.3 Progress 65%

#### **Transportation**

Expand safe, efficient, affordable, and equitable multi-modal transportation options that utilize clean and efficient energy sources.

	%	#
In Progress	55.56	5
Phased	11.11	1
Completed	33.33	3

Action: 9

## Action 1.3.1 In Progress Progress 50%

#### Community - 10

Work with WMATA, MDOT, and Montgomery County to maximize transit accessibility and ridership and enhance mobility options.

**Progress Highlights:** Public Works continued to evaluate sidewalk gaps, prioritizing needed improvements near bus stops, and developing feasibility studies. The city also recently completed a bus stop improvement project, in which 58 bus shelters were evaluated and improved. The first group of sidewalk feasibility studies were completed in 2023 and design of several improvements is ongoing.

**Next Steps:** The second group of sidewalk feasibility studies is anticipated to be completed in fall 2024. The city continues to coordinate with the developer and MCDOT on the Pink Line in Phase I of the Great Seneca Transit Network to link the Shady Grove corridor with the Life Science Center and ensure connectivity. The city also continues to coordinate with MCDOT and MDOT on 355 Bus Rapid Transit. Lastly, the city will collaborate with MCDOT Ride On to identify bus stops for enhanced ADA access.

**Equity:** Public transportation provides mobility options and access to everyone in Rockville and serves several marginalized groups including low-income, elderly, youth, and people with disabilities, as well as those who do not have access to an automobile or cannot drive because of cost, age, or physical ability. Public transportation also produces fewer impacts to the environment compared to privately owned automobiles, including transportation related emissions, noise, and vibration which are frequently felt most directly in disadvantaged communities.

Develop a Rockville Community Electric Vehicle (EV) Readiness Plan.

**Progress Highlights:** In 2023, outreach and engagement continued in the development of the Electric Vehicle Readiness Plan. Significant progress was made in drafting the plan, conducting analysis, and in furthering ongoing efforts towards facilitating electric vehicle adoption and installation of electric vehicle chargers.

## Community Engagement

- A Bang the Table interactive webpage was developed to inform the plan: https://engagerockville.com/evplan
- The city conducted three electric vehicle surveys aimed at employees, residents and visitors, and organizations and large property owners (including HOAs). The surveys were promoted widely through social media, Rockville Reports, and in-person tabling at Lincoln Park and Twinbrook Community Centers. The city received 241 responses from residents and visitors (117), city employees (116), and larger property owners, businesses and HOA's (8).
- Respondents identified more than 100 locations on a crowd-sourced EV charging needs map.
- Promoted a Solar and EV Charger Co-op, the Montgomery County EV purchasing co-op discount program, and federal, state, utility EV incentives
- Participated in the Maryland National Electric Vehicle Infrastructure Plan survey and the Public Policy Day MWCOG panel at the Washington Auto Show.
- Promoted monthly Ask and EV Owner educational virtual calls supported by the Electric Vehicle Association of Greater Washington.

#### Plan Development and Ongoing Progress Highlights

- The Mayor and Council supported the Clean Cars Act of 2023 to support EV adoption.
- The knowledge gathered throughout the plan development process has contributed to several other related projects, and work to support electric vehicle adoption. Work is underway for 14 Pepco-sponsored electric vehicle chargers on City property and to implement the solar canopy and electric vehicle charger grant at 6 Taft and the Rothgeb Maintenance Facility.
- Preliminary work and analysis from the EV Readiness Plan supported grant applications for the Clean Fuels Infrastructure Grant and the EPA Climate Pollution Reduction Grant.
- Documented current EV planning and permitting processes, reviewed guidelines for accessible charging, and explored opportunities for improvement, clarity, and streamlining.
- Coordinated with the Metropolitan Washington Council of Governments (MWCOG) and a consultant to complete initial work to develop analysis and draft content for the plan, including electric vehicle ownership and charger projections, an inventory of funding sources for vehicles and chargers, basic permitting recommendations, sample best practices for codes and policies, charging types and descriptions, and social vulnerability index mapping.
- Staff continues to refine different plan elements, including the publicly accessible electric vehicle charging list, identifying priority areas for equitable public charging (such as multi-family dwelling units, neighborhoods with the shared parking or without access to a garage or driveway), updating the fleet electrification plan, drafting an EV permitting streamlining guide, identifying code and zoning changes, and identifying key commercial and residential charging gaps.
- Drafted a preliminary EV Readiness Action List to be shared with the Environment Commission for feedback.

**Issues:** The EV charging needs assessment revealed a deficit of reliable public charging. Many residents lack home charging, especially those that rent or reside in multiunit residential buildings. Additional work with the private sector and the public is needed to expand charging. Permitting processes offer opportunities for improvement, clarity, and streamlining.

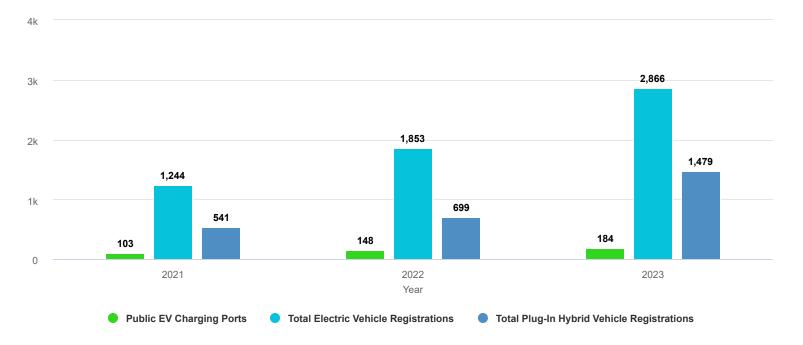
**Next Steps:** Staff will continue to develop a draft plan. After internal reviews are completed, the EV Readiness Plan is expected to be posted for public review in mid-2024. Implementation of fleet electrification, EV charger projects on city property, grant participation, and community engagement is ongoing.

**Equity:** Developing requirements for publicly accessible electric vehicle charging stations and establishing locations for grant-sponsored stations on City property serves residents that do not have easy access to home charging. Streamlining permitting reduces burdens on under-resourced applicants. The draft Electric Vehicle Readiness Plan prioritizes equity wherever possible.

**Metric**: In Montgomery County, electric vehicles and plug-in hybrids account for 3.7% of all registered light-duty vehicles. In Rockville zip codes, the number of electric vehicles and plug-in hybrids has more than doubled in two years to 4,345. Electric vehicle chargers open to the public grew from 103 to 184. Public chargers included in the count does not include restricted access chargers at private residences, for fleets, residents, or employees, so the actual count of total chargers is much higher.

## (C-11) Electric Vehicles and Charging Stations

## Electric Vehicles Restrations and Public EV Charging Ports in Rockville Zip Codes



Quantities are cumulative.

MD MDOT/MVA Electric and Plug-in Hybrid Vehicle Registrations by main Rockville Zip Codes (20580, 20851, 20852). https://opendata.maryland.gov/Transportation/MD-MDOT-MVA-Electric-and-Plug-in-Hybrid-Vehicle-Re/tugr-unu9/data

Public EV charging ports (https://chargehub.com/en/countries/united-states/maryland/rockville.html)

Action 1.3.3 In Progress Progress 33%

## Community - 12

Require new developments and redevelopments to be electric vehicle-ready.

Progress Highlights: In-depth model code research and analysis of Rockville electric vehicle trends and land use and transportation patterns informed electric vehicle charging station recommendations in the green and energy building code amendments in the coming code cycle (see Community - 03). The amendments were developed with interdepartmental working groups and in consultation with Montgomery County and the MWCOG Regional Electric Vehicle Workgroup, and based on consultant analysis and the latest best practices and model codes. Recommended amendments require a certain number or percentage of parking spaces in commercial developments and redevelopments to have EV chargers installed, have electrical capacity and wiring to enable quick expansion of charging if/when needed (EV charger-ready), and enable longer term increases in chargers if needed (EV-capable) to provide a flexible way to expand existing stations for visitors and residents. Emphasis is placed on residential charging followed by workplace and visitor charging. A Maryland law requiring one EV charger installed or EV ready wired parking space with single unit new homes and townhomes went into effect October 1, 2023.

**Next Steps:** Proposed building code amendments will be presented to Mayor and Council and the public this spring prior to adoption to meet the May 2024 state deadline.

**Equity:** Publicly accessible charging stations and chargers that are available to multi-family residents benefit those who do not have garages and driveways, including low-income residents and those without designated parking spaces. New federal electric vehicle discounts for used EVs and lowered maintenance and fueling costs assist drivers with lower means to access clean fuel transportation.

#### Action 1.3.4 Completed Progress 100%

#### Community - 13

Promote a regional electric vehicle purchasing cooperative (EVPC).

**Progress Highlights:** First launched in 2022, the Montgomery County EV Purchasing Co-op (EVPC) continues to work with local dealerships to provide incentives and discounts that will save residents money to purchase or lease new and pre-owned electric vehicles (EVs). In 2023, more than 20 dealers participated in the program and provided incentives. Rockville continued to promote the program and the monthly EV Purchasing Co-op newsletter.

#### Action 1.3.5 In Progress Progress 58%

### Community - 14

Expand active transportation and shared micro-mobility network by implementing improvements in the Bicycle Master Plan and Vision Zero Plan.

**Progress Highlights:** In 2023, 58% of Vision Zero actions were complete and the remainder are on-schedule or ongoing. The FY 2023 capital budget included new appropriations totaling \$7.7 million to support bicycle, pedestrian, and safety projects. The city also continues to seek external funding to leverage city resources and extend the city's ability to carry out multimodal safety projects. In FY 24, the city received over \$750,000 in grant funds from five different sources, including the federal Safe Streets and Roads for All program. The grants cover a variety of projects including complete streets studies, bicycle lanes designs, new pedestrian crossing guidelines, and intersection safety audits for both city- and statemaintained intersections. Also, Capital Bikeshare stations in Rockville began offering e-bikes among their fleets in Rockville.

**Next Steps:** Continue implementing bicycle, pedestrian, and safety projects as outlined in the capital improvement program. City staff will complete the feasibility study and design of bicycle facilities for Martins Lane between Mannakee Street and N. Washington Street. Also, the city will procure and install permanent pedestrian and bicycle counters to help track active transportation in the city.

**Equity:** Implementing facilities to accommodate safe and direct active transportation, such as walking, rolling, and bicycling, helps increase the mobility options for all Rockville residents and visitors to reach their destination. This is especially important for residents and visitors who do not have immediate access to an automobile or cannot drive because of cost, age, or physical ability. Moreover, providing walking/rolling, bicycling, and micromobility facilities in Rockville encourages more people to travel by non-private-automobile modes, which reduces transportation related emissions, vibration, and noise, which is most acutely felt by historically excluded communities.

## Action 1.3.6 Completed Progress 100%

#### Community - 15

Adopt and implement a Pedestrian Master Plan.

**Progress Highlights**: The Mayor and Council adopted Rockville's first Pedestrian Master Plan in October 2023. This plan is the culmination of more than two and half year's effort and community collaboration; including but not limited to review by the Planning Commission, the Rockville Transportation and Mobility Commission, the Rockville Pedestrian Advocacy Committee (RPAC), the Rockville Bicycle Advisory Committee, and the Rockville Recreation and Parks Advisory Board. The Pedestrian Master Plan includes 46 action items for the city to carry out to improve the pedestrian environment and experience in Rockville. These action Items include recommendations for new pedestrian facilities and updating city policies and practices related to pedestrian travel.

**Next Steps**: Plan implementation will guide future city policies, projects, programs, plans, and investments to improve the pedestrian experience and enhance the pedestrian environment citywide. City staff developed a draft implementation strategy, which will be reviewed by RPAC and other city commissions before being finalized and shared with the Mayor and Council in 2024.

**Equity:** The Pedestrian Master Plan acknowledges that walking and rolling are often the primary mode of transportation for low-income individuals, persons with disabilities, and other disadvantaged groups. As such, additional and deliberate measures, especially related to enforcement and roadway design, need to be taken to produce more socially just outcomes.

#### Municipal - 06

Convert the City fleet to cleaner and more efficient fuel sources.

**Progress Highlights:** The Mayor and Council adopted Resolution 02-22 to transition the city's on-road fleet to cleaner, more efficient vehicles. Since the adoption of the resolution, all leased vehicles up for replacement are substituted with electric models with the exception of police vehicles or those used in snow/ice operations that must be available 24-hours per day. The total number of vehicles currently leased in 2023 was 118 out of 187, and by the end of FY 2024, the total number of leased vehicles will be 177 out of 187. Of the 187 vehicles scheduled for the lease program, approximately 70 are currently suitable for electrification (37%). Other vehicles that are purchased by the City, including heavy-duty vehicles, dump trucks and refuse trucks currently do not have electrified models available on the market that suits the vehicle's duty cycle. When those purchases are made, the Fleet Manager investigates available options and includes an explanation in the staff report as to feasibility of the conversion to an electrified model.

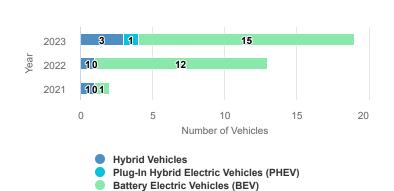
**Issues:** Staff continues to coordinate the planning and installation of EV charging infrastructure with the vehicle replacement cycle. Work continues to award contracts, site plan amendments, and permits for the installation of electric vehicle charging stations to serve fleet at City Hall, Police Station, Recreation Services, 6 Taft Court and the Rothgeb Maintenance Facility (see M-07).

**Next Steps:** The city will continue electric vehicle replacements for Phase 1 Light Duty - FY 2024 and FY 2025 leases, install EV charging stations to serve the fleet, and monitor bus and heavy-duty opportunities and charging infrastructure needs. The city will continue to monitor opportunities to move towards the goal of electrifying more of the total fleet as more options become available.

**Metric:** In 2023, the city fleet included 15 battery electric vehicles (BEV), 1 plug-in hybrid electric vehicle (PHEV), and 3 hybrid vehicles. Of the 70 leased vehicles currently suitable for electrification, currently 23% have been converted to an electric version. As the City's fleet electrification is ongoing, a significant reduction in gasoline and diesel consumption has not yet been realized. Many factors influence total fuel consumption, including the number of snow and ice events occurring per year and the use of diesel fuel consumption for heavy duty operations. One measure to assess total fuel consumption is Gasoline Gallon Equivalents (GGE), this metric can be used to determine the amount of energy produced by alternative fuels as they compare to the energy produced by one gallon of gasoline (114,100 BTUs). GGE includes fleet's use of gasoline, diesel and electricity. Using fuel energy equivalents provides a comparison tool for gauging the consumption of various fuels based on an energy equivalent basis.

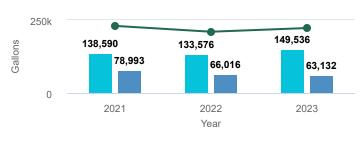
### (M-06) Rockville Fleet





## (M-06) Fleet Fuel

## Fleet Fuel Usage



Total Gasoline Gallon Equivalents (GGE)

Gasoline (gallons)

Diesel (gallons)

Gasoline Gallon Equivalents (GGE) provides a comparison tool for gauging the consumption of various fuels (e.g., gasoline, diesel and electricity) based on an energy equivalent basis.

#### Action 1.3.8 Phased Progress 30%

#### Municipal - 07

Establish a new Capital Improvement Project to expand electric vehicle charging infrastructure on City property to serve employees, fleet and the community.

Progress Highlights: The FY 2023 budget created the Electric Vehicle Infrastructure CIP (GA23) to strategically plan, design and install chargers, also known as electric vehicle supply equipment (EVSE), at city facilities and rights-of-way in coordination with the fleet electric vehicle acquisition and replacement cycle and Rockville's Electrical Vehicle Readiness Plan. The project expands the network of electrical vehicle charging infrastructure on city property to serve the fleet and potentially employees and the community. Phase 1 involves the purchase and installation of charging infrastructure to serve light duty fleet as aligned with the vehicle replacement schedules. Phase II involves planning for heavy duty fleet, such as buses and refuse, as available models come on the market that meet duty cycles. In support of Phase 1, three Level 2 single port charging stations are installed at City Hall, one Level 2 single port charger is installed at the Fleet Services facility, and one portable Level 2 charger is available at the Water Treatment Plant. In 2023, staff coordinated with contractors for designs and cost estimates to expand charging infrastructure to serve fleet at City Hall, the Police Station, Recreation Services Building, 6 Taft Court and the Rothgeb Maintenance Facility. The city also continued to explore grants and partnerships to expand community charging, as described below.

**Issues:** The next round of EV chargers installations require minor site plan amendments, electric upgrades, and changes to parking configurations to support charging accessibility. Additional time is needed for plan and permit approvals.

**Grants:** The city is strategically planning to take advantage of outside funding or the third-party provision of charging infrastructure to reduce installation and maintenance costs.

- Pepco: Rockville is partnering with Pepco for the installations of public charging stations at five sites: Mattie Stepanek Park, Thomas Farm
  Community Center and on-street parking at City Hall/Vinson Street, Fallsgrove Drive/Prettyman Drive, and Twinbrook Station/Bouic
  Avenue. In December of 2023, Pepco began construction of stations (9 ports) in the three right-of-way (ROW) locations. These public
  chargers will be integrated into Pepco's Public Charging Network and will be managed and maintained by Pepco. The next step in the City's
  partnership with Pepco is to complete plan review and permitting for EV chargers (5 ports) at Thomas Farm Community Center and Mattie
  J.T. Stepanek Park.
- Maryland Energy Administration (MEA) grants: Rockville was awarded a Solar Canopy and Dual Use Technology grants to fund the installation of solar canopies over parking lots with four EV chargers at Rothgeb and four EV chargers at 6 Taft. The city also received \$5,632 in rebates from MEA for chargers installed at City Hall and the Rothgeb Maintenance Facility.
- Charging and Fueling Infrastructure (CFI) Discretionary Grant: As part of the IIJA, the City partnered with the Maryland Clean Energy Center and Montgomery County to include up to eight Rockville sites in grant applications submitted to the CFI program. While the 2023 CFI applications were unsuccessful, this is a multi-year grant opportunity where the city can resubmit sites in future funding applications.

**Next Steps:** Continue to design and install EV charging stations to serve light duty fleet replacements planned at the Police Station, City Hall, 6 Taft Court, Rothgeb Maintenance Facility, and Recreations Services. Staff will continue to plan for future funding needs and track funding opportunities, including the Climate Pollution Reduction Grants, and will apply when projects align with funding requirements and schedules.

**Equity:** As grant opportunities arise, the city will submit sites or right-of-way (ROW) locations to support charging opportunities for underserved communities (see also Community - 11).

**Metric:** The table summarizes the locations and status of electric vehicle charging infrastructure planned at city facilities and rights-of-way. As opportunities arise, staff will continue to assess needs and locations.

## (M-07) Table of Electric Vehicle Charging Stations on City Property

Location	EV Charger Type	Ports	Service Type	Status	Location Type
City Hall	Level 2	3	Fleet	Complete	Facility/Park
Rothgeb Maintenance Facility	Level 2	1	Fleet	Complete	Facility/Park
Rothgeb Maintenance Facility	Level 1 - Portable	1	Fleet	Complete	Facility/Park
Water Treatment Plant	Level 1 - Portable	1	Fleet	Complete	Facility/Park
Thomas Farm Community Center	Level 2	1	Public (Pepco)	Complete	Facility/Park
Thomas Farm Community Center	Level 3 - DC Fast Charger	1	Public (Pepco)	Complete	Facility/Park
City Hall (Vinson Street)	Level 2	2	Public (Pepco)	Construction	Right-of-Way
Fallsgrove (Prettyman Drive)	Level 2	3	Public (Pepco)	Construction	Right-of-Way
Twinbrook Station (Bouic St.)	Level 2	4	Public (Pepco)	Construction	Right-of-Way
Police Station	Level 2	1	Fleet	Design	Facility/Park
City Hall	Level 2	6	Fleet	Design	Facility/Park
Thomas Farm Community Center	Level 3 - DC Fast Charger	1	Public (Pepco)	Design	Facility/Park
Mattie Stepanek Park	Level 2	4	Public (Pepco)	Design	Facility/Park
6 Taft Court	Level 2	4	Public (Rockville)	Design	Facility/Park
Rothgeb Maintenance Facility	Level 2	4	Public (Rockville)	Design	Facility/Park
City Hall	Level 2	1	Public (Rockville)	Feasibility	Facility/Park
Rothgeb Maintenance Facility	Level 2	4	Fleet	Feasibility	Facility/Park
Recreation Services Building	Level 2	4	Fleet	Feasibility	Facility/Park

## Action 1.3.9 Completed Progress 100%

## Municipal - 08

Update City teleworking and transportation benefit policies to encourage City employees to reduce vehicle miles traveled (VMT).

**Progress Highlights:** Continued implementing the telework policy and request form. Completed an employee electric vehicle and commute survey in 2023. A total of 116 employees completed the survey. 71% indicated that they would be more likely to purchase or lease an electric vehicle if charging were available at or near work.

**Next Steps:** Explore additional steps to reduce emissions from employee commutes, such as advanced incentives or benefits for cleaner transportation choices. Pepco will soon complete the installation of two Level 2 charging stations in the right-of-way along Vinson Street that will be available to the public and employees to charge, as part of the Pepco Public Charging Network.

### Category 1.4 Progress 30%

#### **Land Management**

Maximize the economic and social benefits of land while maintaining or enhancing natural systems and ecological health to ensure resiliency.

	%	#
In Progress	50.0	2
Phased	50.0	2

Action: 4

#### Action 1.4.1 In Progress Progress 50%

#### Community - 16

Implement the Comprehensive Plan to steer the densest development/redevelopment to mixed-use, transit-served locations, reduce VMT and emissions, and conserve/restore environmental areas.

**Progress Highlights:** In January 2023, the city began to update the Town Center Master Plan, which will aim to increase density and promote transit oriented development in the Town Center neighborhood. In August 2023, the city kicked off the zoning ordinance rewrite initiative which will modernize the city's zoning ordinance and make adjustments to encourage lower parking requirements, incorporate the use of electric vehicles, promote transit oriented and mixed use development, and employ other smart growth principles.

**Next Steps:** Seek endorsement of the Town Center Master Plan by the Planning Commission and then adoption by the Mayor and Council. Continue implementation of the recommendations within the Rockville 2040 Comprehensive Plan according to their implementation tables. Continue the zoning ordinance rewrite project.

**Equity:** Mixed use, transit oriented development can foster affordable housing and with more efficient development and reduce the impacts of climate change and air pollution which are felt most acutely by historically excluded communities. Through these processes, city staff are also looking at new methods of community outreach and engagement to ensure we are hearing from voices that are traditionally left out of public processes or may be harder to engage.

## Action 1.4.2 In Progress Progress 30%

#### Community - 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.

**Progress Highlights:** In 2023, the city launched the Stormwater Incentive Program, a comprehensive program with a total budget of \$300,000 that allocates funds for the RainScapes Program, Flood Mitigation Assistance Program, and a new competitive water quality grants program. The city also partnered with the Chesapeake Bay Trust (Trust) for program administrative assistance. By implementing this innovative and broader funding strategy and leveraging the expertise of the Trust to manage and administer these incentive programs, the city is better able to meet the growing demand for environmentally friendly landscape incentives on private property. The city also collaborated with community volunteers to promote environmentally friendly landscapes and management of of non-native invasive species, highlights include:

- The RainScapes Program expanded to include rain gardens and green roofs as eligible practices, increase the maximum rebate amount to \$5,000 per property, and increase rebate rates for individual practices. In 2023, the RainScapes Program issued \$32,733 in rebates to support 25 tree canopy, rain barrel, conservation landscaping, and permeable pavement projects at 23 properties.
- Two grant applications were selected to receive a total of \$36,154 in grant funds as part of the new competitive water quality grant partnership with the Chesapeake Bay Trust. The projects will receive funding to implement projects aimed at engaging faith-based communities located in the city in reducing stormwater pollution and promoting sustainable practices on private property.
- The city distributed 200 native trees at the annual Fall Tree Giveaway, gave away 250 wildflower seeds at community events, hosted the annual native plant sale at Croydon Creek Nature Center, and hosted a Climate Solutions virtual education session on native plants and trees attended by 60 people.
- The city achieved Community Wildlife Habitat Recertification through the National Wildlife Foundation for the 9th year that included 10 homes newly certified as Wildlife Habitats.

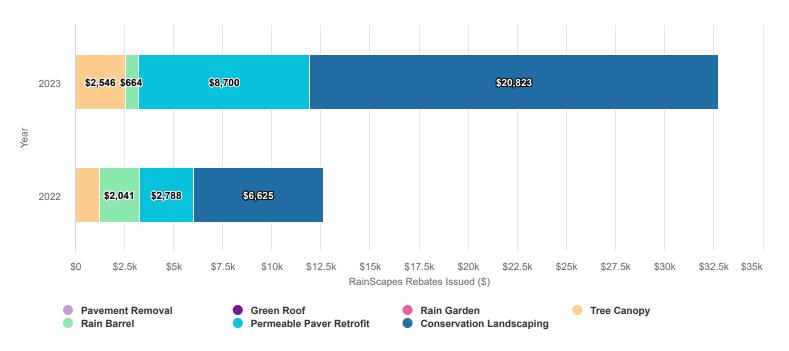
**Next Steps:** Staff will continue to promote environmentally friendly landscaping through incentives programs, giveaways, and Climate Solutions education sessions.

**Equity**: The Competitive Water Quality grant program provides up-front funding to expand or launch water quality restoration and outreach projects within the city. This helps reduce the cost barriers and build capacity in local organizations to deliver programs to residents.

**Metric**: RainScapes rebates are tracked by the Chesapeake Bay Trust. Eligible properties include single-family and townhome residences, homeowners' associations and other nonprofits. In 2023, the amount of rebates issued increased 159% from 2022.

## (C-17) RainScapes Rebates





Properties may receive up to \$5,000 in rebates to implement small-scale stormwater projects to reduce pollution and runoff. Eligible projects include conservation landscaping, permeable paver retrofit, rain barrel, tree canopy, rain garden, green roof, and pavement removal.

## Action 1.4.3 Phased Progress 20%

#### Municipal-09

Develop a Green Space Management Plan for public lands to assess and restore trees, forests, meadows, stream valleys and wetlands.

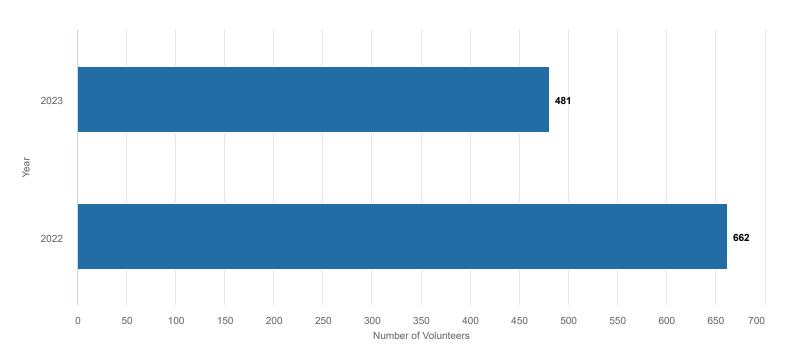
**Progress Highlights:** Rockville owns and maintains more than 1,100 acres of parkland. Parkland uses vary from actively maintained ball fields, playgrounds, community gardens, and lanscaped parks to passively managed forests, stream corridors, meadows and wetlands. In 2023, the city received a grant to restore forested habitat at RedGate Park and worked with volunteers to restore natural parkland. The Rockville Weed Warrior Program engaged 481 volunteers to remove non-native invasive plants from Rockville parks in 2023. Staff also researched plan models implemented by other jurisdictions that incorporate progressive, nature-based approaches to green space management to draft a preliminary project scope and cost estimate. Staff participated in Montgomery County's Nature-Based Climate Solutions workshops.

**Grant:** In 2023, the Chesapeake Bay Trust (CBT) awarded Rockville a \$199,930 grant to fund tree planting at RedGate Park. The grant will help address the reforestation and arboretum component of the RedGate Park Master Plan. Approximately 29 acres of new forest is included in the Habitat Areas Plan, primarily along the southern, eastern, and northern perimeters of the park where it can most effectively connect existing (but fragmented) forest stands, fill gaps in the forest habitat, and increase riparian buffers along drainage systems. New forest will also help connect the natural habitats of RedGate Park with forested areas associated with the adjacent Rock Creek Regional Park to the west and with Croydon Creek Nature Center/John G. Hayes Forest Preserve to the south.

**Next Steps:** Continue to manage the Weed Warrior Volunteer Program, implement the RedGate reforestation project, and coordinate interdepartmental discussions on opportunities to develop a city-wide Greenspace Management Plan, including potential plan options, scope, budget needs, and grant opportunities. The proposed FY 2025 Budget includes a Planned Improvement Project (PIP) for future consideration in FY 2026 for consulting support to develop the Green Space Management Plan.

## (M-09) Weed Warrior Volunteers





Action 1.4.4 Phased Progress 20%

#### **Future Monitoring - 03**

Monitor opportunities to reduce air and noise pollution from leaf blowers and yard equipment.

**Progress Highlights:** The Montgomery County Council enacted Bill 18-22, Noise Control- Leaf Removal Equipment - Amendments, in September 2023 to phase-out the sale and use of gas-powered leaf blowers and leaf vacuums in most areas of the county. This bill applies in City of Rockville and will be enforced by Montgomery County Department of Environmental Protection (DEP) as part of the noise ordinance. The bill prohibits the sale (starring July 1, 2024) and use (starting July 1, 2025) of handheld, backpack, and walk-behind gas-powered leaf blowers and leaf vacuums.

**Next Steps:** Montgomery County will provide retail businesses signs to provide notice to their customers on the forthcoming ban. The city will coordinate with Montgomery County to help inform the community about the leaf blow legislation and available incentives. The city is also planning to transition city-owned landscaping equipment and contracts to comply with the new legislation. This would require funding to replacement gas powered leaf blowers with electric leaf blowers, multiple batteries, and charging station electrical upgrades.

**Equity:** Montgomery County is developing a rebate program to help offset the potential financial burden of converting from gas-powered leaf blowers to electric leaf blowers.

## Category 1.5 Progress 49%

# Materials and Waste Manage solid waste by reducing, reusing, recycling, composting, and sustainable purchasing.

	90	1
In Progress	33.33	1
Upcoming	33.33	
Completed	33.33	1

Action: 3

Develop a food waste composting program for residents.

**Progress Highlights:** The City of Rockville provides two food scraps drop-off sites to make composting easy, keep valuable materials out of landfills, and reduce excessive greenhouse gas emissions. The following sites are accessible 24/7 and the service is free of charge to Rockville residents:

- Rothgeb Maintenance Facility (14625 Rothgeb Drive)
- Senior Center (1150 Carnation Drive)

The Senior Center food waste compost drop-off station opened in April 2023. The second round of kitchen compost caddies was distributed to approximately 250 residents through the Senior Center and City Hall.

**Issues:** Rockville does not currently have access to a local commercial compost facility that processes food scraps. Montgomery County only accepts yard waste at the Transfer Station for composting. Therefore, the city uses a private contractor to transport the food scraps from the two drop-off sites to the Prince George's County compost facility. Due to the high costs of collection and transportation and infrastructure limitations, curbside compost collections are currently not financial feasible. Therefore, the City has first pursued the drop-off model to gauge overall community interest, begin education on this waste diversion opportunity, and build a market for more local commercial food waste compost opportunities.

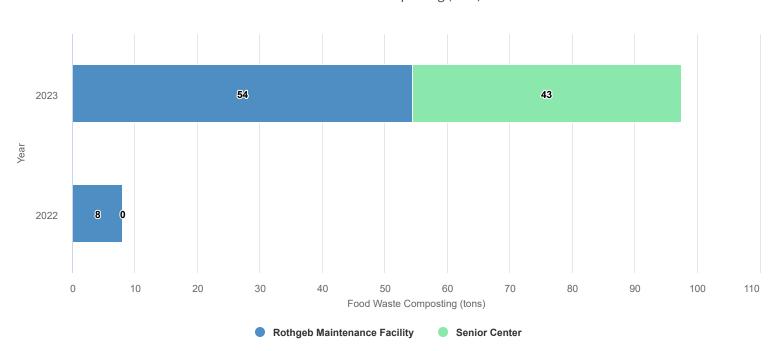
**Next Steps:** Continue to operate drop-off stations and monitor demands and services. Monitor the growth of new food waste composting infrastructure and service opportunities.

**Equity:** Unlike curbside collections that would only serve single-unit attached and detached homes, the drop-off station model is open to all Rockville residents that live in multi-unit or single-unit homes.

**Metric:** The two drop-off stations composted a total of 97 tons of food scraps in 2023.

## (C-18) Food Waste Composting

#### Food Waste Composting (tons)



 $Food \ was te \ compost \ drop-off \ stations \ opened \ at \ the \ Rothgeb \ Maintenance \ Facility \ in \ October \ of \ 2022 \ and \ the \ Senior \ Center \ in \ April \ of \ 2023.$ 

Expand residential recycling and waste reduction outreach program to increase compliance and waste diversion.

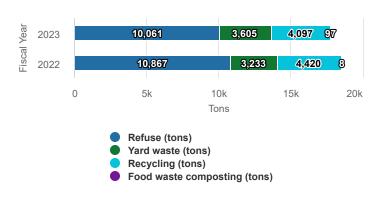
**Progress Highlights:** Distributed multilingual recycling education postcards and included recycling tips in Rockville Reports and social media. Trained staff to utilize new software to record and track recycling compliance on daily routes.

**Next Steps:** Target recycling outreach to homes with reported recycling compliance issues.

**Metric**: The percent of waste recycled/diverted from the landfill increased from 41% in 2022 to 44% in 2023. Diversion includes single stream recycling, yard waste and leaf collection composting, food scrap composting, electronics recycling, and bulk metal recycling. The metric reflects City of Rockville collections from single-family homes and most townhouses; it does not include commercial or multi-unit properties.

#### (C-19) Solid Waste Collected

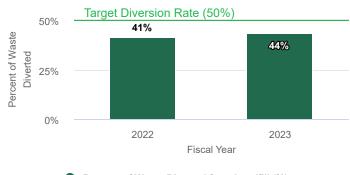
#### Solid Waste Collected



Includes City of Rockville collections from single family detached and attached homes and some facilities (does not include commercial or multiunit properties).

#### (C-19) Waste Diversion Rate

#### Rockville Waste Diversion Rate



Percent of Waste Diverted from Landfill (%)

Percent of waste diverted from the landfill; includes single stream recycling, yard waste and leaf collection composting, food scraps composting, electronics recycling, and bulk metal recycling.

## Action 1.5.3 Upcoming

## Municipal - 10

Develop a City sustainable procurement policy.

**Progress Highlights:** Section 17-89, Environmentally preferrable procurement, of the Procurement Ordinance (Chapter 17) states "the purchasing agent will develop an environmentally preferable procurement policy which shall provide preference, to the greatest extent practicable, to products and services that will enhance and protect the environment, protect the welfare of workers, residents, and the larger global community, and represent the best overall value to the City." While the city has evaluated and improved many purchasing policies, the development of a sustainabable procurement policy is still pending. The Environment Commission identified this item as a priority for their 2024 work plan.

**Next Steps:** The Environment Commission is planning to host a meeting with Procurement to discuss best practices, opportunities and barriers for a sustainability procurement policy.

#### Goal 2

Progress 42%

#### RESILIENCY

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.

% # In Progress 100.0 9

Category: 2

Action: 9

## Category 2.1 Progress 34%

#### **Flood Resiliency**

Reduce vulnerability and enhance flood resiliency.

In Progress

% 100.0

Action: 3

#### Action 2.1.1

In Progress

Progress 42%

#### Community - 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.

**Progress Highlights:** Rockville, Montgomery County, and other municipalities coordinated to support Federal Emergency Management Agency (FEMA)'s update of Montgomery County's Flood Insurance Rate Maps (FIRM) and launch the floodplain update webpage in December 2023. Rockville is required to adopt the final maps into law to participate in the National Flood Insurance Program which allows property owners to obtain flood insurance. Habitable structures with federally backed mortgages that are located in the Special Hazard Flood Area (SFHA), an area with a high risk of flooding, are required to have flood insurance. Based on FEMA's updated Flood Insurance Rate Maps, a total of 84 structures in the City of Rockville will be affected by the floodplain map update. 72 structures will be added to or remain in the SFHA and 12 structures will no longer be located in the SFHA.

**Next Steps:** Staff will mail 374 letters to residents with structures or property affected by the FEMA Flood Insurance Rate Map (FIRM) update and host three floodplain update information sessions in conjunction with Montgomery County and City of Gaithersburg. Virtual and in-person session options will be available. Staff will update the Floodplain Management ordinance (Chapter 10) of the city code to meet the requirements to participate in the National Flood Insurance Program and enhance floodplain management.

**Equity:** Higher insurance premiums would have a disproportionate impact on low-income homeowners and could raise rents. The city offers an expanded Flood Mitigation Assistance Program to offset the costs of floodproofing projects. Implementing floodproofing can not only reduce risk to structures. Translation services will also be offered for the in-person information session. Letters to residents with structures or property in the floodplain will be made available in Simplified Chinese and Spanish on the city's website.

## Action 2.1.2 In Progress Progress 33%

#### Municipal - 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.

**Progress Highlights:** To address how climate change is impacting Maryland's rainfall patterns, stormwater runoff and urban flooding, the Maryland General Assembly enacted 2021 Senate Bill 227. The Bill tasks the Maryland Department of the Environment (MDE) with developing plans to evaluate current flooding risks and update regulations to improve urban stormwater flood management. MDE worked with a stakeholder advisory group and the public on the Advancing Stormwater Resiliency in Maryland (A-StoRM) initiative. A-StoRM looks to update Maryland stormwater regulations to incorporate recent precipitation data more effectively and to address urban flooding events. Rockville engineering staff participated in stakeholder advisory group meetings.

Based on the A-StoRM initiative, MDE published for public comment, "Proposed Stormwater Management Regulatory Requirements for New Development and Redevelopment," dated July 26, 2023. The proposed regulatory requirements change the Maryland Stormwater Design Manual (October 200, Revised May 2009) to rely on updated rainfall data covering a larger period. The updated rainfall data indicates an increase in the 90% average rainfall for the State from 1.0" to 1.4" and a new 1 yr/24-hr design storm rainfall of 3.0" instead of the previous 2.7". This will represent a fundamental change in how stormwater best management practices are evaluated to meet design storm and environmental site design requirements.

**Next Steps:** MDE plans to move forward with the proposed regulation changes, which, if approved, would go into effect on January 1, 2027. Local municipal and county ordinances would need to be updated with the new regulations. MDE will provide a Model Ordinance and updated Design Manual, and provide examples to help local governments in updating their ordinances. All municipal and county ordinances would be required to receive MDE approval by January 1, 2026 and be approved by the local governing body by January 1, 2027.

#### Action 2.1.3

In Progress

Progress 27%

#### Municipal - 13

Assess Rockville's risk of flooding and develop a Flood Resiliency Master Plan to reduce or mitigate flooding impacts.

**Progress Highlights**: The FY 2023 budget appropriated \$1.5 million to develop a Flood Resiliency Master Plan (SA23) to assess the potential impacts of changing weather events and flood risks and develop a plan to mitigate flooding. The plan features two concurrent studies:

- Targeted drainage areas: In February of 2023, Rockville entered into an agreement with the United States Army Corps of Engineers (USACE) to participate in the Planning Assistance to States (PAS) Program. Via this program, the City receives USACE technical assistance in developing high-resolution stormwater flood models and flood mitigation options for two targeted drainage areas: 1) the area leading to Congressional Towers property; and 2) a portion of the drainage area in the Twinbrook neighborhood. Both areas received flood damage during Tropical Storm Ida in 2021. The PAS program gives the City direct access to highly-trained technical experts. The USACE contributes 50% of the cost of the project. The total cost for the Phase 1 and Phase 2 studies is \$358,000 and the City will contribute \$179,000. In the fall of 2023, the USACE began to collect storm drain field survey data to include in the stormwater flood model.
- Citywide study: Due to limited USACE resources to conduct a citywide assessment, the city is planning to work with a consultant to pursue a lower-resolution city-wide model of 13.5 square miles and a network of more than 12,000 storm drain structures. In 2023, staff developed the scope of work for the citywide study to fulfill future State of Maryland requirements for "Watershed Plans" introduced in the fall 2021 MDE A-StoRM report. The city applied for FEMA granting funding to support the citywide study.

### **Next Steps:**

- The USACE will continue analysis of the targeted drainage areas, Twinbrook and Congressional Towers, which will continue in FY 2025.
- Consultant award and work on the city-wide study is on hold until FEMA issues notice for grant awards. The FEMA grant award process stipulates that the project cannot start until the grant is awarded, which is anticipated in April of 2024. After grant award and execution, the city can then award and issue the notice to proceed to the consultant to begin the stakeholder engagement process and development of the flood model.

**Equity:** The consultant will develop a community engagement plan in accordance with the City's values of Justice, Equity, Diversity, and Inclusion. A comprehensive and equitable analysis is needed to evaluate areas at risk for flooding, work with the community to develop risk tolerance and prioritization methodologies, and prioritize mitigation projects to help improve flood resilience in a transparent and equitable manner.

**Grants**: The Flood Resiliency Master Plan was awarded a \$75,000 grant from Maryland Department of Natural Resources and \$179,000 in technical support from Army Corps of Engineers (50 percent cost-share). Rockville applied for a \$700,000 Flood Mitigation Assistance Grant and is waiting for FEMA to announce grant awards in 2024.

## Category 2.2 Progress 47%

## **Community Resiliency**

Reduce vulnerability and enhance community resiliency.

In Progress 100.0

Action: 6

Incorporate climate resilient building and infrastructure design features in new buildings and retrofits.

**Progress Highlights**: Launched as a pilot in FY 2023 to assist property owners in making improvements to protect their properties from flooding, the Flood Mitigation Assistance Program (FMAP) was instituted as a permanent program in FY 2024 under the comprehensive Stormwater Incentive Program. FMAP provides up to 50% of the total costs for approved flood mitigation measures, up to a maximum amount of \$5,000 per property. Reimbursements are open to both residential and commercial properties, as well as homeowner associations and condominium associations to help promote community flood resiliency. Examples of approved practices include custom window wells, quick dams, sump pumps with battery backup, utility protection, basement floodproofing, and surface drainage improvements.

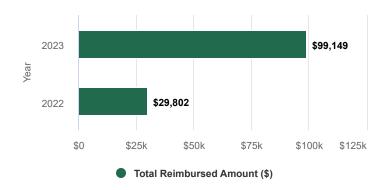
**Next Steps:** Continue to implement the Flood Mitigation Assistance Program and monitor trends. Consider flood resiliency measures in future building code and floodplain ordinance updates. Transition management and administration of the FMAP program to the Chesapeake Bay Trust in FY 2025. Monitor needs and opportunities to incorporate other resiliency measures for heat, severe weather, power outages, etc.

**Equity:** Staff recognizes that the upfront cost required for flood mitigation projects limits the ability of low- to moderate-income residents to participate in the reimbursement program. Staff plans to work with the Chesapeake Bay Trust to explore opportunities to work with non-profits to make flood resiliency projects more accessible.

Metric: In 2023, the Flood Mitigation Assistance Program reimbursed a total of \$99,148 for 92 flood mitigation projects at 40 properties.

#### (C-20) Flood Mitigation Assistance Program Reimbursements

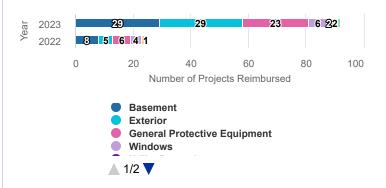
## Flood Mitigation Assistance Program (FMAP)



The Flood Mitigation Assistance Program (FMAP) provides up to 50% of the total costs for approved practices, up to a maximum amount of \$5,000.

## (C-20) Flood Mitigation Assistance Program Projects

## Flood Mitigation Assistance Program (FMAP)



The Flood Mitigation Assistance Program (FMAP) offers reimbursement funds to residents and property owners who make improvements to their properties to mitigate future flood damage.

Work with Montgomery County and state agencies to provide cooling centers, resilience hubs, and other services to strengthen community resiliency.

Progress Highlights: Rockville coordinates with Montgomery County, state agencies and members of the community on a variety of programs and projects to strengthen community resiliency.

- Rockville operates four cooling centers when the temperature hits 95-plus degrees, or when a code red air quality alert is issued for Montgomery County. The centers are located at Lincoln Park Community Center, Thomas Farm Community Center, Twinbrook Community Recreation Center and the Rockville Senior Center.
- The "Alert Rockville" emergency communications system sends time-sensitive emergency alerts, notification and updates to devices.
- The "villages" program includes multigenerational and multicultural neighbor support networks. The program fosters social connections through activities and events, and coordinates volunteer help at home using a neighbor-helping-neighbor model. A Villages Facilitator provides monthly newsletters on upcoming events, news and resources. The Villages program has grown with the formation of villages in King Farm, East Rockville, Rockville Town Center, West Rockville, Wootton's Mill, New Mark Commons, Lincoln Park, Twinbrook and Falls Orchard. The program coordinate friendly visits, check-in phone calls, social events, health and safety events, grocery and pharmacy pickups and delivery and transportation to medical appointments. These volunteer networks can be used to ensure that vulnerable neighbors are checked upon during snowstorms, severe weather or heat waves to strengthen community resiliency.
- To further expand resiliency, the renovation of 6 Taft Court includes plans to install and operate a City multi-purpose operational Emergency Operations Center (EOC) facility.

Next Steps: Rockville will continue to evaluate community needs and partnership opportunities for community resiliency support. Results from the updates to Montgomery County's Hazard Mitigation Plan and Rockville's Continuity of Operations Plan (COOP) will inform future endeavors.

Equity: To better serve vulnerable populations, Rockville's Housing and Community Development coordinates with Montgomery County to provide comprehensive and wraparound social services that include counseling and mental health services, referral services to food supply, mentoring, emergency assistance for eviction prevention, prescription medications, home energy programs, electric/gas/water utility assistance, and other self-sufficiency programming for residents.

#### Action 2.2.3 In Progress Progress 75%

#### Community - 23

Work with Montgomery County and community partners to measure and map urban heat islands to mitigate exposure to extreme heat.

Progress Highlights: The National Oceanic and Atmospheric Administration (NOAA) awarded Montgomery County an urban heat mapping grant. Rockville provided a letter of support to partner in this effort and promoted participation in a mapping event held August 2022. Almost 600 community volunteers used heat sensors mounted onto their cars to record and map temperatures as they traveled their neighborhoods on one of the hottest days of the year. Mapping efforts encompassed densely populated areas like Gaithersburg, Germantown, Rockville, Silver Spring, Bethesda, Fairland, and Olney. The results of the study are published in Montgomery County's Community Heat Mapping Story Map.

Next Steps: Montgomery County's Office of Emergency Management and Homeland Security (OEMHS) is developing a tool to integrate mapping of the County's tree canopy, land use and land cover, impervious surfaces, and heat maps. The mapping tool can be utilized in concert with maps of vulnerable or high-risk communities to determine areas at highest risk of urban heat island effect for mitigation efforts and resource prioritization.

Equity: Extreme heat can cause dangerous health outcomes for those exposed, especially for seniors, infants, outdoor workers, people with preexisting health conditions, and people without access to air conditioning. Mitigation measures should address vulnerable or high-risk communities.

Increase tree planting, green, cool and photovoltaic roofs, and cool pavements on public and private property.

**Progress Highlights:** Rockville provides a variety of programs to increase tree planting, green, cool and photovoltaic roofs, and cool pavements on public and private property.

- In FY 2024, the city partnered with the Chesapeake Bay Trust to expand the RainScapes Rebate Program and create a new competitive water quality grant program to include incentives for the installation of new green roofs. Residents and non-profits can now receive a rebate for green roof installation at a rate of \$9 per square foot. Eligible properties can receive up to \$5,000 per property across all RainScapes rebate options. Green roofs are also eligible for grant funding under the new competitive water quality grant program, which is open to organizations including non-profits, faith-based organizations, community and homeowners' associations, and educational institutions.
- In 2023, the city provided rebates for 17 trees planted on private property through the RainScapes Rebate Program.
- The city distributed 200 native trees to residents during the Fall Tree Giveaway and provided tree care educational information.
- The city planted 431 trees on public property.
- See Community 02 and Community 09 for solar progress highlights.

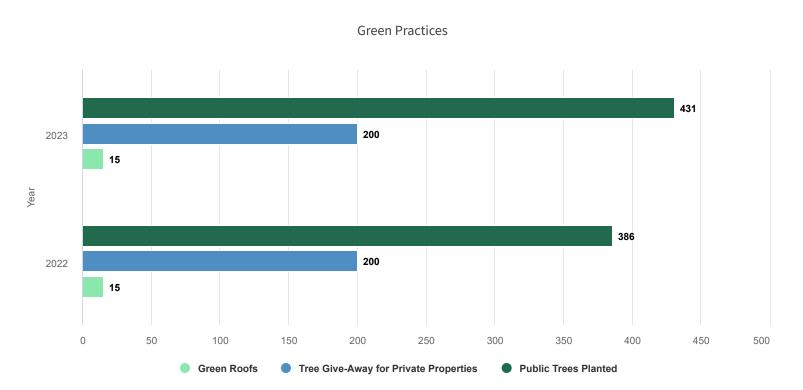
**Next Steps:** Continue to promote incentives for green roofs and tree plantings through the RainScapes Rebate Program and new competitive water quality grants. Continue to improve methods to track green roof installations, solar permits, and tree plantings on public and private property.

**Equity:** Initial data shows a wide distribution of trees districuted to homes from the Fall Tree Giveaway and RainScapes projects across Rockville in all neighborhoods. New expanded RainScapes programs are available to more non-profits and multi-unit residences, expanding the program beyond single-unit homes. The City continues to seek grants to benefit low income households and to work with Rockville Housing Enterprises to expand funding for green investments.

Grants: Rockville was awarded a grant for \$199,930 from the Chesapeake Bay Trust Fund for RedGate Park and Arboretum tree planting.

**Metric:** Data on green roof installations is available through the city's internal stormwater facility GIS database. Data on tree planting on public property is tracked by the city's Forestry division. Comprehensive data on tree plantings and cool pavement on private property is not currently available.

## (C-24) Green Practices



#### Action 2.2.5 In Progress Progress 50%

#### Municipal - 11

Continue assessing the vulnerability of Rockville's critical infrastructure, facilities, and services, and prioritize areas for improved climate resiliency.

**Progress Highlights:** Rockville participated in the five-year update of Montgomery County's Hazard Mitigation Plan (HMP). The County is responsible for updating and adopting a FEMA-Approved Hazard Mitigation Plan every five years to maintain eligibility for hazard mitigation funding. Montgomery County's Office of Emergency Management and Homeland Security (OEMHS) coordinated with several local jurisdications and agencies to develop the draft Hazard Mitigation Plan (HMP) for public comment in 2023. The plan identifies and profiles hazards, analyzes people and facilities at risk because of these hazards, and develops mitigation actions to reduce or eliminate hazard risk to create a stronger, more resilient community. The plan is not only intended to protect lives and properties but also to reduce the social, economic, and environmental aftereffects which often follow hazardous events. The plan update factors impacts due to climate change and equity considerations in vulnerability assessments.

Rockville also partnered with a consultant to update the Continuity of Operations Plan (COOP) in 2023. Continuity planning facilitates the performance of essential government functions during all-hazards emergencies or other situations that may disrupt normal operations. The COOP planning process is almost complete with dozens of workshops held over the last year with various city departments and sub-functions to identify almost 100 essential functions of City government. These functions were then examined across three COOP scenarios: 1) loss of personnel, 2) loss of critical facilities, 3) loss of critical systems. Where possible, workarounds and redundancies are identified in order to keep core functions of city government operating.

**Next Steps:** The County will finalize the 2024 Hazard Mitigation Plan and local jurisdictions must adopt the plan to maintain eligibility for federal funding. Rockville's COOP update process will conclude with a tabletop exercise involving senior staff in mid-April 2024. The COOP documents will be finalized following implementation of lessons learned from the exercise. The completed COOP documents are expected in May 2024 with annual review and exercises to begin in 2025.

**Equity:** Montgomery County's Hazardous Mitigation Plan includes a social vulnerability assessment and incorporates the Climate and Economic Justice Screening Tool (CEJST). CEJST uses datasets that are indicators of burdens in eight categories: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development to help identify disadvantaged communities at the census tract level (from 2010 Census). The COOP planning process also ensures that essential functions of City government operate to support vulnerable communities.

## Action 2.2.6 In Progress Progress 50%

#### Municipal - 14

Develop and implement Heat Illness Prevention Plans for various City services and operations.

**Progress Highlights:** A Heat Illness Prevention Plan (HIPP) contains specific steps the city will take during high heat events to reduce heat risks; which include, but are not limited to implementing work practice controls, training workers before hot outdoor work begins, ensuring workers are acclimatized before working in hot environments, providing appropriate hydration, ensuring and encouraging rest/cool-down breaks, among others. Human Resources and Public Works developed a Heat Illness Prevention Plan (HIPP) in 2020 for Recycling and Refuse operations. Annual employee training and implementation are ongoing. Maryland Occupational Safety and Health (MOSH) proposed new Heat Stress Standards with a wide-reaching scope. Human Resources is tracking the proposed standards to determine how they may apply to all operations, both indoors/outdoors, where the heat index exceeds 80 degrees.

Next Steps: Pending adoption of new Maryland OSHA standards, Human Resources will develop plans to comply with the new standard.

**Equity:** The plans are designed to protect the health and safety of employees working outdoors, who are disproportionately socially vulnerable populations, from exposure to high heat conditions during the summer.

#### **PUBLIC ENGAGEMENT AND OVERSIGHT**

Incorporate equity in implementation and conduct inclusive engagement to reduce environmental disparities and protect and empower vulnerable communities.

| # In Progress | 75.0 | 3 | Completed | 25.0 | 1

Category: 2

Action: 4

## Category 3.1 Progress 67%

#### **Public Engagement**

Promote public engagement and empowerment.

In Progress

% 100.0

Action: 2

#### Action 3.1.1

In Progress

Progress 71%

#### Community - 25

Work with community partners to conduct an inclusive public engagement campaign to reduce emissions and adapt to the impacts from climate change.

**Progress Highlights:** Public engagement and outreach for the Climate Action Plan is achieved through multiple venues including Rockville Reports, social media, an Environment and Sustainability email newsletter, Climate Solutions virtual sessions, and in-person community events. Highlights of 2023 public engagement include:

- Published 12 issues of the Environment & Sustainability newsletter with an average open rate of 57% and increased email subscriptions to 3,115. The newsletter shares sustainability events, volunteer opportunities, Climate Action Plan updates, and environmental news and tips within the Rockville community. 2023 newsletters featured information on solar programs, rebate opportunities, native habitat and gardening tips, flooding resources, green events and general pollution prevention. Residents opt in to receive the Environment and Sustainability email newsletter through an online form linked on the city website, in-person sign-up sheets at community events, and through various program and giveaway forms.
- Hosted two Climate Solutions education sessions attended by 84 participants.
- Hosted or participated in eight in-person community outreach events.
- The Rockville Environment Commission hosted an outreach booth at 7 Farmers Market events.

**Next Steps:** Continue to engage and educate community members in climate topics through the email newsletter, Climate Solutions virtual sessions, and in-person and virtual events. Explore opportunities to partner across departments and agencies on new community engagement opportunities.

**Metric:** Staff track participation in community events and how many impressions, or the number of community members engaged, are made at each event. The Environment and Sustainabilty Email Newsletter and subscriptions are created and managed in MailChimp, which provides detailed analytics that allow staff to track subscriptions and evaluate the interest in various issues and topics through open rates and click rates.

## (C-25) Outreach and Community Events

## **Outreach and Community Events**

Year	Newsletters	Newsletter Subscriptions	Events	Event Impressions
2022	16	2,629	25	757
2023	12	3,115	17	1,056

## Action 3.1.2 In Progress Progress 62%

#### Municipal - 16

Develop partnerships and interdepartmental climate action teams to implement and track plan progress.

**Progress Highlights:** Throughout 2023, CAP implementation involved a combination of internal and external partnerships and coordination. Interdepartmental teams involved electric vehicle planning and permitting, fleet electric vehicle use, Justice Equity Diversity and Inclusion (JEDI) workgroups, building codes, low-to-moderate income housing weatherization, and budget action items. Additionally, Rockville participated in several external policy and implementation partnerships, including Montgomery County Climate Leadership meetings, MWCOG Climate and Energy Policy Committee, MWCOG and Montgomery County EV Workgroups, the Maryland Coalition of Counties, and Cities for Climate Action. Rockville also participated in several partnerships for federal grant programs:

- Climate Pollution Reduction Grant: The City is participating in the Maryland, Montgomery County, and MWCOG Climate Pollution Reduction Act plans and are attending meetings to represent the City's interests in both the Priority Climate Action Plans and the potential implementation grants to reduce emissions from buildings, transportation, and increase sequestration.
- DOT Charging and Fueling Infrastructure Program: Rockville joined Maryland Clean Energy Center's applications to seek funding for DC Fast public electric vehicle charging stations at the Swim and Fitness Center and several other community charging stations on City rights-of-way near low income, multi-family residences and community centers. Although not awarded this round, the program will have future rounds and Rockville will continue to apply and/or identify other funding opportunities to support publicly accessible charging.
- EPA Greenhouse Gas Reduction Fund Solar For All Program. The City submitted a letter of support for the Maryland Clean Energy Center's statewide grant application for a low- and moderate-income Solar for All grant program. The program funds the installation of solar systems on individual homes, multi-family buildings, and develops community solar projects to benefit disadvantaged communities. The program details are in development, but the grant, if awarded to the MCEC, would fund approximately 30,000 solar systems in Maryland, reducing energy costs and supporting renewable energy production.

**Issues:** Due to the comprehensive nature of the CAP, a single climate action team would not efficiently and effectively execute the CAP. Instead the CAP requires multiple partnerships with external agencies and coordination with interdepartmental teams with expertise to address individual topics. Therefore, this action was updated as follows:

- Original Action: Develop an interdepartmental climate action team to implement and track plan progress.
- Revised Action: Develop partnerships and interdepartmental climate action teams to implement and track plan progress.

**Next Steps:** Continue to coordinate with external potential partners and expand interdepartmental teams and workgroups to focus on other topics of sustainability and CAP implementation.

**Metrics:** The exhibit highlights some of the of external partnerships (Federal, state, regional and county agencies) and interdepartmental working groups needed to implement and track the CAP's 42 actions.

## Climate Action Plan Partnerships and Coordination

Federal Partners

- US Environmental Protection Agency
- US Department of Energy
- US Department of Transportation

Regional and State Partners

- Metropolitan Washington Council of Governments
- Utilities (Pepco)
- MD Department of the Environment
- MD Energy Administration
- MD Department of Housing and Community Development
- MD State Highway Administration
- MD Public Service Commission
- MD Department of Natural Resources
- MD Clean Energy Center
- Chesapeake Bay Trust
- Montgomery County

Rockville Interdepartmental Teams

- Building Codes
- Electric Vehicle Charging Plans and Permitting
- Facilities (energy efficiency, solar, ev charging, etc.)
- Fleet EV Drivers
- Floodplain and Stormwater
- Green Space and Trees
- Hazardous Mitigation and Continuity of Operations
- Justice Equity Diversity and Inclusion
- Sustainability (other measures)
- Zoning Code

Category 3.2 Progress 88%

## Oversight

Execute, plan and monitor progress.

In Progress Completed % 50.0 50.0

1

Action: 2

#### Action 3.2.1 In Progress Progress 75%

#### Community - 26

Develop metrics and performance indicators for climate actions to establish a data-driven assessment and reporting process.

Progress Highlights: The Environment Commission provided feedback for improvements to the annual report, the Climate Action Plan (CAP) project website, and performance metrics. After developing an initial template for tracking limiting available metrics in the first annual report, the 2023 version was developed in a new software platform, Envisio, to help streamline reporting and provide meaningful visual data representations of metrics to communicate progress on several CAP actions. In addition to an annual report, the software supports a new Climate Action Plan interactive public dashboard to report progress updates and performance measures. The dashboard is embeded into the Climate Action Plan website.

**Next Steps**: Continue to compile annual reports to monitor and demonstrate CAP progress. MWCOG anticipates the next round of greenhouse gas inventories for calendar year 2023 will be released in 2025 to align with the regional transportation plan and reflect post-2020 pandemic patterns. Other metrics can be tracked annually or semi-annually as needed. Develop metrics to track equity in implementation in consultation with the JEDI team

**Equity**: The new Envisio public dashboard provides an accessible reporting mechanism that is ADA compliant and conforms with WCAG 2.1 AA guidelines.

## Action 3.2.2 Completed Progress 100%

#### Municipal - 15

Incorporate climate mitigation, resiliency, and equity considerations into the City's budget prioritization process.

**Progress Highlights:** The FY 2024 budget introduced new climate resiliency and equity considerations as part of the internal budget development process. These items have continued with the FY 2025 budget. Climate sustainability and resiliency resources are provided to staff to assist in documenting climate considerations and new fields for staff to identify climate considerations were added to all capital project and operating enhancement submissions. These fields allow staff to better document climate impacts and provide the City Manager with clearer information to support funding recommendations.

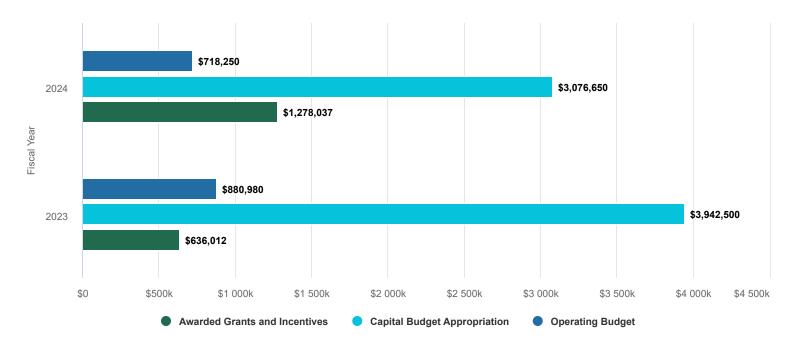
The FY 2024 budget included more than \$3.7 million for CAP initiatives, such as continued food waste composting program, facility energy audits and improvements, LED streetlight replacement, storm drain rehabilitation, stream restoration, and an expanded stormwater incentive program that includes the Flood Mitigation Assistance Program, expanded RainScapes Rebates, and new competitive watershed grants.

**Next Steps:** Continue to prioritize CAP measures in the FY 2025 budget process, when feasible. Continue to monitor and seek outside funding to implement CAP projects and programs.

**Equity:** The operating and capital budgets include equity criteria for prioritization.

**Grants:** The City continued to leverage outside funding sources to implement CAP projects. In 2023, the city was awarded more than \$1.2 million in grants and rebates to support LED streetlight conversations, facility energy retrofits, solar canopies, and flood resiliency master planning.

## (M-15) Climate Action Plan Budget



<sup>\*</sup> Includes new capital appropriations. Does not include transportation appropriations and grants that are summaried in Vision Zero progress reports.