



CITY OF ROCKVILLE

CLIMATE ACTION PLAN



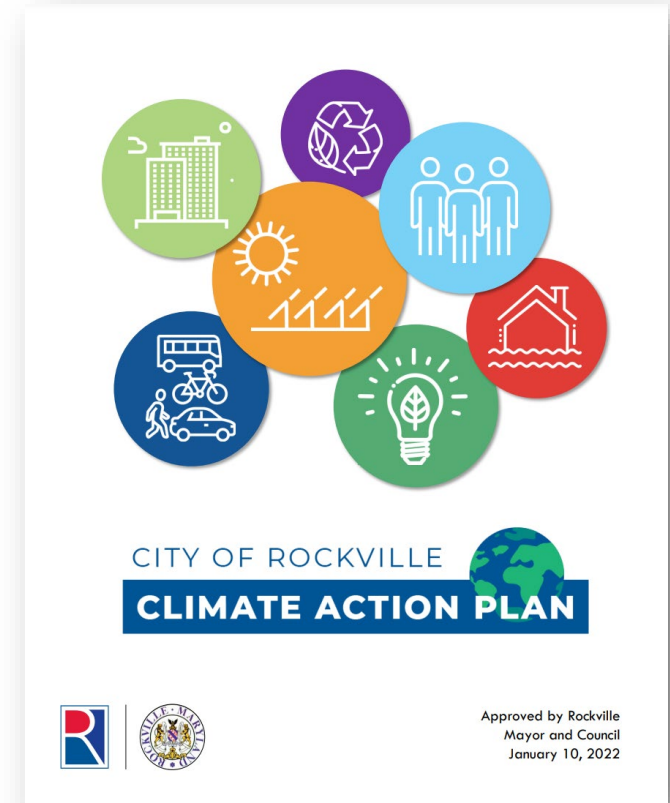
2022 Annual Report

Rockville Mayor and Council

March 27, 2023

Overview

1. 2022 Annual Report (Action C-26)
2. CAP Action Status Summary
3. Greenhouse Gas Trends
4. Highlights of 2022 Accomplishments
5. Next Steps



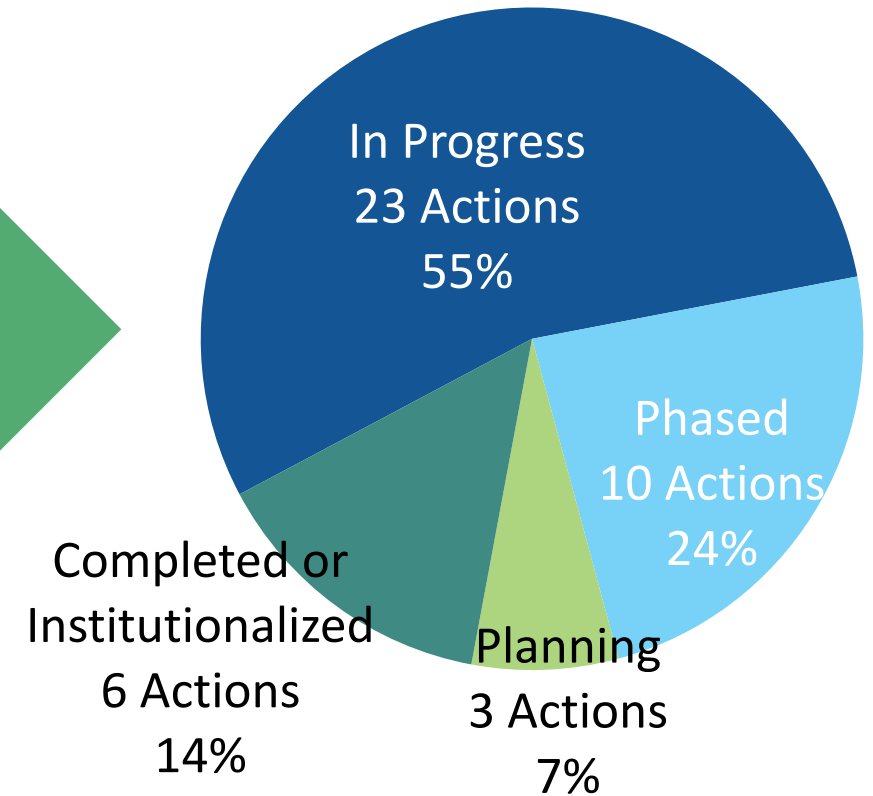
CAP Action Status Summary

Status of 42 Climate Actions (2022)

Mayor and Council adopted the Climate Action Plan on January 10, 2022.

FY 2023 budget: more than \$4.2 million to climate mitigation & resiliency actions*.

Awarded 11 grants and rebates worth more than \$1.58 million to support climate actions*.



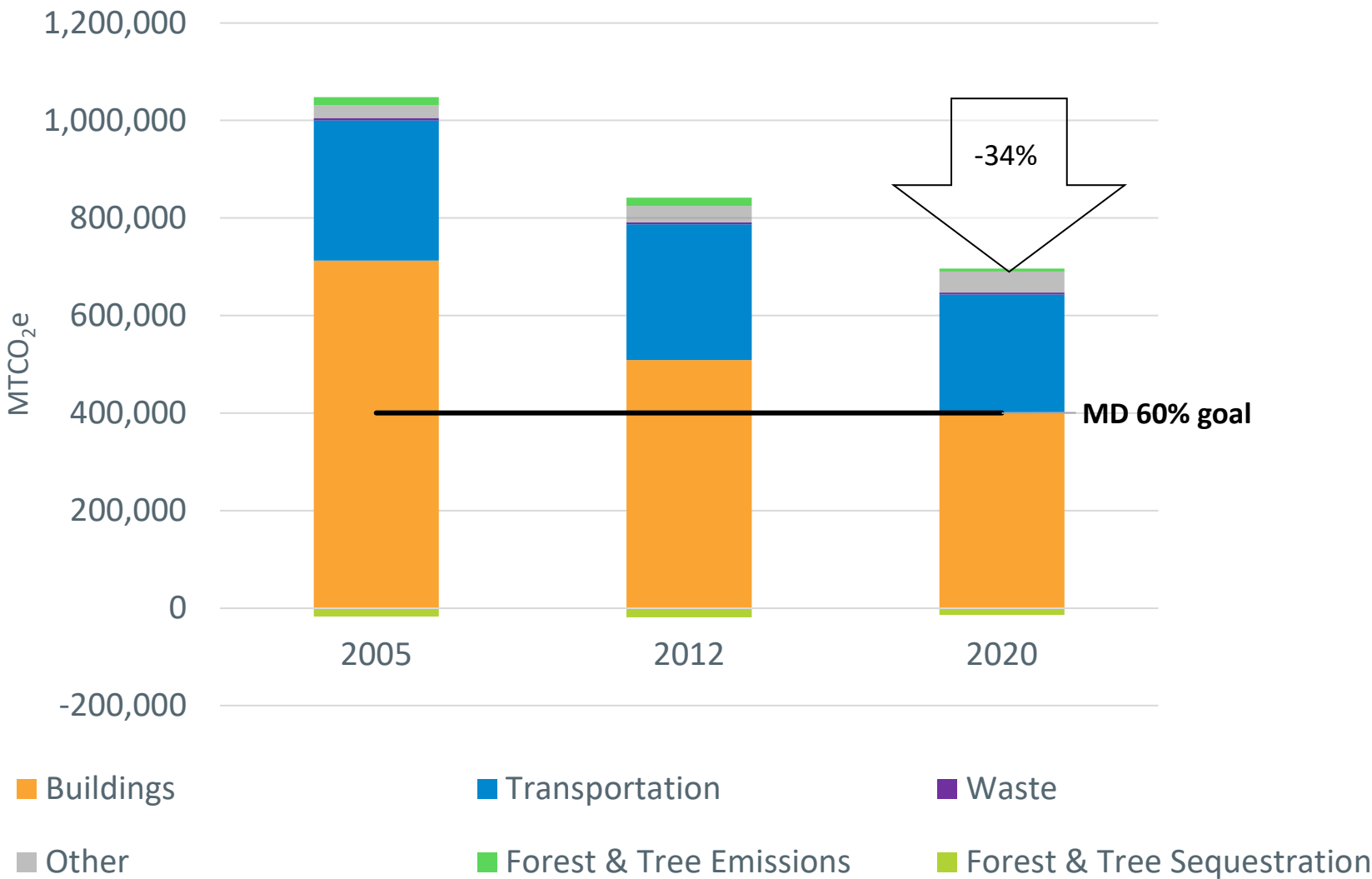
*Does not include transportation funding

Greenhouse Gas Trends

Rockville’s greenhouse gas emissions decreased 34% since 2005.

This is mostly due to fuel-switching, efficiency increases, and pandemic changes.

Another 26% decrease is needed to reach Maryland’s 60% reduction goal by 2030.



2022 CAP Highlights

7 Categories, 42 Actions



Energy Efficiency (9 actions)

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



Renewable Energy (5 actions)

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



Transportation (9 actions)

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



Land Management (3 actions)

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



Materials and Waste (3 actions)

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



Resiliency (9 actions)

Improve the capacity of our community, homes, businesses, and natural environment to prevent, withstand, respond to, and recover from climate change impacts such as rising temperatures, more frequent and intense heat waves, heavy rainfall and severe storms.



Public Education and Oversight (4 actions)

Conduct inclusive and equitable public engagement and involvement and establish systems for monitoring and accountability to encourage participation and support plan success.



Energy Efficiency: Community

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- **Building Energy Performance Standards (BEPS) (C-01):** Montgomery County and Maryland approved BEPS legislation for existing buildings to increase efficiency and reduce emissions. Regulations to be issued in 2023.
- **Home Energy Improvements (C-02):** The City began a working group with Rockville Housing Enterprises (RHE) and Habitat for Humanity Metro Maryland for energy audits and weatherization of RHE homes.
- **Home Energy Disclosure (C-04):** Rockville opted into Montgomery County's point of sale home energy disclosure and radon testing law. Distributed free radon test kits.
- **Building Electrification Incentives (C-06):** Montgomery County appropriated \$1 million for a pilot incentive program to replace residential fossil fuel appliances with electric systems. City staff is participating in RFP selection workgroup for contractor support; home incentives expected to launch in 2023.

Energy Disclosure for Home Sales

Montgomery County requires home sellers to provide an energy cost and consumption history, along with information on residential energy efficiency opportunities.

This requirement is intended to ensure that the home buyer is informed of the home's energy performance before the sale, and provides options to finance energy efficiency improvements. **Providing this document to the home buyer, along with the energy cost and usage information, satisfies the Energy Disclosure Requirement (see blue box below).**

Home Buying Financing

Energy Efficiency Mortgages
energystar.gov/newhomes/mortgage_lending_programs/energy_efficient_mortgages
This page provides an overview of EEMs and links to resources such as U.S. General Services Administration, and EPA's ENERGY STAR Program.

Streamlined K Loan
hud.gov/program_offices/housing/sfh/203k
This loan supported through the U.S. Department of Housing and Urban Development merges the homeowners mortgage with a loan for any immediate improvements.

Energy Basics

Montgomery County, MD
montgomerycountymd.gov/green/energy
The site has a list of local, state and federal incentives and resources, as well as, utility incentives for energy-efficiency improvements.

ENERGY STAR
energystar.gov
Find information on ENERGY STAR products and tips for common energy efficiency home.

Energy Disclosure Requirement:

THE SELLER must provide:

- copies of applicable electricity, gas, and home heating oil bills, or a cost and usage history for the 12 months immediately prior to the sale, unless the home was previously unoccupied for the entire 12-month period;
- the required information for the part of the prior 12 months, if any, the single-family home was occupied; and
- information, approved by the Montgomery County Department of Environmental Protection, to assist the buyer in making energy conservation decisions.

Montgomery County Code, § 40-13B

Do-It-Yourself

Online tools are available for DIYers who want to conduct their own energy assessment.



Energy Efficiency: Municipal

- **Facility Energy Efficiency (M-01):**
 - Completed City Hall Phase 1 energy efficiency work (2nd floor LED lights).
 - Awarded \$55,000 Maryland Energy Administration (MEA) grant and pre-approved for \$40,362 Pepco rebate for City Hall Phase 2 energy efficiency work (1st and 3rd floor LED lights, window film).
 - Applied for MEA grants for LED lighting upgrades to Senior Center and Twinbrook Community Recreation Center (\$150,000).
- **LED Streetlight Conversion (M-02):** MEA awarded a \$445,750 grant and Pepco approved \$224,875 in rebates to implement the first phase of the LED Streetlight Conversion CIP TA22. Conversion planned in 2023.

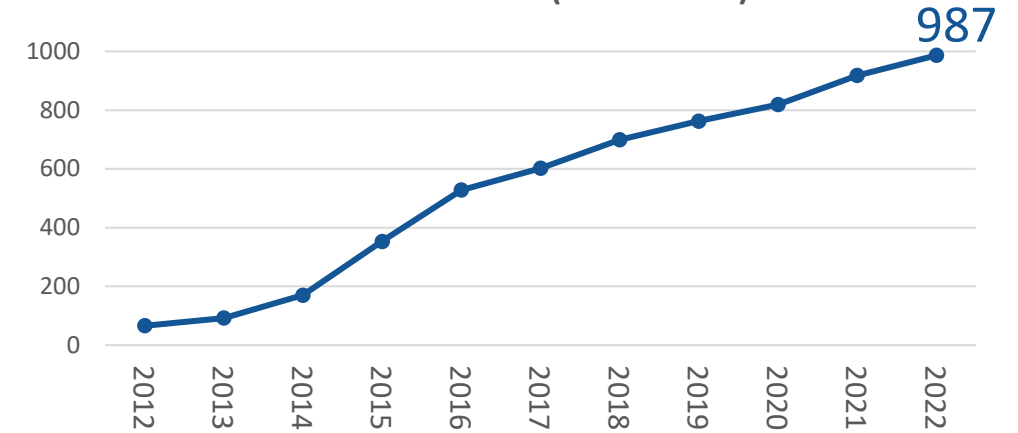




Renewable Energy: Community

- **Renewable Energy Advocacy (C-07):** The Mayor and Council advocated for the Maryland Climate Solutions Now Act of 2022 to expand clean energy and reduce emissions.
- **Promote Solar Installations (C-09):** Rockville participated in the Capital Area Solar and Electric Vehicle Charger Co-op.
 - Co-op recruited 337 regional members.
 - Environment Commission invested 80 hours in Solar Co-op outreach at the Farmer's Market.
 - Promoted Montgomery County Green Bank's Access Solar Financing for income qualified homeowners.
 - Reduced solar and EV permit fees and planning Green Fee Waiver in April 2023.
 - 987 solar permits issued in Rockville (cumulative).

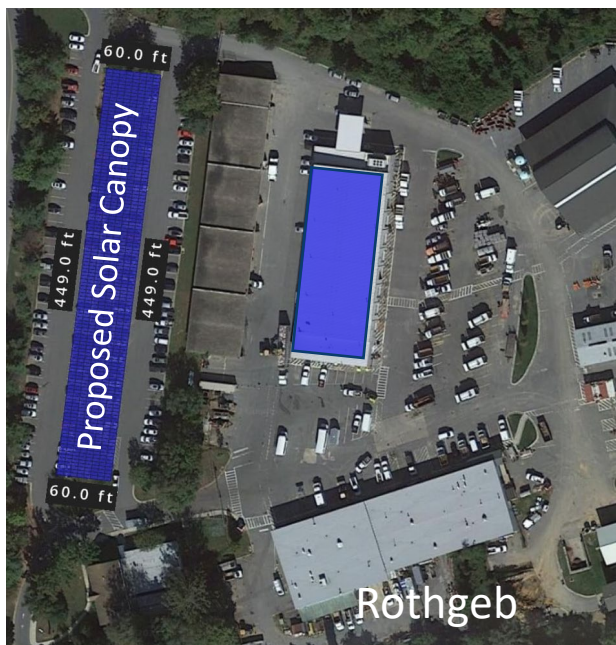
Solar Permits Issued (Cumulative)





Renewable Energy: Municipal

- **City Facility Solar Planning (M-04):**
 - MEA awarded \$250,000 grant for solar canopies over parking lot at the Rothgeb Maintenance Facility.
 - MEA awarded \$144,000 grant for solar canopies over parking lot at 6 Taft Court.
 - Developing a solar power purchase agreement (SPPA) with a third-party developer to repay the installation costs through the purchase of solar electricity over 20 years.



Rothgeb



6 Taft Court

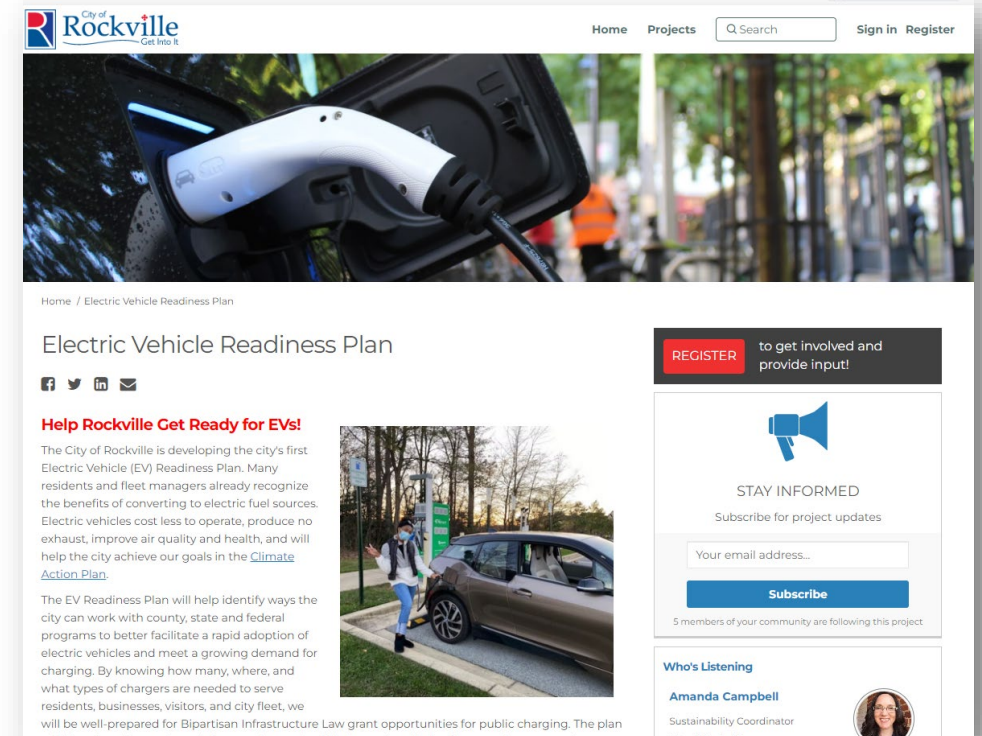


Solar Canopy Example



Transportation: Community

- **Rockville Electric Vehicle Readiness Plan (C-11)**
 - Launched the stakeholder engagement process for Rockville's first EV Readiness Plan.
 - More than 242 residents participated in stakeholder engagement sessions and surveys.
- **Montgomery County EV Purchasing Cooperative (C-13):** Reached regional goal of 1,000 EV pledges.
- **Bike Master Plan and Vision Zero (C-14):** The FY 2023 capital budget included \$7.7 million to support bicycle, pedestrian, and safety projects. The City received grants for designing new bicycle lanes, tracking pedestrian and bicycle activity, and for sidewalk gap and intersection improvement feasibility studies in Twinbrook.
- **Pedestrian Master Plan (C-15):** Developing draft plan.

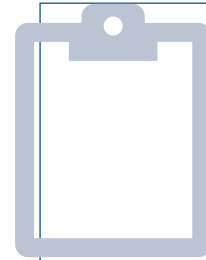




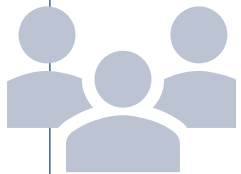
EV Readiness Plan Scope



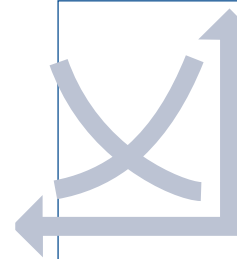
EVSE Needs Assessment
and Siting Options



Codes, Permits, Policies,
Signage, and Programs
Assessment



Equity Considerations



Charger Cost Estimates
and Funding
Opportunities



Transportation - Municipal

- **City Fleet (M-06):** Increased City fleet EVs from 1 to 12 vehicles, with 6 more on order to be delivered in 2023.
- **EV Charging Infrastructure CIP (M-07):** The FY 2023 Budget created a new EV Infrastructure CIP (GA23) to provide EV charging on City property and rights-of-way (ROW).
 - **Fleet Charging:** three Level 2 charging stations were installed at City Hall, three portable Level 2 chargers are available at Fleet Services, and one portable Level 2 charger at the Water Treatment Plant.
 - **Public Charging:** Executed agreements with Pepco to install 14 new public EV charging ports at Thomas Farm Community Center, Mattie J.T. Stepanek Park, and City rights-of-way.



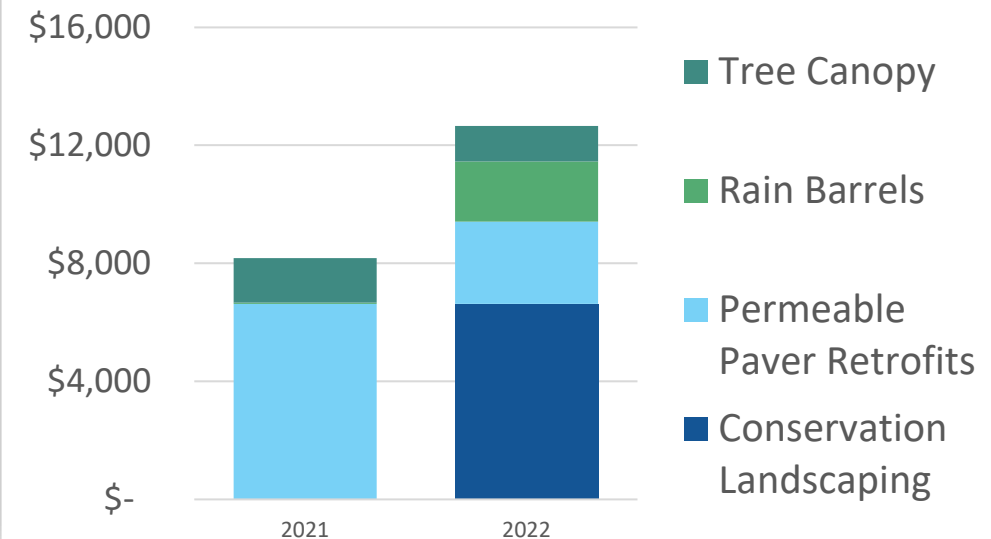


Land Management

- **Environmentally Friendly Landscaping (C-17, M-09)**
 - Distributed 200 native trees and 300 packets of wildflower seed packets to residents.
 - 662 Weed Warrior volunteers removed invasive plants from parks.
 - RainScapes issued \$12,654 in rebates to residents and property owners to support 21 small-scale environmentally friendly stormwater projects.



RainScapes Rebates Issued





Materials & Waste



- **Residential Food Waste Composting (C-18)**
 - Launched compost drop-off station at Rothgeb Maintenance Facility.
 - Distributed more than 250 kitchen compost caddies.
 - Planned second drop-off station at the Senior Center to open in April 2023.
- **Increase Recycling and Waste Diversion (C-19)**
 - Developed multilingual recycling outreach materials
 - Awarded recycling processing and hauling contracts
 - Launched a modernized software to manage routes and report issues to improve recycling and refuse services, safety, and route efficiency.





Resiliency

- **Climate Resilient Buildings (C-20):**

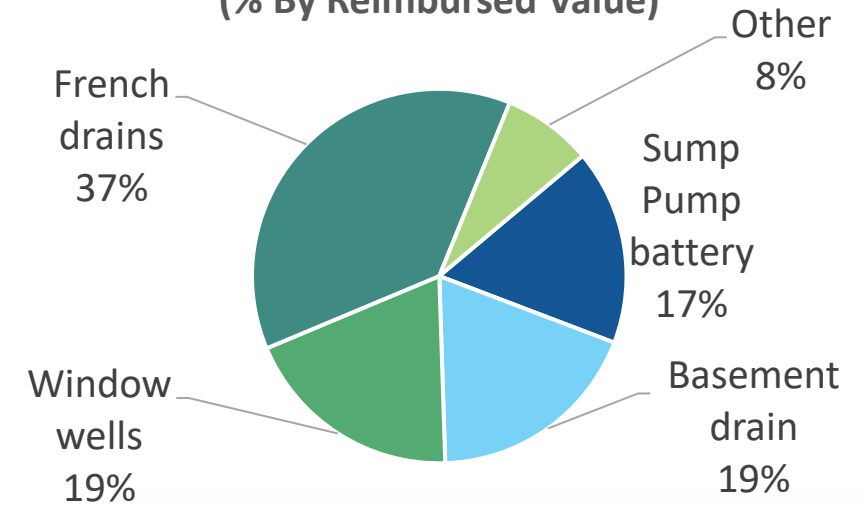
- Launched the Flood Mitigation Assistance Program (FMAP) to provide private property owners matching funds to implement flood mitigation projects.
- Reimbursed 19 homes a total of \$29,587 to support flood mitigation projects in 2022.

- **Urban Heat Island Mapping (C-23):**

- Partnered with Montgomery County and National Oceanic and Atmospheric Administration for volunteer mapping of urban heat islands or hot spots throughout the county.

- **Flood Resiliency Master Plan (M-13):** The FY 2023 Budget created a new FRMP CIP (SA23). The 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% cost-share).

2022 Flood Mitigation Projects
(% By Reimbursed Value)





Public Engagement & Oversight

- **Community Engagement (C-25):** Increased subscribers to the online Environment & Sustainability newsletter to 2,400. Engaged with thousands more through Rockville Reports, tabling at events and community centers, mailers, posters, new public webpages, and surveys.
- **Education and Outreach (C-25, C-05, C-17):** 225 people attended Climate Solutions virtual education sessions with experts on:
 - Net zero homes
 - Home electrification
 - Flood mitigation
 - Waste minimization
 - Environmental landscaping





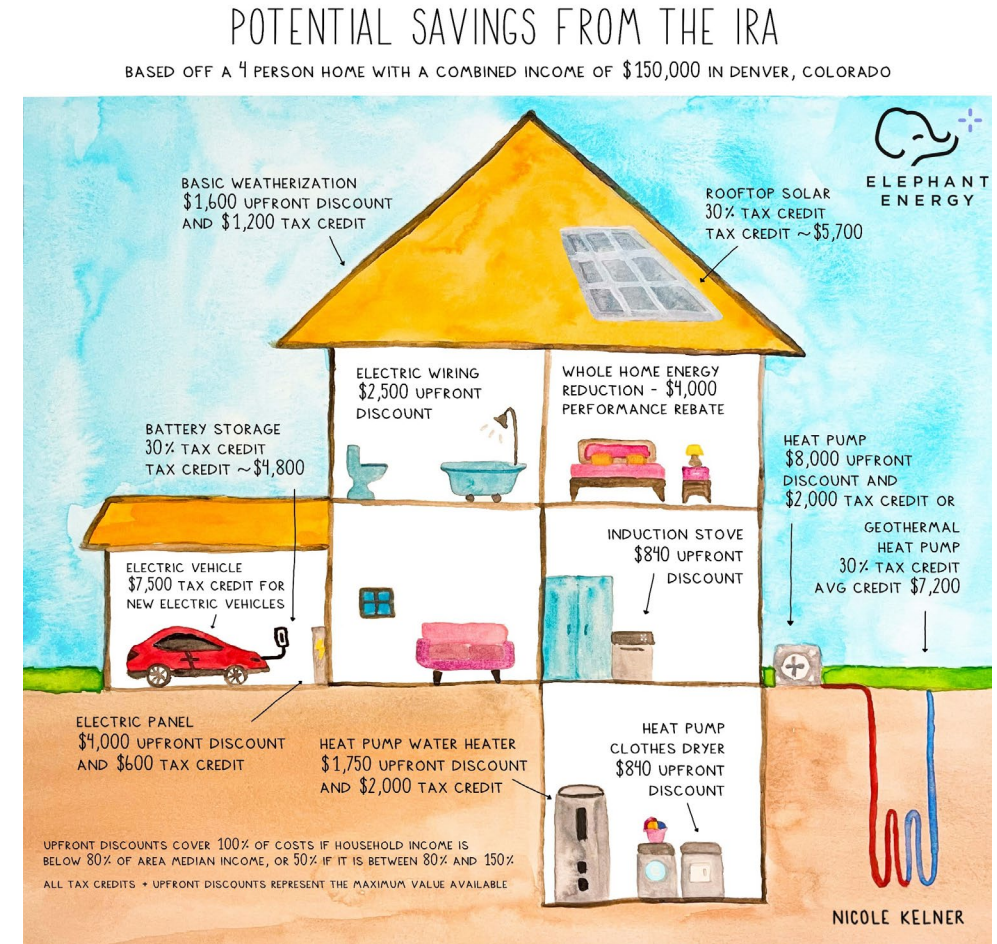
Public Engagement & Oversight

- **Budget Process (M-15):** Incorporated equity, climate mitigation and resiliency in Rockville's FY 2024 budget prioritization process.
- **Equity and Sustainability (C-25):** The City formed a new Justice, Equity, Diversity, and Inclusion division to further the City's equity priorities. Several staff participated in the Urban Sustainability Directors Network Equity Foundations course.



Next Steps - Monitoring and Promoting Incentives

- Montgomery County electrification incentive program (mid-2023)
- Inflation Reduction Act household incentives
 - IRS tax credits for electric vehicles, solar, energy efficiency (available)
 - Maryland IRA rebates for income-scaled home energy efficiency and electric appliance rebates (late 2023)
- Infrastructure Investment and Jobs Act
 - Energy Efficiency Conservation Block Grants
 - EV Charging Stations



<https://elephantenergy.com/your-guide-to-making-the-most-of-the-inflation-reduction-act-ira-incentives/>

Next Steps – Mayor and Council

FY24 Proposed Budget includes

- SWM Incentive Program (FMAP, Rainscapes, Water Quality Grants)
- Compost continuation
- Phase 2 LED Streetlight Conversion (TA22)
- Stormwater upgrades and stream restoration

Agreements and Contract Awards

- MEA Grant: Solar canopies at Rothgeb Dr. and Taft Ct.
- MEA Grant: Energy upgrades at Senior Center and Twinbrook CRC
- Solar Power Purchase Agreements
- Award contract for Phase 1 LED Streetlights

Plans

- Pedestrian Master Plan
- Rockville Electric Vehicle Readiness Plan

Policies

- Chapter 5, Building Regulations, with energy and green building code updates
- Chapter 25, Zoning Ordinance re-write

Acknowledgements

Thank you to the many partners in this work including Rockville Mayor and Council, Rockville Environment Commission, City departments, Boards and Commissions and residents and businesses in Rockville for your continuing support and dedication.





Links and Resources

- Rockville Climate Action Plan Webpage: www.rockvillemd.gov/climate (Climate Actions, What You Can Do, Progress)
- EV Readiness Plan: <http://www.engagerockville.com/evplan>
- Compost: <https://www.rockvillemd.gov/2451/Food-Scraps-Compost-Drop-Off>
- Flood Assistance: <https://www.rockvillemd.gov/2431/Flood-Mitigation-Assistance-Program>
- Inflation Reduction Act Incentives: <https://opc.maryland.gov/Consumer-Learning/Inflation-Reduction-Act>
- Earth Month/Spring Events: <https://rockvillereports.com/earth-month-for-early-birds-and-bees-and-flowers-and-trees/>
- Sign up for Environment & Sustainability Newsletter at <http://eepurl.com/dtJySD>
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