



# Montgomery County Climate Action Plan

**Progress Report for July – September 2022**

**(Fiscal Year 2023 Quarter 1)**



## **PURPOSE OF THIS REPORT**

The [Montgomery County Climate Action Plan](#) (CAP) is a strategic plan to cut greenhouse gas (GHG) emissions 80% by 2027 and 100% by 2035 (compared to 2005 levels) and to reduce climate-related risks to Montgomery County’s residents, businesses, and the built and natural environment. The Fiscal Year 2023 (FY23) Climate Action Plan Annual Report provides an overview of the work plan of climate initiatives for the coming year, in alignment with the CAP.

This quarterly progress report summarizes the efforts undertaken by County departments and agencies for the period of July 1 to September 30, 2022 (Quarter 1 of FY23) to implement the CAP. Quarterly progress reporting on the status of CAP implementation fosters public transparency and accountability.

## **HOW THE PROGRESS REPORT IS ORGANIZED**

County departments and agencies that have a role in implementing the CAP provided detailed updates on their efforts. The progress report is organized in two sections:

### **Section 1: Highlights by Sector**

This section summarizes the most salient updates for the quarter. The sectors, or buckets, in which the updates are organized include the 7 sectors of the CAP (Clean Energy, Buildings, Transportation, Carbon Sequestration, Climate Adaptation, Governance, and Public Engagement & Education), as well as Zero Waste and Economic Development. There is also a “catch all” bucket for actions that don’t easily fit into any of the other sectors.

### **Section 2: Complete Submissions by Department**

This section is organized by department and includes all the detailed submissions provided by each County department and agency. This section is intended for readers who would like to have a comprehensive understanding of the climate activities that took place during the quarter.

## **WE WOULD LIKE YOUR FEEDBACK**

Each quarter since the CAP was released in June 2021, we have tweaked the format of the progress report in a continuing effort to make it readable and informative to the public. Do you have any feedback on the progress report? Share your feedback with us at:

[climate@montgomerycountymd.gov](mailto:climate@montgomerycountymd.gov)

## SECTION 1: HIGHLIGHTS BY SECTOR

### Clean Energy

- **Solar installations:**
  - The second annual **Capital Area Solar Co-op** concluded in August 2022 with 345 signed contracts to install 2.92 megawatts of solar on single-family homes in the region—89 of those are in Montgomery County totaling 813 kilowatts of installed capacity to come online by the end of calendar year 2022.
  - Work continues on **designs for rooftop solar installations at 8 MCPS sites**, as well as a pilot parking lot canopy with electric vehicle charging stations, a pilot of solar parking lot lighting, and purchasing of off-site ground mounted solar in the PJM region.
  - The Montgomery County Green Bank supported two more solar projects totaling 173 kilowatts with **faith-based organizations**, bringing in a total of 1.4 megawatts of solar projects for nonprofits, affordable housing, faith-based institutions, and homeowners.
  - The Montgomery County Green Bank is creating a **new approach to support small community solar projects of faith-based and nonprofits** that will help these projects more efficiently move forward. The Green Bank is presently working with three organizations to use this approach.
  - The Department of Permitting Services' customer service section has moved large photovoltaic installations into its case management process. This process puts additional focus and resources on projects deemed a high priority.
- The Public Service Commission's **Community Choice Aggregation Work Group** continued to meet to develop regulations that will govern the County's Community Choice Energy program.
- Montgomery County joined the **PJM Cities and Communities Coalition**, a formal coalition of local governments with ambitious clean energy goals organized to drive decarbonization in the wholesale electricity market in the PJM Interconnection region.

## Buildings

- 89% of properties covered by the Benchmarking Law submitted calendar year **2021 benchmarking reports** through the end of Quarter 1. The [Energy Benchmarking Report](#) highlights 2021 results and trends.
- The Department of Environmental Protection, with consultant support, completed **two research efforts related to Building Energy Performance Standards (BEPS)** in July:
  - The [Allowance for Renewable Energy Technical Report and Recommendations](#) provides information on determining how a renewable energy allowance should be defined and implemented within BEPS regulations.
  - The [Addendum to the BEPS Technical Report](#) provides an analysis of potential utility rebates through the EmPOWER Maryland 2021 - 2023 program cycle that could be applied to the BEPS Technical Report case study energy measure packages.
- The County Executive's appointments to the [Building Performance Improvement Board](#) were confirmed by County Council in September. The **Building Performance Improvement Board** is made of up 15 voting members who advise on implementation of [building energy performance standards](#).
- In partnership with the City of Takoma Park, Habitat for Humanity Metro Maryland, and the Montgomery County Green Bank, the Department of Environmental Protection (DEP) continues to participate in the RMI Electrify cohort to develop the **Residential Electrification Incentives Pilot Program** (approved in the FY23 budget).
  - In Quarter 2, DEP will launch a Request for Proposals for this pilot program, seeking a contractor to provide technical assistance and incentives for electrification in existing residential homes.
- Following a public hearing in July 2022, the Council's Planning, Housing, and Economic Development Committee is reviewing the **Comprehensive Building Decarbonization legislation** ([Bill 13-22](#)) in Quarter 2. The bill would require the County to issue all-electric building standards.
- The Department of Permitting Services (DPS) is working with stakeholders to explore options for the **2021 International Energy Conservation Code**.
  - The 2021 codes are currently under review at the state level. Once the state publishes the 2021 codes, the County will move to public engagement. DPS will utilize the New Buildings Institute decarbonization language during amendment proposal.
  - The 2018 International Green Construction Code (IgCC), which was adopted in September 2021, will advance energy goals through enforcement on new construction over 5,000 square feet. The 2018 IgCC is now being enforced.

- The Montgomery County Green Bank developed a technical assistance program to be launched in Quarter 2 to **support commercial property owners with energy assessments** to determine current conditions and potential energy improvements for their properties. The assessments will also include reviews of electrification alternatives where appropriate.
- The Montgomery County Green Bank is working on a **pipeline of over \$20 million in clean energy projects for commercial and multifamily properties** using a variety of its products, including its CLEER (Commercial Loan for Energy Efficiency and Renewables) program, commercial solar power purchase agreement product, community solar roof leases, small business energy savings support product, and debt investment in co-lending arrangements with financial partners.
- Montgomery County Public Schools (MCPS) has competitively bid and awarded contracts to two Energy Service Performance Contractors (Ameresco, Noresco) to conduct **investment grade audits of MCPS facilities** to identify energy savings and GHG reduction projects that can be implemented using a self-funding strategy.
  - Work is currently underway to identify the first phase of buildings to be audited this school year, with a target of work initiating during summer 2023.
- MCPS was awarded a **grant from the Maryland Energy Administration** to identify steps necessary to implement Net Zero Emissions criteria into its new school construction portfolio.

## Transportation

- **Electric vehicle charging:**
  - The Department of Environmental Protection, in collaboration with the Commission on Common Ownership Communities, Department of Permitting Services, and the Montgomery County Green Bank, presented a [webinar](#) on **Electric Vehicle (EV) Charging for Condominiums and Townhomes** to educate property managers, HOA board members, and residents on the process to install EV charging and resources that are available.
  - The Montgomery County Green Bank launched its pilot **Electric Vehicle Charger program** in support of affordable multifamily properties using a grant from General Motors. The program provides a no out-of-pocket cost solution to install up to 2 dual chargers at up to 30 properties.
  - The Montgomery County Department of Transportation installed two **EV charging stations in Garage 13 in Wheaton**. Installation of two EV charging stations at Garage 40 in Bethesda is underway and the stations are expected to be available to the public shortly.
  - Montgomery Parks is making progress on installing EV chargers in parks through its partnership with BGE and Pepco. Construction was recently completed on **EV charging stations at Argyle Local Park, Olney Manor Recreation Park, and Wheaton Forest Local Park**, which are now fully operational. There are now 5 parks with EV chargers.
- **Buses:**
  - MCPS is adding **61 more electric school buses this fall**, bringing it to a total of 86 electric buses in the fleet. Highland is partnering with MCPS to upgrade 326 school buses to electric by 2025.
  - The Montgomery County Department of Transportation was awarded a **\$15 million grant for hydrogen fuel cell buses**. The buses and fueling station will be located at the Ride On Gaithersburg Depot. It is expected to be implemented in FY25.
  - The Montgomery County Department of Transportation completed **Preliminary Engineering on the Veirs Mill Road Bus Rapid Transit** and has entered it into the Capital Investment Grant program with the Federal Transit Administration. This program could fund 50 to 80 percent of the project. The local funding match has been allocated through a state grant. Assuming the County is successful in receiving the Federal grant, the project is fully funded.
- **Pedestrian and bicycle projects:**
  - The Montgomery County Department of Transportation continues to plan, design, and construct several bike facility projects, including:
    - Woodmont Avenue Cycletrack
    - Bethesda Avenue Cycletrack

- Montgomery Avenue/Lane Cycletrack
- Emory Lane Shared Use Path
- Sandy Spring Bikeway
- MD 355 Shared Use Path
- Marinelli Road Separated Bikeway
- Kensington Parkway Shared Use Path
- Dr. Bird Shared Use Path
- Fenton Street Cycletrack
- Amherst Avenue Cycletrack
- Bowie Mill Road Bikeway
- Dale Drive Shared Use Path
- The Montgomery County Department of Transportation (MCDOT) is continuing installation of **pedestrian hybrid beacons** at mid-block crossings that are currently unprotected. Additionally, MCDOT is continuing to work with the State Highway Administration to design and implement adaptive traffic signal control systems in select corridors.
- The Little Falls Parkway Phase 2 project is underway. In the spring, Montgomery Parks plans to launch a **temporary linear park** in the southbound lanes between Arlington and Dorset, with space for walking and biking as well as programming that includes games, events, and tables with seating.
- **County Council approved Bill 36-21, Motor Vehicles and Traffic – E-Scooters** – Operation Requirements and Registration. This bill further defines e-scooter and e-bike registration, operation, and parking for for-hire vehicles and sets regulations for privately owned and operated vehicles.
- **Off-road equipment electrification:**
  - Off-road equipment for the Division of Highway Services includes **electric handheld tools** such as blowers, trimmers, and saws, and electric zero turn mowers. **All depots now have electric blowers and trimmers** with some saws. The Silver Spring Depot has replaced 3 out of 5 zero-turn mowers with electric mowers and a portable charging station.
  - Montgomery Parks is no longer purchasing gas powered trimmers or leaf blowers. When a piece of equipment is at the end of its life cycle, an electric replacement will be purchased. Northern Parks Regions is working to replace all gas trimmers and leaf blowers by the end of FY23.



## Carbon Sequestration

- **Tree planting and maintenance:**

- The Department of Environmental Protection (DEP) increased shade tree planting efforts through the **Tree Montgomery** program, with more than a thousand trees ordered by the end of the first quarter. More than 2,250 shade trees are ready to be installed and additional orders are anticipated for FY23.
- DEP launched the **Clean Water Montgomery Grant Program** in September. DEP and the Chesapeake Bay Trust (the Trust) are partners in the program through the Trust's grant process.
  - County nonprofit organizations such as local watershed groups, homeowner and community associations, faith-based organizations, service and civic groups can apply for grants for projects including tree planting, installing permeable pavers or creating rain gardens. The grant program is made possible through the County's Water Quality Protection Fund and through federal appropriations.
- The Montgomery County Department of Transportation received a grant from the Chesapeake Bay Trust for \$360,000. A total of **1,200 trees will be planted in the public right-of-way** through this grant over the next three years.
- The Montgomery Parks' **Urban Forest Patches Program** is currently underway. The patches are being evaluated individually based on data collected to identify management strategies, ease of implementing strategies, and resources needs. Most of these patches are not currently managed but serve a deep ecological purpose in areas of the county with low forested and tree canopy cover.
- Montgomery Parks held the [2022 Urban Tree Summit](#) in September with a virtual conference and in-person field days, one of which was at Pope Farm Nursery, Park's plant production facility in Gaithersburg.
- The **Park Urban Forestry program** has begun implementing its preventative tree maintenance program, which will help retain current tree canopy on parkland. The work started in July in the Cabin John management area where 264 trees were pruned in 9 parks.

- **Forest conservation:**

- Reforest Montgomery, supported by the Forest Conservation Fund, plants trees and forests throughout Montgomery County. The Planning Department is working on an **update to the Reforest Montgomery coupon**, which would increase the discount from \$40 to \$50 off a native tree purchased at a participating retailer.
- The County Council received amendments to [Bill 25-22-Forest Conservation - Trees](#) and has reviewed them in committee and council work sessions with anticipated adoption in Quarter 2 of FY23. Bill 25-22 amends the [Forest Conservation Law](#) with the aim to achieve no net loss of forest. Draft amendments to the law and regulations include:

- Increasing the amount of forest that needs to be preserved (forest conservation thresholds) in lower density land use categories, where additional space exists for on-site planting and protection.
  - Increasing forest planting (afforestation) requirements in the institutional land use category.
  - Increasing reforestation ratios and incentivizing required forest mitigation in the same watershed as the project or in a watershed considered high priority for forest planting or forest preservation.
  - Requiring planting of forest in unforested stream valley buffers, with some exceptions, such as if the stream valley buffer is not suitable to establish and retain required forest planting
  - Expanding options to create forest ecosystems and increase long-term resilience of planted forests.
- Montgomery Parks completed several [Meadow Restoration Projects](#), including:
    - a small, half-acre demonstration plot for environmental education and pollinator habitat at the Locust Grove Nature Center.
    - a 1.5-acre restoration for environmental education and pollinator habitat at the Meadowside Nature Center.

## Climate Adaptation

- **Flood preparedness:**
  - Multiple County departments, with consultant support, continued **developing the County's Comprehensive Flood Management Plan**. The Plan seeks to address flooding in the County while taking account of scientific and engineering data, the needs of the County's residents and businesses (particularly historically underserved communities that are least prepared to respond to and recover from flooding events), and the resources required to develop comprehensive solutions.
  - A [new flooding website](#) was launched to consolidate information about flooding activities and resources in a single location. This website will provide updates on the progress of the Comprehensive Flood Management Plan.
  - Montgomery County is partnering with the U.S. Department of Homeland Security Science and Technology Directorate to provide **early-warning detection for flood-prone areas in the County** as part of a national program to develop scalable, low-cost flood-sensor networks. To-date, [31 of the 34 sensors](#) have been installed and the remaining sensors will be installed by the end of November.
  - Montgomery County requested **assistance from the U.S. Army Corps of Engineers to complete a flood risk management study** for areas prone to stormwater and/or urban riverine flooding. This study will provide the County with a plan for reducing the risk of flooding to property owners and critical roadways in the Neilwood Creek, White Oak, Hampshire West, and Upper Turkey Branch watersheds.
  - The **timeframe for updates to FEMA's Flood Insurance Rate Maps has been delayed**. The Department of Permitting Services (DPS) is cooperating with FEMA to ascertain when residents will be able to view flood maps online.
- **Stormwater management:**
  - Montgomery Parks is continuing to implement [outfall restoration projects](#). Several outfall restoration projects were completed in Quarter 1:
    - The Byeforde Road Outfall (Rock Creek SVU 3) project included sustainable outfall stabilization, non-native invasive treatment, and riparian enhancements.
    - The Nairn Road Outfall project in Wheaton Regional Park helped improve drainage.
  - Montgomery Parks and the Montgomery County Department of Transportation (MCDOT) are moving forward with the **construction of two storm drain projects**—Vandever Street Outfall and Georgian Forest Local Park storm drain rehabilitation.

- MCDOT completed **three culvert replacement and rehabilitation projects** and began planning the construction of twelve more culverts. MCDOT also finished the construction of two storm drain inlets, one grass bioswale, and one bioretention bioswale. All of these projects addressed local road flooding and improved the accessibility of sidewalks.
- **Heat preparedness:**
  - The Planning Department has received the final version of **Downtown Silver Spring Cool Streets Guidelines** which assess the Universal Thermal Temperatures associated with various impervious surfaces within Silver Spring and made recommendations for cooling the urban streetscape. The finalized guidelines will be released in January 2023.
  - The Office of Emergency Management and Homeland Security completed the Fall 2022 **update of the County's Extreme Temperature Plan**.
  - The Department of Environmental Protection, the Office of Emergency Management and Homeland Security, Montgomery Parks, and volunteers conducted a [NOAA Urban Heat Mapping Campaign](#) in August to better understand where residents may be most at-risk for extreme heat. The County recently received the results and is in the process of analyzing and mapping the data.
- The Office of Emergency Management and Homeland Security delivered a **National Preparedness Month** outreach campaign with social media and Nextdoor messaging, newsletters, and preparedness and resiliency events. The County Executive and County Council issued a Joint Proclamation for September as National Preparedness Month.
- The adoption of the [Silver Spring Downtown and Adjacent Communities Plan](#) was approved unanimously by the Montgomery County Planning Board on June 2. The Silver Spring and Downton Adjacent Communities Plan recommends numerous actions to improve climate resiliency including planting native trees, implementing nature-based solutions such as green roofs, and reducing impervious surface cover.

## Climate Governance

- Over **150 Climate Ambassadors** have been identified by departments and agencies and are meeting quarterly. Ambassadors have recently received a Climate Action Strategy Matrix to help them see how their department's work intersects with climate change as well as a "Top 10 Actions" guide. Ongoing Lunch and Learn sessions are offered during which departments share their unique initiatives with one another.
  - The Office of Human Resources is working with the Department of Environmental Protection to explore opportunities to develop training and professional development to the County Climate Change Ambassadors.
- The Department of Finance executed a **Memorandum of Understanding with the Montgomery County Green Bank to implement Bill 44-21 – Montgomery County Green Bank Fuel Energy Tax Revenue**. The County has made the first 2 monthly distributions of appropriated Fuel Energy Tax. A monitoring program for the use of these funds is under development.
- Planning Department staff have continued to work with a consultant to **develop a method for conducting Climate Assessments** as required by [Bill 3-22 - Legislative Branch - Climate Assessments - Required](#), including estimating greenhouse gas emissions associated with Master Plans and Zoning Text Amendments, estimating carbon sequestration, and making recommendations for community resilience.
- The Office of Management and Budget received information on the **climate impacts of proposed capital projects** and used that information to inform recommendations for the County Executive to consider for the FY24 capital budget.
- Departments also submitted **operating budget proposals with climate information** that will inform the County Executive's budget decisions. The Office of Management and Budget will review the need for new positions and the ability to realign existing resources as needed to meet the County's climate goals.

## Community Engagement, Partnerships, & Education

- Montgomery Energy Connection hosted **68 in-person and virtual events**, engaging over 4,300 residents between July 1 and September 30 on several topics:
  - Collected and recycled 542 CFL bulbs the right way and swapped out 497 incandescent bulbs.
  - Referred 156 residents to Pepco, BGE, and Potomac Edison for Quick Home Energy Checkups.
  - Promoted Clean Energy Week with five in-person events focusing on renewable energy.
- The P.O.W.E.R program created an **interactive presentation infusing energy messaging into the Montgomery County Public Libraries' summer reading** theme for the fourth year in a row; this year, they provided 20 Energy Express: Oceans of Possibilities presentations to 332 students and their caregivers.
- **The "Core Team" to develop the Community Justice Academy was established** in September with members representing the Montgomery County Racial Equity Network, CASA de Maryland, Collaboration Council, Latin American Youth Council, Impact Silver Spring, Everyday Canvassing, Racial Equity and Social Justice Committee, Latino Health Initiative, Muslim Voices Coalition, Department of Environmental Protection, and the Business Advancement Team.
- **The Office of Community Affairs established a cross department Climate Action Team** including members from all three Minority Health Initiatives and Programs and the Community Action Agency to raise awareness, build capacity and drive climate action both with internal and external stakeholders. Planned initiatives include a monthly climate action newsletter and a quarterly lunch and learn series.
- Green Schools leaders in MCPS and partner agencies (such as the Maryland Association for Environmental and Outdoor Education, the Audubon Natural Society and the Montgomery County Council of Parent-Teacher Associations) developed a **plan to support increasing the number of certified Green Schools in MCPS**.
  - The plan includes individual professional development, individual support for certifying schools, and continuing and enhanced financial support for leading the certification process.
- MCPS began implementing a **revised Grade 6 Science curriculum** in which the theme of climate change, both natural and manmade, is woven throughout the units to develop student understanding of this important issue.
  - The curriculum includes a 30-Day Intent to Act Pledge in which students develop a plan that reduces their environmental impact to become more climate neutral. Over 120 teachers participated in professional development on the topics and how to effectively instruct students on the issues, impacts, and actions they can take to reduce their impact on the environment.

- Fifty-six middle school and high school resource teachers and content specialists participated in **professional learning that included hands-on investigation of local environmental conditions** and a discussion of the importance of teaching science outdoors to a student's overall well-being.
- During Summer 2022, MCPS partnered with the Chesapeake Bay Foundation to provide a **week-long course focused on climate change education**. Nine public and private school teachers successfully completed the course, which included the development of a student-led investigation and action project to be implemented during the 2022 - 2023 school year.
- As part of the outreach during the development of a recommended methodology for implementing the requirements of [Bill 3-22 - Legislative Branch - Climate Assessments - Required](#), staff and the consultant have met twice with a citizen stakeholder group to share information, have discussions, and hear suggestions from the public regarding the proposed approach. Additional information sharing and outreach has occurred through email interactions.

## Zero Waste

- The Department of Environmental Protection continues Phase I of the **single-family residential curbside recycling collection of food scraps pilot** by providing weekly collection of food scraps from participating households and soliciting participation of additional eligible households.
  - Implementation of Phase II of the of the pilot continues with the issuance of a Request for Proposals to select a contractor to collect food scraps from up to an additional 1,700 participating households in two additional pilot areas and determining areas of eligible households.
- The Department of Environmental Protection continues the **commercial food scraps recycling partnership program**, soliciting partners that generate food scraps; providing technical assistance and best practice recommendations; helping to set up on-site food scraps separation and storage/recycling containers; providing collection/transportation to a compost facility; providing for processing fees; etc.
- The Department of Environmental Protection continues to distribute educational materials and conduct training sessions on using rodent-proof compost bins to include food scraps in backyard composting efforts. **Nearly 1,000 residents are continuing to test two types of rodent-proof compost bins**: one static compost bin model and one dual-chamber tumbler compost bin model.
  - Educational workshops and training for backyard composting of yard trim materials and backyard composting of food scraps using rodent-proof compost bins continue to be offered.
- The Department of Environmental Protection continues to **provide compost bins to residents directly or via 21 partner distribution locations** to encourage managing yard trim and food scraps at the source and create compost for use to improve soil health.
- The Department of Environmental Protection's **Edible Food Recovery Working Group** continues to meet and discuss ways to increase the donation of edible food to organizations that distribute or provide food to community members experiencing food insecurity, as well as to reduce wasted food. The Working Group presented a series of interim recommendations to the County Executive.



## Economic Development

- Following the publication of the *Montgomery County High Road Inclusion Framework for an Equitable Climate Ready Economy*, the Department of Environmental Protection and WorkSource Montgomery have started to meet regularly to **discuss green workforce development**, particularly around meeting the labor needs and skills associated with building electrification.
- \$80,000 in Community Grant funds have been encumbered in a contract with Impact Silver Spring to expand its existing work **accelerating the spread of worker-owned businesses**.

## Other Climate Updates

- The Department of Environmental Protection submitted recommendations to the Maryland Commission on Climate Change regarding state policy priorities to recommend in its annual report to the General Assembly. These suggestions included steps to decarbonize the built environment, accelerate the deployment of clean energy, and accelerate the transition to low-carbon mobility.
- [Makeover Montgomery 5](#): Montgomery Planning hosted a 3-day public conference with planners, architects, developers, real estate professionals, economists, social scientists, ecologists, and others to discuss cutting-edge ideas for transforming the suburbs in four areas:
  - Economic resilience
  - Neighborhood and social resilience
  - Environmental, climate, and infrastructure-resilience
  - Public health resilience

## SECTION 2: COMPLETE SUBMISSIONS BY DEPARTMENT

### Department of Environmental Protection

- The Public Service Commission’s Community Choice Aggregation Work Group continued to meet to develop regulations that will govern the County’s Community Choice Energy program. (CAP Action E-1).
- The second annual Capital Area Solar Co-op concluded in August 2022 with 345 signed contracts to install 2.92 megawatts of solar on single-family homes in the region -- 89 of those are in Montgomery County totaling 813 kilowatts of installed capacity to come online by the end of calendar year 2022. (CAP Action E-3).
- The Department of Environmental Protection spearheaded the process of Montgomery County joining the PJM Cities and Communities Coalition (PJMCCC), a formal coalition of local governments with ambitious clean energy goals organized to drive decarbonization in the wholesale electricity market in the PJM Interconnection region. PJMCCC members represent more than 14% of the population within the PJM territory, and include Alexandria, VA; Arlington County, VA; Charlottesville, VA; Chicago, IL; Cincinnati, OH; Columbus, OH; Dayton, OH; Delaware County, PA; Montgomery County, MD; Newark, NJ; Philadelphia, PA; Pittsburgh, PA; Richmond, VA; and Washington, DC. Reform to the PJM interconnection process to accelerate the pace of new large-scale renewable energy generation coming online is one example of a key issue within the domain of PJM Interconnection which the County hopes to influence. (CAP Action E-3)
- Through the end of Q1, 89% of covered properties had submitted calendar year 2021 benchmarking reports. The [Energy Benchmarking Report](#) highlights 2021 results and trends. (CAP Action B-3)
- Sent notices to newly covered buildings under the Benchmarking Law.
- DEP, in collaboration with ICF, completed two additional research efforts related to Building Energy Performance Standards (BEPS) in July 2022 (CAP Action B-3):
  - The [Allowance for Renewable Energy Technical Report and Recommendations](#) provides information on determining how a renewable energy allowance (“REA”) should be defined and implemented within BEPS regulations.
  - The [Addendum to the BEPS Technical Report](#) provides an analysis of potential utility rebates through the EmPOWER Maryland 2021-2023 program cycle that could be applied to the BEPS Technical Report case study energy measure packages.
- The County Executive’s appointments to the [Building Performance Improvement Board](#) were confirmed by County Council on September 20. The Building Performance Improvement Board (BPIB) is made of up 15 voting members who advise on implementation of [building energy performance standards](#). (CAP Action B-3)

- Interviews for the Building Data Analytics Program Manager concluded in Q1 (vacant position to support the Benchmarking and BEPS program). DEP is working through the recruitment process and hopes to onboard a candidate in Q2. (CAP Action B-3)
- Position descriptions for the Residential Energy Policy and BEPS positions have been developed (approved in the FY23 budget). DEP anticipates beginning the recruitment process for these positions in Q2-Q3. (CAP Action B-3)
- In partnership with the City of Takoma Park, Habitat for Humanity Metro Maryland, and the Montgomery County Green Bank, DEP continues to participate in the RMI Electrify cohort during calendar year 2022 to develop the Residential Electrification Incentives Pilot Program (approved in the FY23 budget). In Q2, DEP will launch a Request for Proposals (RFP) for this Pilot Program, seeking a contractor to provide technical assistance and incentives for electrification in existing residential homes. (CAP Action B-4)
- DEP continued to make progress on the Electrification Cost Study required by Bill 44-21 and anticipates completing this report in Q3 before the May 1, 2023, deadline. (CAP Action B-4)
- Following a public hearing in July 2022, the Council's Planning, Housing, and Economic Development (PHED) Committee plans to review the Comprehensive Building Decarbonization legislation (Bill 13-22) in Q2, with technical support from DPS and DEP. The bill would require the County to issue all-electric building standards by January 1, 2024. (CAP Actions B-5 and B-6)
- DEP, in collaboration with the Commission on Common Ownership Communities (CCOC), Department of Permitting Services (DPS), and the Montgomery County Green Bank, presented a webinar on EV Charging for Condominiums and Townhomes to educate property managers, HOA board members, and residents on the process to install EV charging and resources that are available. (CAP Action T-7)
- DEP and DPS supported the Poolesville Day National Drive Electric Week event with an exhibit of electric vehicles in the County's fleet and a presentation on EV charging. (CAP Action T-3)
- DEP developed an educational brochure on electric vehicle benefits to provide to auto dealerships as part of the EV Purchasing Co-op and use during other engagement events. (CAP Action T-3).
- DEP submitted formal comments to the Maryland PSC on proposed modifications to the EV Charging Pilot Program. (CAP Action T-7)
- DEP increased the shade tree planting effort through the Tree Montgomery program with more than a thousand trees ordered by the end of the first quarter and an additional 1200 trees ordered by November. A total of more than 2250 shade trees are ready to be installed and additional orders are anticipated for FY23. (CAP Action S-2)
- Plans continue to develop to fully utilize funds from three separate grants that were awarded to DEP. The Chesapeake Bay Trust is administering a portion of the FY22 Omnibus Appropriations for a grant program and the RFP was completed and application period opened in Q1. Additionally, locations for tree plantings have been identified for some of the Omnibus Appropriations as

well as the grant through the CBT/Maryland 5-million tree initiative. The agreement for the DNR Trust Fund grant is being finalized and a contract to implement the project is being developed. (CAP Action S-2)

- DEP continues to develop stream restoration projects that include riparian plantings above requirements. (CAP Action S-2)
- World Resources Institute is close to completing its updated analysis on how the sequestration from trees and forests and the emissions associated with their loss (primarily through conversion to development) impacts the County's GHG inventory. (CAP Actions S-1, S-2, S-6)
- Consultants affiliated with Nature-based Climate Initiatives are close to completing an analysis flowing from multiple meetings and a series of multi-departmental engagement workshops grounded in the "Managing Urban Landscapes for Climate Action guide" to help lay the foundation for coordinated and prioritized action going forward. (CAP Action S-6)
- Work continued on the development of a Comprehensive Flood Management Plan (CFMP) for County. The purpose of the CFMP is to ensure the County is addressing flooding in a logical way, consistent with scientific and engineering data, respectful of the needs of the County's residents and businesses (particularly historically underserved communities that are least prepared to respond to and recover from flooding events), and with full understanding of the resources that will be required to develop comprehensive solutions. A new flooding website – [www.montgomerycountymd.gov/flooding](http://www.montgomerycountymd.gov/flooding) – was launched to consolidate information about flooding activities and resources in a single location. This website will provide updates on the progress of the CFMP. (CAP Actions A-20, G-7, G-15, G-16)
- DEP is exploring different contracting avenues to launch the Efficiency & Climate Resiliency Pilot Program for low-and-moderate housing (approved in the FY23 budget). (CAP Action A-5)
- Montgomery County is partnering with the U.S. Department of Homeland Security Science and Technology Directorate on a program to monitor and provide early-warning detection for flood-prone areas in the County. The federal government has provided 34 flood sensors at no cost to the County as part of a national program to develop scalable, low-cost flood-sensor networks in response to changing climate conditions that are leading to more frequent and higher intensity storm events. The flood sensors collect data in real-time during storm events from each location. The sensors will alert agencies when set thresholds are triggered, adding capacity to the County's storm preparedness and emergency response programs. The County's Department of Environmental Protection, Office of Emergency Management and Homeland Security, Department of Transportation, Fire and Rescue, and the Maryland National Capital Park and Planning Commission are involved in the data monitoring and response. To date 31 of the 34 sensors have been installed including one at the Twinbrook site. The remaining sensors will be installed by the end of November. (CAP Action G-15)
- Montgomery County has requested assistance from the U.S. Army Corps of Engineers (USACE), Baltimore District (NAB), to provide assistance in completing a flood risk management study for areas prone to stormwater and/or urban riverine flooding. This study would provide the county with a plan for reducing the risk of flooding to property owners and critical roadways. The

study area for this investigation includes the following watersheds: Neilwood Creek, White Oak, Hampshire West and Upper Turkey Branch. This study would be conducted by the USACE, NAB, under the Planning Assistance to States (PAS) program which is authorized by Section 22 of the Water Resources Development Act of 1974 (PL 93-251), as amended. The PAS program is designed to provide planning-level assistance to communities and partners for water resource related issues. The project is planning level only. No detailed design or construction will result from this investigation. (CAP Actions A-20, G-15, G-16)

- Over 150 Climate Ambassadors have been identified by departments and agencies and quarterly meeting have been established. Ambassadors have recently received a Climate Action Strategy Matrix to help them see how their department’s work intersects with climate change as well as a “Top 10 Actions” guide. Ongoing Lunch and Learn sessions are offered during which departments share their unique initiatives with one another. A “Consulting Hour” sign up has also been established to help departments examine their unique challenges and opportunities and get support from DEP staff and other Climate Ambassadors. (CAP Actions G-1, G-6)
- While departments are currently required to ask a set of climate questions during the budget submission and review process, OMB, DEP, and Finance have been meeting to discuss ways to further embed mitigation and resilience considerations into the Capital Improvements Program. (CAP Action G-10)
- Montgomery Energy Connection hosted 68 in-person and virtual events between July 1 – September 30, 2022. (CAP Action P-2)
  - Reached 4,305 people during these events.
  - Collected and recycled 542 CFL bulbs the right way and swapped out 497 incandescent bulbs.
  - Referred 156 residents to Pepco, BGE, and Potomac Edison for Quick Home Energy Checkups.
  - Promoted Clean Energy Week with five in-person events focusing on clean energy.
- The P.O.W.E.R program created an interactive presentation infusing energy messaging into the Montgomery County Public Libraries’ summer reading theme for the fourth year in a row; this year, they were able to provide 20 (twenty) Energy Express: Oceans of Possibilities presentations to 332 students and their caregivers. (CAP Action P-2)
- DEP continued to co-lead the Maryland Coalition of Counties and Cities for Climate Action (MC4A), a statewide climate coalition of local governments that meets regularly to discuss state and local policy and programmatic issues. (CAP Action P-10)
- The Climate, Energy, and Air Quality Advisory Committee continues to meet monthly to advise the County on climate, energy, and air quality issues. (CAP Action P-6)
- The “Core Team” to develop Community Justice Academy was established in September with members representing the Montgomery County Racial Equity (MORE) Network, CASA de Maryland, Collaboration Council, Latin American Youth Council, Impact Silver Spring, Everyday Canvassing, Racial Equity and Social Justice Committee, Latino Health Initiative, Muslim Voices Coalition, Department of Environmental Protection, and the Business Advancement Team. The Team has been meeting twice a month since October. (CAP Action P-5)

- DEP, OEMHS, Montgomery Parks, and partners conducted a heat mapping study this summer to understand where urban heat islands are located. The County recently received the results and is in the process of analyzing and mapping data. This will guide prioritization of interventions assisting residents most vulnerable to heat related illnesses. (CAP Action P-1)
- The Climate Change Communication Coalition established two workgroups, one focused on Community Engagement and the other on Communications, that are meeting quarterly. (CAP Action P-3)
- The Department of Environmental Protection continues Phase I of the single-family residential curbside recycling collection of food scraps pilot by providing weekly collection of food scraps from participating households and soliciting participation of additional eligible households. Implementation of Phase II of the of the pilot continues with the issuance of an RFP to select a contractor to collect food scraps from up to an additional 1,700 participating households in two additional pilot areas and determining areas of eligible households.
- The Department of Environmental Protection continues the commercial food scraps recycling partnership program, soliciting partners that generate food scraps; providing technical assistance and best practice recommendations; helping to set up on-site food scraps separation and storage/recycling containers; providing collection/transportation to a compost facility; providing for processing fees; etc.
- The Department of Environmental Protection continues working with businesses, non-profit organizations, and local, state, and Federal government facilities, providing technical assistance and support to establish recycling programs for food scraps.
- The Department of Environmental Protection continues to monitor the progress of the drafting of proposed MDE regulations (COMAR Code of Maryland Regulations 26.04.13 Food Residuals - Organics Recycling and Waste Diversion) and has participated in meetings/presentations conducted by the Maryland Department of the Environment to support compliance with HB 264.
- The Department of Environmental Protection continues to provide outreach and education on the benefits of grasscycling and composting to residents, multi-family properties, and businesses and organizations.
- The Department of Environmental Protection continues to distribute educational materials and conduct training sessions on using rodent-proof compost bins to include food scraps in backyard composting efforts. Nearly 1,000 residents are continuing to test two types of rodent-proof compost bins: one static compost bin model and one dual-chamber tumbler compost bin model. Educational workshops and training for backyard composting of yard trim materials and backyard composting of food scraps using rodent-proof compost bins continue to be offered.
- The Department of Environmental Protection continues to provide compost bins to residents directly or via 21 partner distribution locations to encourage managing yard trim and food scraps at the source and create compost for use to improve soil health.
- The Department of Environmental Protection's Edible Food Recovery Working Group continues to meet and discuss ways to increase the donation of edible food to organizations that distribute/provide food to community members experiencing food

insecurity, as well as to reduce wasted food in support of the County’s zero waste goals and fight climate change. The Working Group presented a series of interim recommendations to the County Executive.

- DEP submitted recommendations to the Maryland Commission on Climate Change regarding state policy priorities to recommend in its annual report to the General Assembly. These suggestions included steps to decarbonize the built environment, accelerate the deployment of clean energy, and accelerate the transition to low-carbon mobility.
- Following the publication of the [\*Montgomery County High Road Inclusion Framework for an Equitable Climate Ready Economy\*](#), DEP and WorkSource Montgomery have started to meet regularly to discuss green workforce development, particularly around meeting the labor needs and skills associated with building electrification.
- \$80,000 in Community Grant funds have been encumbered in a contract with Impact Silver Spring to expand their existing work accelerating the spread of worker-owned businesses.

### **Department of Finance**

- The Department of Finance (DOF) executed an MOU with the Montgomery County Green Bank to implement Bill 44-21 and the County has made the first 2 monthly distributions of appropriated Fuel Energy Tax. A monitoring program for the use of these funds is under development. (CAP Action G-10)
- DOF in coordination with DEP, is responsible for the CPACE program, (Commercial Property Assessed Clean Energy), which is administered by the Green Bank. DOF billed and collected CPACE assessments for Levy Year 2022. Additionally, DOF and DEP are coordinating with the Green Bank on updating the CPACE Program Guidelines documents to reflect amendments made in Bill 46-21. (CAP Action G-10)

### **Department of Health and Human Services**

- The Office of Community Affairs established a cross department Climate Action Team including members from all three Minority Health Initiatives/Programs and the Community Action Agency to raise awareness, build capacity and drive climate action both with internal and external stakeholders. Planned initiatives include a monthly climate action newsletter and a quarterly lunch and learn series.
- The Latino Health Initiative is planning 15 virtual “Charlemos con Zumba” physical activity sessions that include short educational climate chats with participants, demonstrating the link between health and climate.

### **Department of Permitting Services**



- The Department of Permitting Services (DPS) is working with stakeholders to explore options for the 2021 International Energy Conservation Code (IECC). The 2021 building codes are currently under review at the state level. Once the state publishes the 2021 codes, the County can move to public engagement. The 2021 IECC will include proposed amendments that will set minimum thresholds for onsite renewables. (CAP Action E-2)
- The SolarAPP+ pilot program, which allows applicants to obtain pre-approval for basic residential rooftop solar installations, is moving to next steps. DPS is currently working through Apply Online adjustments and issuance processes in preparation for a 2023 launch. (CAP Action E-3)
- DPS's customer service section has moved large photovoltaic installations into its case management process. This process puts additional focus and resources on projects deemed a high priority. (CAP Action E-4)
- Multiple departments are coordinating on a draft plan for electrification ready and electrification of new construction. In the plan, there will be opportunities to explore level 3 alterations as a method of electrifying existing buildings and homes. (CAP Actions B-1, B-2)
- The Department of Permitting Services (DPS) is working with stakeholders to explore options for the 2021 International Energy Conservation Code (IECC). The 2021 codes are currently under review at the state level. Once the state publishes the 2021 codes, the County will move to public engagement. Additionally, DPS has a voting seat in the IECC Energy modeling and Net Zero Energy subcommittee that works on future energy code language. (CAP Action B-5)
- DPS will utilize the New Buildings Institute decarbonization language during amendment proposal. The County is continuing to explore legal and building code strategies to disincentivize fossil fuel use and encourage electrification in newly constructed buildings. (CAP Action B-6)
- DPS is working with stakeholders to explore options for the 2021 IECC. The 2021 codes are currently under review at the state level. Once the state publishes the 2021 codes, the County will move to public engagement. DPS will utilize the New Buildings Institute decarbonization language during amendment proposal. Additionally, the 2018 International Green Construction Code (IgCC), which was adopted in September 2021, will advance energy goals through enforcement on new construction over 5,000 square feet. 2018 IgCC is now being enforced. (CAP Action B-7)
- The Department of Permitting Services (DPS) is exploring options to expand EV ready infrastructure and EV infrastructure in the 2021 International Energy Conservation Code (IECC). (CAP Actions T-7, T-8)
- Currently no codes directly correlate to resiliency but the increased efficiency in the 2021 International Energy Conservation Code (IECC) puts Montgomery County on a path to better extreme weather resiliency through envelope, onsite solar, and potential onsite storage. The 2018 International Green Construction Code (IgCC), adopted in September 2021, also enforces increased efficiencies and onsite generation. (CAP Action A-4)

- The 2018 IgCC was adopted in September 2021. DPS is exploring specific amendments to the 2021 codes to require solar reflective index (SRI) requirements for roofing materials. (CAP Action A-6)
- DPS is in communications with neighboring jurisdictions, the state energy administration, and multiple national organizations to better align with holistic goals and utilize national expertise. (CAP Action A-11)
- DPS requires stormwater management (SWM) compliance to the maximum extent practicable and only grants waivers when 100% compliance cannot be achieved. Many projects meet a large percentage of SWM compliance, but if even 1% is not achievable and a waiver is granted, the full fee-in-lieu (not a portion thereof) is required. DPS is in the process of contacting several Maryland jurisdictions and the District of Columbia. The timeframe for updates to FEMA's Flood Insurance Rate Maps (FIRM) has been delayed. DPS is working with FEMA to ascertain an updated timeline for community outreach and the ability for residents to easily view flood maps online. DPS participated in the kickoff meeting with Jacobs, a consultant that is working with the Flooding Taskforce to comprehensively address flood prevention and mitigation in Montgomery County. These meetings are ongoing and include many other County stakeholders. (CAP Action A-13)
- DPS is cooperating with FEMA who is the lead agency in updating the Flood Insurance Rate Maps. DPS routinely updates GIS layers as new floodplains at the local level are mapped as part of its floodplain study reviews. A draft scope of work has been prepared for the development of a comprehensive strategy to address flooding in the County. (CAP Action A-14)
- DPS plans to explore county legislation to enforce water conservation as a method of energy conservation. (CAP Action A-17)
- The Department of Permitting Services has a new database system under development. This will allow DPS to report more detailed information on Climate Action Plan items. (CAP Action G-15, G-16)

### **Department of Transportation**

- MCDOT was awarded a \$15 million grant for Hydrogen Fuels Cell buses, the buses and fueling station will be located at the Ride On Gaithersburg Depot. It expected to be implemented in FY 25. (CAP Action T-5)
- MCDOT has continued to advance the design for Bus Rapid Transit (BRT) on MD 355 and has selected progressive design build as the preferred delivery method. The department has also identified a Project Management Consultant to help advance the project. (CAP Action T-1)
- MCDOT has completed Preliminary Engineering on the Veirs Mill Road BRT and has entered it into the Capital Investment Grant program with the Federal Transit Administration. This program could fund 50-80% of the project. The local funding match has been allocated through a State grant. Assuming the County is successful in receiving the Federal grant, the project is fully funded. (CAP Action T-1)

- MCDOT continued planning work on US29 BRT Phase 2, with the intent to select an alternative before the end of calendar year 2022. (CAP Action T-1)
- MCDOT continued planning studies for the New Hampshire Avenue BRT and North Bethesda Transitway projects. (CAP Action T-1)
- MCDOT continued design for the first two lines of the Great Seneca Transit Network. Construction of the first two lines is funded in the six-year CIP and the service is expected to open by FY25. (CAP Action T-1)
- MCDOT began work on several projects to support the advancement of BRT and other transit services in the county, including Bus Rapid Transit Design Guidelines and a Lane Repurposing Framework study. (CAP Action T-1)
- MCDOT is working collaboratively with Howard County on a Memorandum of Understanding to extend the US29 Flash to Columbia. (CAP Action T-1)
- MCDOT continues to plan, design, and construct several bike facility projects. These include: Woodmont Avenue Cycletrack, Bethesda Avenue Cycletrack, Montgomery Avenue/Lane Cycletrack, Emory Lane Shared Use Path, Sandy Spring Bikeway, MD 355 Shared Use Path, Marinelli Road separated bikeway, Kensington Parkway Shared Use Path, Dr. Bird Shared Use Path, Fenton Street Cycletrack, Amherst Avenue Cycletrack, Bowie Mill Road Bikeway, and Dale Drive Shared Use Path. (CAP Action T-2)
- County Council approved Bill 36-21, Motor Vehicles and Traffic – E-Scooters – Operation Requirements and Registration. This bill further defines e-scooter and e-bike registration, operation, and parking for for-hire vehicles and also sets regulations for private owned and operated vehicles. (CAP Action T-2)
- MCDOT is working with County representatives, municipalities, and private e-scooter/e-bike operators to expand service areas covered by the micromobility pilot. MCDOT is pursuing placement of additional micromobility corrals in pilot areas. State grant options to support this effort are being pursued. (CAP Action T-2)
- MCDOT continues to sponsor Learn-to-Ride bike and e-scooter training classes. The Walk & Ride Challenge continues to be conducted with teams of employees working in Transportation Management Districts. MCDOT is exploring software updates to enable expansion of Walk & Ride to additional areas of the County. (CAP Action T-2)
- The solar canopy project at the Silver Spring depot is expected to open on October 31, 2022, which will support the operation of 70 battery electric buses over the next three years. (CAP Action T-5, E-4)
- MCDOT is continuing to collaborate with PEPCO and has submitted three additional locations for curbside charging (these locations have been reviewed/approved by Parking Division). PEPCO has responded that they are currently not advancing the curbside charging program; but these locations will remain viable with the expectation that PEPCO will eventually advance them in a future program. (CAP Action T-7)

- Silver Spring - 1<sup>st</sup> Ave. & @ Spring St. (2 locations)
- Bethesda - Cordell Ave. @ Norfolk Ave.
- Wheaton - Ennalls Ave.
- MCDOT installed two dual-port EV charging stations in Garage 13 in Wheaton. Both charging stations are level two. The Montgomery Department of Transportation and Pepco have partnered to bring additional charging stations to the Bethesda, Silver Spring and Wheaton Parking Lot Districts. Installation of two dual-port EV charging stations at Garage 40 in Bethesda is underway and the stations are expected to be available to the public shortly. (CAP Action T-7)
- MCDOT is promoting the FareShare program to private sector employers and employees; County government employees received information on available Get-In transit/vanpool subsidy programs during Open Enrollment efforts. (CAP Action T-8)
- MCDOT is continuing to help County businesses support telework, including providing free consulting from national experts. (CAP Action T-8)
- MCDOT continued installation of pedestrian hybrid beacons at mid-block crossings that are currently unprotected. Additionally, MCDOT is continuing to work with MDOT SHA to design and implement adaptive traffic signal control systems in select corridors. This coordination has been delayed due to restricted/unavailable funding on the part of MDOT SHA. The expectation is that this funding shortage will abate, and the corridor selected for adaptive traffic signal control will be designed and implemented. However no firm time schedule has been given for this action. (CAP Action T-9)
- Off- Road Equipment for DOT-Division of Highway Services includes electric handheld tools such as blowers, trimmers, and saws, and electric zero turn mowers. All depots now have electric blowers and trimmers with some saws. The Silver Spring Depot has replaced 3 out of 5 zero turn mowers with electric mowers and a portable charging station. (CAP Action T-11)
- MCDOT received a grant from the Chesapeake Bay Trust (CBT) for \$360,000. From FY23-FY25 1,200 will be planted under the grant with 400 being planted each year. (CAP Action S-2)
- MCDOT completed construction of Beach Drive Bridge Replacement project, Hidden Valley Drive Culvert Rehabilitation project, and Pooks Hill Road Culvert Rehabilitation project. Completed design and started construction of Bulls Run, Centerway Road, Tucker Lane, Alloway Drive, and Amaranth Drive culvert rehabilitation/replacement projects. Started design of Seven Locks #433, Seven Locks 2, Cinnamon Rd, Hidden Valley Ct, Notley Rd, River Rd #415, and Shiloh Church Rd Culvert rehabilitation/replacement projects. (CAP Action A-2)
- MCDOT completed construction of two storm drain inlets, one grass bioswale and one bioretention bioswale on Saul Road. The project addressed local road flooding and also improved the adjacent sidewalk connection. Continued design and permitting for multiple storm drain and outfall repairs that also incorporate green infrastructure. (CAP Action A-10)

- MCDOT continued supporting DEP in development of a Comprehensive Flood Management Plan (CAP Action G-1)
- Transportation Planning Board's Visualize 2045 Plan was adopted in June 2022 and approved by US DOT and EPA in October 2022. This Plan will be updated in 2024 and will reflect the June 2022 climate goals to reduce GHG emissions 50% below 2005 levels by 2030 and 80% below 2005 levels by 2050. (CAP Action G-7)

### **Montgomery College**

- Montgomery College is retrofitting a 35 KW solar array located on the Science West building rooftop.
- Montgomery College is replacing/upgrading the HVAC systems in 6 buildings. These new energy-efficient HVAC systems will improve indoor air quality and occupants' comfort.
- Montgomery College retro-commissioned 5 buildings in September 2022. This effort is expected to enhance the energy performance of the buildings as well as the indoor air quality and occupant comfort.
- Montgomery College participates in PJM Emergency Load Response Program (ELRP) and the PJM electricity demand Peak Predictor program. During the summer of 2022, the college lowered its electricity demand during the peak hours of the day to protect the local electric grid from overloading.
- Montgomery College has received over \$173,000 from the EMPOWER incentive program for energy efficiency projects since 2018 up to the present.

### **Montgomery County Green Bank**

- The Montgomery County Green Bank has closed on two more solar PV projects totaling 173 kW with faith-based organizations. This brings our total in solar supported efforts to over 1.4 MW in projects with nonprofits, affordable housing, faith-based institutions, and homeowners. (CAP Action E-3)
- The Montgomery County Green Bank approved a new facility to support small community solar projects of faith-based and nonprofits that will help these projects more efficiently move forward. The Green Bank is presently working with three organizations to use this facility. (CAP Action E-3)
- The Montgomery County Green Bank continues to work with several condominiums on solar for their properties and has been engaged with state legislatures and several advocates to address condominium laws and regulations which need to be overcome to make these projects feasible. (CAP Action E-3)

- The Montgomery County Green Bank framed a broader technical assistance program to be launched in Q223 to support commercial property owners with energy assessments to determine potential energy improvements for their properties. The assessments will also include reviews of electrification alternatives where appropriate. (CAP Action B-3, B-4).
- The Montgomery County Green Bank is working on a pipeline of over \$20 million in clean energy projects for commercial and multifamily properties using a variety of its products, including its CLEER program, commercial solar power purchase agreement product, community solar roof leases, small business energy savings support product, and debt investment in co-lending arrangements with financial partners. (CAP Action B-3)
- The Montgomery County Green Bank launched its pilot EV Charger program in support of affordable multifamily properties in the county using a grant from General Motors. The program provides a no out-of-pocket cost solution to install up to 2 dual chargers at up to 30 properties. (CAP Action T-3)
- The Montgomery County Green Bank continued its work to engage and educate the community by hosting or participating in 28 events reaching over 500 people, including with contractors, community groups, associations, and property owners.

### **Montgomery County Public Schools**

- Work continues on the designs for rooftop solar installation at 8 MCPS sites, a pilot parking lot canopy with electric vehicle charging stations, a pilot of solar parking lot lighting, and purchasing of off-site ground mounted solar in the PJM region.
- MCPS has competitively bid and awarded contracts to two Energy Service Performance Contractors (Ameresco, Noresco) to conduct Investment Grade Audits of our facilities to identify energy savings and greenhouse gas reduction projects that can be implemented using a self-funding strategy. Work is currently underway to identify the first phase of buildings to be audited this school year, with a target of work initiating during summer 2023.
- MCPS was awarded a grant from the Maryland Energy Administration to identify steps necessary to implement Net Zero Emissions criteria into our new construction portfolio.
- Central Office staff continue to assist schools in their individual efforts in behavior modification to increase sustainability, reduce energy consumption, and increase recycling and other waste reduction/rethinking activities.
- The first onsite Green Globes assessment for two newly opened schools will be conducted in November: Odessa Shannon MS and Harriet Tubman ES.
- MCPS is adding 61 more electric school buses this fall bringing it to a total of 86 electric buses in the fleet. Highland is partnering with MCPS to upgrade 326 school buses to electric by 2025. (CAP Action T-7)

- MCPS has begun work to replace diesel and gasoline vehicles, as appropriate, with electric, hybrid, or other more efficient or cleaner-fuel vehicles. Two fleet plug-in hybrid SUVs are expected to be delivered in December, a fleet electric cargo van is expected to be delivered in the upcoming months. Additional fleet electric vehicles will be ordered in FY23. (CAP Action T-7)
- MCPS started the process of identifying and highlighting for teachers, administrators, students, and parents where the existing curriculum addresses climate change education. (CAP Action P-12)
- Green Schools leaders in MCPS and partner agencies (such as the Maryland Association for Environmental and Outdoor Education, MAEOE, the Audubon Natural Society and the Montgomery County Council of Parent-Teacher Associations, MCCPTA) have collaborated to develop a plan to support increasing the number of certified Green Schools in MCPS. The plan includes individual professional development, individual support for certifying schools, and continuing and enhanced financial support for leading the certification process. (CAP Action P-12)
- MCPS leaders in Science, Environmental Literacy, and Social Studies are participating in the MSDE technical assistance sessions focused on newly developed state-wide framework for Environmental Literacy Instructional Programs. (CAP Action P-13)
- MCPS began implementing a revised Grade 6 Science curriculum in which the theme of climate change, both natural and manmade, is woven throughout the units to develop student understanding of this important issue. The curriculum includes a 30-Day Intent to Act Pledge in which students develop a plan that reduces their environmental impact to become more climate neutral. Over 120 teachers participated in professional development on the topics and how to effectively instruct students on the issues, impacts, and actions they can take to reduce their impact on the environment. (CAP Action P-13)
- Fifty-six middle school and high school resource teachers/content specialists participated in professional learning that included hands-on investigation of local environmental conditions and a discussion of the importance of teaching science outdoors to a student's overall well-being. (CAP Action P-14)
- During Summer 2022, MCPS partnered with the Chesapeake Bay Foundation to provide a week-long course focused on climate change education. Nine public and private school teachers successfully completed the course, which included the development of a student-led investigation and action project to be implemented during the 2022-2023 school year. (CAP Action P-14)
- MCPS has created a new position of Live Infrastructure Manager who will facilitate the use of school gardens and other outdoor learning facilities, in addition to managing our existing bio-facilities for stormwater management control. The new hire is expected to start in November 2022. (CAP Action P-15)
- MCPS is collaborating with the Student Global Ambassadors Program to expand participation in their Climate Clinics & Sustainability Challenge. (CAP Action P-16)

- MCPS will be holding a Sustainability Symposium on electric school buses in the upcoming months. Our partner, Highland Electric Fleet, will share information on the features of the electric school buses and how they will help bring MCPS closer to its pledge of cutting greenhouse gas emissions. Students will take an active part in organizing and promoting this event. (CAP Action P-16)
- MCPS is in the process of updating the website to share utility consumption and recycling data with schools. New platform expected in mid to late 2023. (CAP Action P-17)
- The MCCPTA has established a Sustainability and Green Schools Subcommittee and are working to create a strong foundation to support and enhance the MCPS Sustainability Policy systemwide and at local schools through increased Green schools and other measures increase climate change action countywide. (CAP Action P-18)

### **M-NCPPC Parks**

- Montgomery Parks in making progress on installation of EV chargers in parks through their partnership with BGE and Pepco. Construction was recently completed on EV charging stations in Argyle Local Park, Olney Manor Recreation Park, and Wheaton Forest Local Park, which are now fully operational. This makes a total of 5 parks with EV chargers through the program. Pepco has a website, which maps out completed EV chargers as part of their public charging program that can be found [here](#). (CAP Action T-7)
- [Little Falls Parkway Phase 2](#) of the project is underway. In the spring, Montgomery Parks plans to launch a temporary linear park in the southbound lanes between Arlington and Dorset, with space for walking and biking as well as programming that includes games, events, and tables with seating. (CAP Action T-4)
- Parks is no longer purchasing gas powered trimmers or leaf blowers. When a piece of equipment is at the end of its life cycle an electric replacement will be purchased. Northern Parks Regions is working to replace all gas trimmers and leaf blowers by the end of FY23. (CAP Action T-11)
- The Urban Forest Patches Program is currently underway. The patches are being evaluated individually based on data collected to identify management strategies, ease of implementing strategies, and resources needs. Most of these patches are not currently managed but serve a deep ecological purpose in areas of the county with low forested and tree canopy cover. (CAP Action S-1)
- The [2022 Urban Tree Summit](#) was held in September 2022 with a virtual conference and in person field days, one of which was at Pope Farm Nursery, Park's plant production facility in Gaithersburg. (CAP Action S-2)



- Park Urban Forestry program has begun implementing their preventative tree maintenance program, which will help retain current tree canopy on parkland. The work started in July in the Cabin John management area where 264 trees were pruned in 9 parks. (CAP Action S-2)
- Completed [Meadow Restoration Projects](#) (CAP Action S-3):
  - Locust Grove Nature Center: Project created a small half acre demonstration plot for environmental education and pollinator habitat.
  - Meadowside Nature Center: Project included a 1.5-acre restoration for environmental education and pollinator habitat.
- The second annual parks urban wood sale is set to take place on December 10, 2022. (CAP Action S-6)
- Parks is continuing to implement [outfall restoration projects](#). Outfall restoration projects completed in Q1:
  - Byeforde Road Outfall (Rock Creek SVU 3): Project included sustainable outfall stabilization, non-native invasive treatment, and riparian enhancements.
  - Nairn Road Outfall: The project in Wheaton Regional Park to help improve drainage (CAP Action A-15)
- Additional funding from MCDOT storm drain program is available. Parks and DOT are moving forward with the construction of two projects: Vandever St Outfall and Georgian Forest Local Park storm drain rehabilitation. (CAP Action A-2)
- The Sustainability Planning process is still underway. In the fall 2022, 108 Parks and Planning staff were engaged in 8 different working groups to develop recommendations for different sections of the plan. Every single group was tasked with recommending actions for the plan related to climate action within their work programs. (CAP Action G-1)

### **M-NCPPC Planning**

- The [Silver Spring Downtown and Adjacent Communities Plan](#) encourages all new construction to exceed county minimum standards for energy efficiency. (CAP Action B-7)
- The [Silver Spring Downtown and Adjacent Communities Plan](#) recommends expanding Bus Rapid Transit service through the downtown on both Colesville Road and Georgia Avenue. (CAP Action T-1)
- [SSDACP](#) recommends studying opportunities to expand the VanGo circulator route to include Jesup Blair Park and Woodside Urban Park. (CAP Action T-1)
- The [Pedestrian Master Plan](#) will go to Planning Board later this fiscal year, and will be taken up by County Council in early 2023.

- Planning is working with MCDOT to do an add-on to the Complete Streets Design guide (could be a separate chapter or amendment), to put design guidance on shared streets, for how those can be build out in the County. (CAP Action T-2)
- Planning has completed guidance on protected intersection design for regulatory projects. (CAP Action T-2)
- With MCDOT, Planning has a bikeway branding effort to actively market the County's bicycle infrastructure to increase bicycling in the County. (CAP Action T-2)
- The [Silver Spring Downtown and Adjacent Communities Plan \(SSDACP\)](#) encourages pedestrian and bicycle travel within the Plan area for local trips to reduce carbon and other greenhouse gas emissions. (CAP Action T-2)
- [SSDACP](#) confirms recommendations for downtown Silver Spring from the Bicycle Master Plan and recommends three new locations for separated bike lanes on existing streets, and one new downtown street with separated bike lanes. (CAP Action T-2)
- [SSDACP](#) recommends installing additional micromobility corrals in underutilized parking facilities and near Veterans Plaza and the forthcoming South County Regional Recreation and Aquatic Center (currently under construction). (CAP Action T-2)
- [SSDACP](#) recommendations that increase BRT service will hopefully reduce cars in the downtown. (CAP Action T-4)
- [SSDACP](#) supports redevelopment projects providing less than what typical parking ratios would yield in the downtown (within the Parking Lot District). (T-4)
- Planning Department staff are collecting and analyzing data from past projects to understand what public benefits have been received. The team will retain a consultant shortly to conduct an analysis of the point system and suggest improvements. (CAP Action T-7)
- [SSDACP](#) amended the NADMS goal to a blended average (commuters and residents) of 65 percent. (CAP Action T-8)
- Reforest Montgomery, supported by the [Forest Conservation Fund](#), plants trees and forests throughout Montgomery County. The Reforest Montgomery team is growing, with two full time Planning staff now dedicated to operating the programs, including compliance enforcement during Regulatory Review. We are working on an update to the Reforest Montgomery coupon, which would increase the discount from \$40 to \$50 off a native tree purchased at a participating retailer. We also plan to roll out an expansion of the Reforest Montgomery easement reforestation program (reforesting private properties) in early 2023. With this update, property owners willing to grant a *new* Category I forest conservation easement to the Commission may also receive free reforestation through our program. In these cases, reforestation areas must be at least 1 acre and within a stream valley buffer and/or adjacent to existing forest. The County Council held a public hearing on the "no net loss of forest" amendment to the Forest Conservation Law in early October 2022, but the work session and vote have been moved by the County Council to calendar year 2023 (dates TBD). (CAP Action S-1)

- The resolution of adoption of the [Silver Spring Downtown and Adjacent Communities Plan](#) was approved unanimously by the Montgomery County Planning Board on June 2. The Silver Spring and Downton Adjacent Communities Plan recommends:
  - Implementing a Green Loop concept to create shaded, performance-based complete streets to serve the Plan area.
  - Increasing overall tree canopy cover to 45% tree canopy coverage on both public and private property. (CAP Action S-2)
- The County Council received advanced amendments to [Bill 25-22-Forest Conservation - Trees](#) continued to review them in committee and council work sessions with anticipation of adoption in Q2 of FY23. The Bill amends the [Forest Conservation Law](#) that will Achieve a no net loss of forest. [Press Release and Summary](#). Draft amendments to the law and regulations include:
  - Increasing the amount of forest that needs to be preserved (forest conservation thresholds) in lower density land use categories, where additional space exists for on-site planting and protection.
  - Increasing forest planting (afforestation) requirements in the institutional land use category.
  - Increasing reforestation ratios and incentivizing required forest mitigation in the same watershed as the project or in a watershed considered high priority for forest planting or forest preservation.
  - Requiring planting of forest in unforested stream valley buffers, with some exceptions, such as if the stream valley buffer is not suitable to establish and retain required forest planting
  - Expanding options to create forest ecosystems and increase long-term resilience of planted forests. (CAP Action S-4)
- The Planning Department has been participating in a DEP-led effort to identify, prioritize, and measure nature-based climate solutions. Planning has also been participating in a parallel effort in the Department of Parks. These projects will continue into the second quarter. (CAP Action S-6)
- The resolution of adoption of the [Silver Spring Downtown and Adjacent Communities Plan](#) was approved unanimously by the Montgomery County Planning Board on June 2. The Silver Spring and Downton Adjacent Communities Plan recommends:
  - Reducing urban surface and air temperatures through the application of nature-based solutions throughout Silver Spring upon redevelopment.
  - Upon redevelopment, increasing carbon sequestration capacities on public and private property through increased stratified understory and tree canopy vegetation, bioretention, and green roofs. (CAP Action S-6)
- Down County Division has received the final version of Downtown Silver Spring Cool Streets Guidelines. The Guidelines were written by Rhodeside and Harwell from a Transportation Land-Use Connections grant obtained by the Council of Government. It assessed the Universal Thermal Temperatures associated with various impervious surfaces within Silver

Spring and made recommendations for cooling the urban streetscape. Application of these techniques will be applied during the site planning process. (CAP Action A-6)

- Planning staff is advancing the research, costs, benefits, maintenance, and priority areas for urban cooling strategies to mitigate the effects of urban heat and climate change. (CAP Action A-6)
- Planning staff is considering collaborative efforts to demonstrate, study, and advance various urban cooling strategies. (CAP Action A-6)
- The Silver Spring Downtown and Adjacent Communities Plan recommends all new development have a green cover of 35% or greater. This can be achieved through the planting of native trees, green roof, or a combination of both. (CAP Action A-6)
- The [Silver Spring Downtown and Adjacent Communities Plan](#) recommends expanded vegetated parks, open spaces, and amenities within a 5-minute walk for all residents. (CAP Action A-7)
- The [Silver Spring Downtown and Adjacent Communities Plan](#) encourages the use of green infrastructure using green roofs, bioretention systems, green roofs, tree and vegetative plantings, and permeable pavements. (A-10)
- The Planning Department is continuing to apply updated guidelines to the Ten Mile Creek watershed. (CAP Action A-15)
- Planning staff is a member of the Patuxent Reservoir's Watershed Technical Advisory Committee. There are on-going long-term projects. One project is to develop a watershed-wide geodata base of the Patuxent watershed to enable the committee to do watershed mapping and analysis. WSSC Water will be hosting the geodatabase to advise the policy workgroup with inter-agency representatives. The committee is also working on a stream buffer restoration potential analysis to will assess the potential for reforesting stream buffers in the reservoir watershed as a BMP to help reservoir move closer to meet its TMDLs for phosphorus and sediment. (CAP Action A-15)
- The Planning Department continue its work on the [Fairland Briggs Chaney Master Plan](#). Preliminary recommendations include the development and support of Community Gardens in the Master Plan area. (CAP Action A-18)
- Planning staff have continued to work with the consultant recently hired to develop a method for doing Climate Assessments as required by [Bill 3-22 - Legislative Branch - Climate Assessments - Required](#), including estimating greenhouse gas emissions associated with Master Plans and ZTAs, estimating carbon sequestration, and making recommendations for community resilience. A preliminary methodology has been proposed, and staff is working with the consultant to finalize the methodology before the end of the calendar year. This work has included outreach to various stakeholders, including citizens, MCDEP, and the Office of Legislative Oversight. (CAP Action G-7)
- The Planning Department participated in planning for a Heat Mapping Study led by MCDEP and the County's Office of Emergency Management and Homeland Security, as well as a graduate student from the University of Maryland. The

project, which is supported by a grant from NOAA, will map heat islands in a broad swath of the County. The data collection was done in August of this year. Results are anticipated in the second quarter. (CAP Action G-16)

- As part of the outreach during the development of a recommended methodology for implementing the requirements of [Bill 3-22 - Legislative Branch - Climate Assessments - Required](#), staff and the consultant have met twice with a citizen stakeholder group to share information, have discussions, and hear suggestions from the public regarding the proposed approach. Additional information sharing and outreach has occurred through email interactions. (CAP Action P-7)
- [Makeover Montgomery 5](#): Montgomery Planning hosted and Completed a 3-day public conference with planners, architects, developers, real estate professionals, economists, social scientists, ecologists and others to discuss cutting-edge ideas for transforming the suburbs in four areas:
  - Economic resilience
  - Neighborhood and social resilience
  - Environmental, climate, and infrastructure-resilience
  - Public health resilience

### **Office of Agriculture**

- The OAG met with a company proposing to install a 2MW community solar project in the AR zone. The OAG, DPS, MNCPPC are working the solar company to ensure the project complies with County and State regulations. (CAP Action E-4)
- The OAG met with staff from the University of the District of Columbia to learn what agrivoltaic projects UDC is researching and how the County could implement similar ideas. (CAP Action E-4)
- The OAG, SCD, and UME held its Close Encounters With Agriculture event in October. This event has 4<sup>th</sup> graders from County schools come to the Ag History Farm Park and learn from three sections – Agriculture, Environment, and Nutrition. Approximately 4,000 students attended the event this year. Since its inception in 1993, over 100,000 4<sup>th</sup> grade students have attended this event.  
The OAG also monitors the annual GHG reductions by BMP installation. This is done annually due to how the State processes the data and reports it to the EPA. This data is found on the OAG website, [here](#), [here](#), and [here](#). ( CAP Actions S-4, S-5)
- The Soil Conservation District has reported nineteen BMPs to the Maryland Department of Agriculture. These BMPs have associated reductions of GHGs. They also have reductions in N, P, and sediment, which is important for the Chesapeake Bay WIP goals. (CAP Action S-4, S-5)

- The OAG settled an agricultural preservation easement permanently protecting 241.5 acres of farmland. The easement requires a conservation plan which includes the installation of BMPs which help sequester carbon and reduce pollution to the waters of the state. (CAP Actions S-4, S-5)
- For the OAG FY22 program the following acres were certified:
  - 15,215 acres of traditional cover crop
  - 5,040 acres of commodity cover crop

### **Office of Emergency Management and Homeland Security**

- OEMHS completed the Fall 2022 Update of the County’s Extreme Temperature Plan.
- OEMHS continued work with Thriving Earth Exchange on Urban Heat Island and Tree Canopy Cover.
- OEMHS kicked off planning team meetings for the Hazard Mitigation Plan revision.
- OEMHS delivered a National Preparedness Month outreach campaign with social media and Nextdoor messaging, newsletters, and preparedness and resiliency events. The County Executive and County Council issued a Joint Proclamation for September as National Preparedness Month.
- OEMHS has participated in the Flood Management Planning meetings. As of November 4, 2022, 31 out of 34 flood sensors have been installed. The last 3 sensors will be installed by 11/30/22.
- The Maryland State Mesonet program is underway. The Governor, State officials, and local officials from Montgomery County debuted the program at a press event.

### **Office of Human Resources**

- OHR is working with DEP to explore opportunities to develop training and professional development to the County Climate Change Ambassadors. (CAP Action G-2)
- OHR is exploring the feasibility of a Project Manager or series as a potential new job classification to address the implementation of climate change projects and efforts. (CAP Action G-4)
- OHR updated the County’s Telework Policy in October 2021 to further expand the opportunities for remote work. Transit Benefit Policies will be addressed by DOT. (CAP Action G-13)

### **Office of Management and Budget**

- OMB received information on the climate impacts of proposed capital projects and used that information to inform recommendations for the County Executive to consider for the FY24 capital budget (CAP Action G-9).
- Departments submitted operating budget proposals with climate information that will similarly inform the County executive's budget decisions. OMB will review the need for new positions and the ability to realign existing resources as needed to meet the County's climate goals (CAP Action G-4 and G-9).

### **WSSC Water**

- WSSC Water completed the Calendar Year 2022 GHG inventory and updated the WSSC GHG Action Plan.
- WSSC Water initiated the Potomac WFP microgrid study.