



# Montgomery County Climate Action Plan

**Progress Report for January – March 2023**  
(Fiscal Year 2023 Quarter 3)



## **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 January 1 to March 31, 2023 (Quarter 3 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 significant updates for the quarter. The categories 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 categories.

### **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)

## Clean Energy

- **Solar Installations**
  - The Montgomery County Green Bank closed on a **31.5 kilowatt (kW) solar PV project** with Sandy Spring Monthly Meetings, a faith-based organization. This brings the Green Bank's total in solar supported efforts to **633.87 kW among 8 organizations** including nonprofits, affordable housing, and faith-based institutions.
  - MCPS continues work on designs for installation of **rooftop solar production sites at 8 MCPS sites**, including a pilot parking lot canopy with EV charging station, a pilot of solar parking lot lighting, and purchasing of off-site ground mounted solar in the PJM region.
  - The Department of General Services (DGS) completed the **572 kW Animal Shelter Solar and Microgrid project**. There is a Ribbon Cutting ceremony scheduled on June 13<sup>th</sup>, 2023.
- The Montgomery County Green Bank supported **two renewable energy residential loans** (one geothermal and one solar PV) through the [Clean Energy Advantage Program](#).
- The Community Choice Aggregation work group sent **draft regulations to the Public Service Commission** in late January, and the Commission held a rulemaking session on February 23<sup>rd</sup> to discuss the regulations. The Commissioners agreed with the County's proposed views regarding Commission oversight of the CCA's procurement activities, but noted a number of other areas where the work group needed to continue to work on the regulations and directed the work group to submit a revised set of regulations by April 25<sup>th</sup>.
- The County developed a Memorandum of Understanding (MOU) with Solar United Neighbors to **launch a new version of the Capital Area Solar Co-op program**, which will launch in mid-May 2023. Each year, the County, along with our neighbors in the DMV region, coordinate on this program to use collective buying power of neighbors to bring down the cost of solar installations for homeowners.
- DGS has signed a contract for Equipment Maintenance & Transit Operation Center's Smart Energy Depot as design continues. This microgrid project will provide resilient electrical power to the transit fleet which will be comprised of both electrical battery buses and hydrogen fuel cell buses.

## Buildings

- The Montgomery County Green Bank closed on **6 loans to homeowners in support of energy efficiency** improvements generating nearly \$5,000 a year in energy savings for a total of 29 projects in FY23. These homeowners used the new Clean Energy Advantage statewide program done in collaboration with the Maryland Clean Energy Center and using EmPOWER funding through the participation of six utilities across the state.
- The Montgomery County Green Bank has 13 contractors under agreements (and 5 more in the works) and **77 studies presently underway for its [technical assistance program](#)** with a dedicated \$750,000 of funding to support commercial property owners to complete energy assessments to determine potential energy improvements for their properties. The assessments will also include reviews of electrification alternatives where appropriate.
- In March 2023, the Department of Environmental Protection (DEP) and the Department of Finance (DOF) submitted the [2023 Commercial Property Assessed Clean Energy \(C-PACE\) Annual Report](#) to the County Council.
- DEP and DOF continued to work with the Montgomery County Green Bank on revisions to the C-PACE Program Guidelines to reflect the amendments passed in [Bill 46-21](#). The new guidelines are expected to be published by Quarter 4.
- On March 28-29, 2023, the Department of Environmental Protection (DEP) hosted the **10<sup>th</sup> annual [Montgomery County Energy Summit](#)** at the Silver Spring Civic Building. Over 200 attendees came each day to learn how to prepare for compliance with energy benchmarking, building energy performance standards, and emerging building codes, as well as explore best practices for decarbonized buildings in Montgomery County.
- Together with the Cities of Rockville and Gaithersburg, the County began to develop its approach for coordinated community spending of **Energy Efficiency and Conservation Block Grant (EECBG)** formula funding from the U.S. Department of Energy (DOE). All three jurisdictions will be receiving formula grants from DOE in early 2024.
- Montgomery County Public Schools (MCPS) developed a work plan for a **2023 grant received from the Maryland Energy Administration** for [Decarbonizing Public Schools](#). This project examines the educational facilities construction projects and investigates opportunities to improve energy efficiency and reduce greenhouse gas consumption and emissions. The project will cover a review of new and existing facilities, create language for MCPS design guidelines, and examine renewable energy opportunities. The final report is expected in December 2023.

- Last year, MCPS 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. Fifty schools were selected, audits began during Q3; both projects are nearing the 30% completion mark.
- The [Building Performance Improvement Board](#)—the appointed advisory board that advises the County on building energy performance standards (BEPS) implementation—continued meeting bi-weekly to develop their recommendations on BEPS Method 2 regulations, due to be issued by December 31, 2023.

## Transportation

- **Electric Vehicles:**

- The Montgomery County Green Bank closed on **two more EV Charger installations** under the Electric Vehicle Charger Infrastructure program for affordable multifamily properties in the County using a grant from General Motors. The Green Bank has a total of three projects being supported by the program and is working on three more projects.
- The Montgomery County Department of Transportation (MCDOT), in partnership with Pepco, installed and planned **additional EV charging stations in County parking facilities:**
  - Four EV charging station ports were installed in Garage 7 in Silver Spring.
  - Four EV charging station ports were installed in Garage 57 in Bethesda.
  - Two charging station ports are in the planning process to be installed in Lot 34 in Wheaton.
- DEP published the [Charge Montgomery Story Map](#) – an interactive tool that helps residents understand the County’s plans to expand public EV charging.
- MCPS has begun to work towards **replacing fleet diesel and gasoline vehicles**, as appropriate, with electric or hybrid vehicles. Two fleet plug-in hybrid SUVs were delivered in December, a fleet electric cargo van is expected to be delivered in the upcoming months, and four additional fleet electric vehicles have been ordered in FY23.
- The Department of General Services’ (DGS) Fleet Management **continues expanding the County’s electric fleet** and new vehicles will be available for service, including:

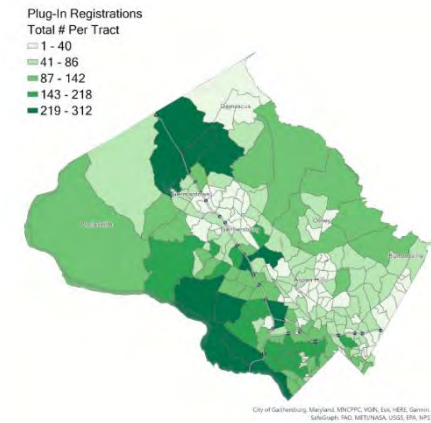


Figure 1: Maps from the DEP’s new Charge Montgomery Story Map which show the total number of plug-in registrations per tract as well as charging sites in the County.

- A Kenworth K270 “Class 8” all electric box truck for Library Services, expected to be online in April 2023.
  - An electric van for Library Services, expected to be received late June or early July 2023.
  - Fleet will pilot an electric loader in partnership with DOT highway in Fall 2023.
  - Fleet exploring the purchase of electric box trucks to support Alcohol Beverage Services’ delivery fleet.
- **Buses:**
  - MCPS continued operation of 85 electric school buses this winter, across 5 of the 6 service area depots. MCPS has partnered with Highland Fleet to **upgrade a total of 326 school buses to electric by 2025**. So far, MCPS electric buses have driven more than 150,000 miles.
  - DGS’s Fleet Management is finalizing the technical scores and recommendation for additional 40’ Low Floor all battery electric buses (BEB) **Electric Bus RFP for 100 Electric buses** scheduled to be awarded in Q3 of FY23.
  - MCDOT continued work on several **Bus Rapid Transit (BRT) projects**:
    - The Veirs Mill Road BRT project is working on 65% design to be completed in the Summer.
    - The MD 355 BRT project has completed preliminary engineering. The team will start developing the RFQ to bring the progressive design-builder on board at the beginning of 2024.
    - Planning was completed for the US 29 BRT Phase 2. Preliminary engineering is underway.
    - Planning is underway for the New Hampshire Avenue BRT, North Bethesda Transitway.
- **Pedestrian And Bicycle Projects:**
  - Montgomery Parks received a **\$7.5 million from the Safe Streets and Roads for All (SS4A) grant program**. The SS4A grant money will be applied to three major parks and trails in the county: Sligo Creek Stream Valley Park and trail, Matthew Henson State Park and trail, and Wheaton Regional Park.
  - Montgomery Planning and MCDOT kicked off the [Shared Streets](#) Guidelines project.
  - The original scope for the [Bikeway Branding Project](#) is complete. Montgomery Planning and MCDOT will be piloting one of the outcomes of the project, a wayfinding approach, in the North Bethesda area.
  - MCDOT continues planning, design, and construction of several bike facility projects: Woodmont Avenue Cycletrack, Bethesda Avenue Cycletrack, Montgomery Avenue/Lane Cycletrack, 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, Good Hope Road Shared Use Path, Good Hope Road Shared Use Path Extension, and Dale Drive Shared Use Path.



- MCDOT continued to offer **Bike Learn-to-Ride and e-scooter classes** this spring as demand continues to grow. These affordable classes are held in various locations around the County in the fall and spring and are taught by certified instructors through arrangements with the Washington Area Bicycle Association (WABA).
- Montgomery Parks has set a goal to transition all handheld 2-cycle gas powered lawn equipment to electric in the next two years, and to transition all gas-powered mowers to electric in the next six-to-seven years. **About 60% of handheld 2-cycle gas equipment has been replaced with electric** (265 out of 444 units).
- MCDOT received a Transportation Planning Board Transportation Land Use Connection (TLC) grant to rethink and restart the [FLEX microtransit system](#) operated by Ride On. The current FLEX program operates similar to a ride-hailing service during set hours. Ridership is lower than pre-COVID levels so this study will evaluate travel behaviors and conditions, market opportunities, and service delivery options to reimagine FLEX for the future.
- MCDOT's **Commuter Survey was conducted** for the first time since the pandemic in Fall 2022 and preliminary results are being reported. Data from the survey is used to determine progress toward the Non-Auto Driver Mode Share (NADMS) goals which are set by County Council in Master Plans. NADMS includes transit, car/van pooling, cycling/scooter, walking and telework modes of accessing work sites.
  - Results from the survey indicate an overall County NADMS of 55 percent for employees commuting to work during the morning peak period. The prior survey, conducted in Fall 2019, indicated a much lower morning peak period NADMS of 31 percent. The difference appears to be attributable to the larger numbers of employees who are now teleworking.

## Carbon Sequestration

- **Tree Planting and Reforestation:**

- DEP's Tree Montgomery completed the planting of almost 3,800 trees for FY23 including **the planting of the 10,000<sup>th</sup> tree** for the Tree Montgomery program since it began in 2015.
  - DEP received a grant through the Chesapeake Bay Trust/Maryland 5-Million Tree Initiative to **install shade trees in Equity Focus Areas**. DEP worked with the Department of General Services to identify more than 380 planting sites on 12 properties and the planting of these 380 trees was completed in Q3.
  - DEP and MCPS collaborated to apply for grant through the Chesapeake Bay Trust/Maryland 5-Million Tree Initiative to plant 1,348 urban shade trees, including 1,154 through the grant and 194 as in-kind match. The shade **trees will be installed at 43 schools**.
  - MCPS partnered with DEP to **plant eight trees at Diamond Elementary School**. The tree planting is estimated to sequester 5,400 pounds of carbon dioxide and intercept 75,600 gallons of stormwater over the next 20 years.
  - An **update to the County's Forest Conservation Law** ([Bill 25-22](#)), recommended by the Montgomery Planning and backed by the Montgomery County Forest Coalition, was passed unanimously by County Council in March.
  - Planning's proposed '[No Net Loss of Forest](#)' amendments to [Bill 25-22](#) were adopted by County Council. The amendments **incentivize strategic protection of existing forests**, encourage planting new forests where forest cover is lacking, and expand options to create forest ecosystems and increase long-term resilience of planted forests.
- The Clean Water Montgomery Grant Program **awarded 23 of the 30 applications** in February. DEP and the Chesapeake Bay Trust are partners in the program through the Trust's grant process, made possible through the County's Water Quality



Figure 2: On March 10<sup>th</sup>, 2023-Eight trees were planted at Diamond Elementary School in partnership with Montgomery County DEP.

Protection Fund and federal appropriations. County nonprofit organizations, community associations, faith-based organizations, and civic groups can apply for grants for projects including tree planting or creating rain gardens.

- Staff continued working with congregations for the Congregations for Clean Water campaign to encourage local **congregations to install green infrastructure**. One congregation has received 4 trees thus far and staff are working with 4 other congregations that expressed interest.
- The Office of Agriculture received data from the Maryland Department of Agriculture showing that, through the use of Best Management Practices (BMPs), Montgomery County farmers **reduced their greenhouse gas emissions by 13,096 tons of CO<sub>2</sub>** and reduced their nitrogen and phosphorus inputs to state waters by 31,784 and 1,563 pounds, respectively in 2022.

## Climate Adaptation

- **Resilience**

- DEP published the [Community Heat Mapping Story Map](#) to highlight results from the August 2022 Urban Heat Mapping Campaign, which was conducted in partnership with the National Oceanic and Atmospheric Administration (NOAA) and Climate Adaptation Planning and Analysis (CAPA). The results show that urban areas of the County experience **temperatures up to 10 degrees higher** than rural areas.
- The Office of Emergency Management and Homeland Security (OEMHS) continues work with the [Thriving Earth Exchange](#) team, which is developing a tool to integrate mapping of the County's tree canopy, land use and land cover, impervious surfaces, and heat maps. This tool can then be utilized in concert with maps of vulnerable or high-risk communities to determine **areas at highest risk of urban heat island effect for mitigation efforts** and resource prioritization.
- The Department of General Services has completed the construction phase of the **Scotland Recreation Center resilience hub** which included installing a rooftop solar system, a battery storage system, a natural gas generator, and an LED lighting retrofit to the facility. A ribbon cutting was held on April 20<sup>th</sup> to celebrate the completion of the County's first resilience hub project. Expected permission to operate from Pepco is June 2023.
- OEMHS is working with a community partner organization with grant funding through the Maryland Energy Administration, along with the Office of Energy and Sustainability in the Department of General Services, to identify additional **county locations for resiliency hub scoping**, with expected completion August 2023.
- OEMHS hired the Climate Adaptation Program Manager who will support resiliency hub efforts, as well as other OEMHS climate actions. The **Climate Adaptation Program Manager** will conduct climate and flood risk community outreach and education in Q4.
- MCPS authorized and filled a **new position of Live Infrastructure Program Manager**, whose work focuses on improving green roofs, bioretention facilities, school gardens, and other green infrastructure improvements, resiliency, and climate adaptation measures.
- The Montgomery County Green Bank's charter was amended by the Montgomery County Council in March 2023 to add resiliency as an area of focus for the Green Bank.

- **Flood Management**

- OEMHS **completed the installation of [flood sensors](#)** in the County's most frequently flooded sites, with the final sensor installed at the Burnt Mills Dam. This was the last sensor covered under the grant funding from the Department of Homeland Security. Data generated by the sensors on water levels and flood stages at dams is now fed directly to the ECC, OEMHS, MCPD, MCFRS, MCDOT, dam owners, and neighboring jurisdictions that may be impacted. Work has begun to install sensors at ten more sites and to purchase software that will connect the sensor data to real time maps published by the National Weather Service for public use.
- Work on Phase 1 of the **County's Comprehensive Flood Management Plan** continued, although completion was delayed slightly due to a revision in the analysis used to prioritize watersheds for initial study in Phase 2. Completion of Phase 1, along with initiation of Phase 2, is expected in Q4. 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), and the resources required to develop comprehensive solutions.

## Climate Governance

- DEP presented a **Climate Ready Office checklist to Climate Ambassadors** at its most recent quarterly meeting. The checklist, which includes 30 climate actions, will include resources for all departments and agencies to take action in the office.
- The Office of Community Affairs Climate Action Team hosted an interactive Lunch & Learn workshop for Health and Human Services (HHS) staff, on **the Impact of Climate Change on Chronic Disease** in February. This event is part of the Equity Lunch & Learn Series which is being used to raise awareness and build internal capacity within HHS. Future Climate themed Lunch and Learn events are being planned.
- DEP finalized plans for a **Flow Leadership course for Climate Ambassadors** and senior managers involved in climate change work starting in June. The program will be taught by Leith Sharp, Director of the [Executive Education for Sustainability Leadership](#) at Harvard and is designed to help changemakers bring bold ideas for addressing climate change to life by navigating barriers, reducing friction and unleashing idea “flow.”
- The Office of Management and Budget (OMB) compiled and **reviewed climate information with FY24 budget requests** and transmitted the information to the County Executive for inclusion in his FY24 Recommended budget. OMB is also participating in discussions to bring a new capital budget climate/environmental impact tool to Montgomery County to be tested during the FY25-30 CIP development.
- The Department of Finance has supported telework for its employees where it is appropriate and where direct customer interactions do not occur. As a result, **over 65% of the Department’s total hours per week are done remotely** while removing many cars from the roads and contributing to lower emissions.
- Montgomery Planning staff have started creating **climate assessments for Zoning Text Amendments (ZTAs) and Master Plans**. One Climate Assessment has been completed for a ZTA. The Takoma Park Master Plan and the Fairland-Briggs Chaney Master Plan teams are currently applying the Quantitative Tool for estimating GHG emissions impacts and using the checklists and templates create recommendations for Adaptive Capacity and Community Resilience.

## Community Engagement, Partnerships, & Education

- Montgomery Energy Connection completed **35 in-person events** resulting in 2,946 interactions with residents, 43 Quick Home Energy Checkup up referrals, 1,792 incandescent bulbs swapped for energy efficient LEDs, and 1,011 compact fluorescent bulbs properly recycled.
- DEP partnered with Community CHEER, Montgomery Parks, and the Long Branch Community Center to host a MLK community cleanup at Long Branch Community Center. Over **40 community members learned about recycling** and waste reduction.
- The Latino Health Initiative and DEP hosted the “Climate Change Film Festival: Our Grain of Sand” at the AFI Theatre and Cultural Center in Silver Spring on February 23. The event, presented in English and Spanish, highlighted the [Climate Stories Ambassadors Initiative](#). Locally, the initiative has resulted in **the collection of more than 100 climate stories** that capture residents’ voices, their emotional responses to the changing climate and their commitment to building a more positive future.
- In February and March, the Latino Health Initiative delivered another 6-week series of [Charlemos Con Zumba](#), which combines **Zumba with a discussion on climate related topics**. An average of 32 participants attended the 6-week series. Community partners from DEP and Montgomery Parks joined the sessions to deliver climate awareness raising conversations with participants. Participants also received climate actions kits to encourage them to make changes at home.
- In March, staff from Services to End and Prevent Homelessness (SEPH) placed a **climate themed art installation** in the 2<sup>nd</sup> floor lobby at Piccard Drive in an effort to create a soothing and welcoming setting for clients and staff, highlighting the connection between climate and mental health.
- Green Schools leaders in MCPS and partner nonprofits, including the Maryland Association for Environmental and Outdoor Education (MAEOE), Nature Forward (formerly the Audubon Natural Society), and the Montgomery County Council of Parent-Teacher Associations (MCCPTA) continue working together to support increasing the number of [certified Green](#)



Figure 3: Climate Stories Ambassadors at the Climate Change Film Festival.

[Schools](#) in MCPS and recertification on a 3 to 4-year cycle. MCPS school teams submitted **8 new Green School applications and 27 recertification applications** in March 2023.

- MCPS staff partnered with One Montgomery Green to develop the Climate Explorers program, an extracurricular program to be piloted this spring that will introduce students to core climate change concepts and the primary ways Montgomery County contributes to the climate change crisis. The program will also support students in developing plans to reduce greenhouse gas emissions (GHG) at their high schools.
- The Community Justice Academy (CJA) development is still underway with the County partnering with frontline organizations and community members to **develop a strategy and programming for equitable resilience**. The partners meet regularly and have been making progress on power building & belonging and moving towards community ownership of climate resilience initiatives.
- MCDOT's Commuter Outreach teams informed local businesses and their employees about commuting benefits like FareShare; changes in transit services and schedules; and assistance with other more fuel-efficient mode choices. A total of more than 2,800 direct contacts were made with employers and employees and over 18,000 other outreach contacts were made using newsletters, e-blasts, and social media.



## Zero Waste

- MCPS continues to actively **support schools to implement food waste reduction programs** to address countywide food insecurity in County communities and start composting programs at some schools. Currently, there are 33 schools participating in food recovery, 25 schools composting, and 19 schools participating in both food recovery and composting programs.
- DEP continues Phase I of the single-family residential curbside recycling collection of food scraps pilot in parts of Silver Spring and Potomac. As of March 31, 2023, 1,049 households have **recycled more than 466,000 pounds of food scraps**.
  - DEP awarded a contract for collection of food scraps to service Phase II of the pilot. Food scraps recycling carts and starter kits were delivered to 325 households in Bethesda and weekly recycling collection service began in March. Recruitment continues in the Bethesda and Gaithersburg pilot areas, with a goal of enrolling 1,700 households.
- DEP continues its award-winning Commercial Food Scraps Recycling Partnership Program. As of March 31, 2023, **more than 1.6 million pounds of commercially generated food scraps have been recycled** through this program.
- DEP has continued several outreach and education efforts about reducing waste for both residents and businesses, including:
  - distributing educational materials and conducting training sessions on using rodent-proof compost bins for backyard composting efforts; nearly 1,000 volunteer residents are continuing to test two types of rodent-proof compost bins.
  - conducting an in-person business waste reduction and recycling seminar in February to highlight efforts of businesses and organizations implementing Zero Waste programs.
  - conducting an in-person multi-family waste reduction and recycling seminar in March to highlight the efforts of several multi-family properties that have implemented food scraps recycling programs for their residents.
  - educating residents, multi-family properties, and organizations about the benefits of grasscycling and composting.
- DEP continues to provide compost bins to residents directly or via 21 partner distribution locations to encourage managing yard trim and food scraps. A total of **350 backyard yard trim compost bins were distributed** to residents in Q3.
- DEP's Edible Food Recovery Working Group continues to meet and discuss ways to increase the donation of edible food and ways to reduce wasted food in support of the County's zero waste goals. A task order was awarded to an engineering contractor to conduct a survey and on-site waste sort/audit of selected commercial food establishments and food assistance providers **to estimate the amount of edible food available for recovery**.

## Other Climate Updates

- County staff **participated actively in the 2023 General Assembly** session to advocate for state policy priorities in alignment with Climate Action Plan goals to decarbonize the built environment, advance the deployment of clean energy, and accelerate the transition to climate-friendly transportation choices. County officials and staff met with members of the General Assembly, testified in Committees, and **submitted written testimony on more than 30 bills** to advance priorities aligned with the Climate Action Plan.
  - Legislation under consideration by the General Assembly this year included bills related to the development of community solar and offshore wind energy; expansion of energy efficiency programs; support for electric vehicles and associated infrastructure; funding for bus rapid transit service; and support for more equitable and inclusive planning decisions and infrastructure investments.
- DEP staff continued to participate in **meetings of the Maryland Commission on Climate Change** to advocate for state policy priorities in alignment with the Climate Action Plan. The State Climate and Energy Policy Manager is now a full member of the Commission's Mitigation Working Group, which strategizes on reducing greenhouse gas emissions.
- The Metropolitan Washington Council of Governments (COG) published GHG emission inventories for 24 member jurisdictions in the Washington Region, including Montgomery County, in January. Montgomery County's [inventory](#) covers GHG-emitting activities from the entire community, including the County government, businesses, industry, residents, and visitors. Montgomery County **community-wide greenhouse gas (GHG) emissions decreased by 30 percent between 2005 and 2020**, despite a 13 percent growth in population.

## SECTION 2: COMPLETE SUBMISSIONS BY DEPARTMENT

### Department of Environmental Protection

- The Community Choice Aggregation work group sent draft regulations to the Public Service Commission in late January, and the Commission held a rulemaking session on February 23<sup>rd</sup> to discuss the regulations. The Commissioners agreed with the County's proposed views regarding Commission oversight of the CCA's procurement activities, but noted a number of other areas where the work group needed to continue to work on the regulations and directed the work group to submit a revised set of regulations by April 25<sup>th</sup>. (CAP Action E-1)
- The County developed a MOU with Solar United Neighbors to launch a new version of the Capital Area Solar Co-op program, which will launch in mid-May 2023. Each year, the County, along with our neighbors in the DMV region, coordinate on this program to use collective buying power of neighbors to bring down the cost of solar installations for homeowners. (CAP Action E-3)
- On March 28-29, 2023, DEP hosted the 10<sup>th</sup> annual [Montgomery County Energy Summit](#) at the Silver Spring Civic Building. Over 200 attendees came each day to learn how to prepare for compliance with energy benchmarking, building energy performance standards, and emerging building codes, as well as explore best practices for decarbonized buildings in Montgomery County. (CAP Action B-3)
- Together with the Cities of Rockville and Gaithersburg, the County began to develop its approach for coordinated community spending of Energy Efficiency and Conservation Block Grant (EECBG) formula funding from the U.S. Department of Energy (DOE). All three jurisdictions will be receiving formula grants from DOE in early 2024. (CAP Action B-3)
- The [Building Performance Improvement Board](#)—the appointed advisory board that advises the County on building energy performance standards (BEPS) implementation—continued meeting bi-weekly to develop their recommendations on BEPS Method 2 regulations, due to be issued by December 31, 2023. (CAP Action B-3)
- DEP has continued outreach about building benchmarking and building energy performance standards. In Q3, DEP shared information to a number of individual benchmarkers, the Gaithersburg Sustainability Summit for Homeowners & Civic Associations, and to Leisure World of Maryland property managers. (CAP Action B-3)
- Following the release of a Request for Proposals for a contractor to implement the Residential Electrification Incentives Pilot Program funded in the FY23 operating budget, DEP selected a vendor and continued contract negotiations through Quarter 3. The contract will be awarded in Quarter 4, and DEP anticipates opening up the incentive program in summer 2023. This

contractor will stand up an administrative help desk to support residents with general questions, perform energy audits, perform retrofits of appliances and systems currently heated with fossil fuels with efficient electric alternatives, and administer prescribed financial incentives directly to residents. (CAP Action B-2)

- In March 2023, the Department of Environmental Protection and the Department of Finance submitted the [2023 Commercial Property Assessed Clean Energy \(C-PACE\) Annual Report](#) to the County Council. (CAP Action B-3)
- DEP and the Department of Finance continued to work with the Montgomery County Green Bank on revisions to the C-PACE Program Guidelines to reflect the amendments passed in [Bill 46-21](#). The new guidelines are expected to be published by Q4. (CAP Action B-3)
- Continued to offer [Dealership Incentives](#) through the Electric Vehicle Purchasing Co-op (EVPC), helping consumers find savings on electric vehicles from local dealerships. (CAP Action T-3)
- Published the [Charge Montgomery Story Map](#) – an interactive tool that helps residents understand the County’s plans to expand public EV charging. This effort also included a survey to collect information about community preferences for public EV charging. (CAP Action T-3, T-7)
- Organized an open house event in partnership with the Montgomery County Green Bank at the Seneca Village Apartments, a local affordable apartment community, to educate residents about electric vehicles and bring attention to new EV chargers that will be installed at the community. (CAP Action T-3, T-7)
- The Department of Environmental Protection (DEP) Tree Montgomery completed the planting of almost 3,800 trees for FY23 including the planting of the 10,000<sup>th</sup> tree for the Tree Montgomery program. This is a record number of trees planted through this program which began in 2015. (CAP Action S-2)
- DEP received a grant through the Chesapeake Bay Trust/Maryland 5-Million Tree Initiative to install shade trees in Equity Focus Areas. DEP worked with the Department of General Services to identify more than 380 planting sites on 12 properties and the planting of these 380 trees was completed in Q3. (CAP Action S-2)
- DEP applied for grant through the Chesapeake Bay Trust/Maryland 5-Million Tree Initiative to plant 1,348 urban shade trees, including 1,154 through the grant and 194 as in-kind match. The shade trees will be installed at 41 Montgomery County Public Schools (MCPS). (CAP Action S-2)
- The Clean Water Montgomery Grant Program awarded 23 of the 30 applications in February. 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, 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. (CAP Action S-2, S-5)

- Staff continued working with congregations for the Congregations for Clean Water campaign to encourage local congregations to install green infrastructure. One congregation has received 4 trees thus far and staff are working with 4 other congregations that expressed interest during the reporting period. To expand the Congregations for Clean Water program, staff applied for \$2,550,000 in federal appropriations but were denied funding. (CAP Action S-2, S-5)
- DEP published the [Community Heat Mapping Story Map](#) to display results from the August 2022 Urban Heat Mapping Campaign in partnership with the National Oceanic and Atmospheric Administration (NOAA) and Climate Adaptation Planning and Analysis (CAPA). The results show that urban areas of the County experience temperatures up to 10 degrees higher than rural areas. The data and the community feedback will help the County identify areas where it can take action to protect vulnerable populations and build resilience against extreme heat risks. (CAP Action A-3)
- Work on Phase 1 of the County's Comprehensive Flood Management Plan continued, although completion was delayed slightly due to a revision in the analysis used to prioritize watersheds for initial study in Phase 2. Completion of Phase 1, along with initiation of Phase 2, is expected in Q4. 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. (CAP Action A-20)
- DEP finalized plans for a Flow Leadership course for Climate Ambassadors and senior managers involved in climate change work starting in June. The program will be taught by Leith Sharp, Director of the [Executive Education for Sustainability Leadership](#) at Harvard, and is designed to help changemakers bring bold ideas for addressing climate change to life by navigating barriers, reducing friction and unleashing idea "flow." (CAP Action G-1)
- DEP presented a Climate Ready Office checklist to Climate Ambassadors at its most recent quarterly meeting. The checklist, which includes 30 climate actions, will include resources for all departments and agencies to take action and, potentially, serve as a tool for friendly competition. (CAP Action G-1)
- Montgomery Energy Connection completed 35 in person events resulting in 2,946 interactions with residents, 43 Quick Home Energy Checkup referrals, 1,792 incandescent bulbs swapped for energy efficient LEDs, and 1,011 compact fluorescent bulbs properly recycled. (CAP Action P-1)

- Project Porchlight, a new initiative, launched where Energy Ambassadors go door-to-door offering to swap out incandescent/CFL light bulbs with energy efficient bulbs LEDs for free. Through this program, new bulbs are given to residents of the Stoneybrook Homeowners Association and Chadsberry Homeowners Association. (CAP Action P-1)
- DEP has partnered with Oak Chapel Church Food Hub to provide income qualifying residents with energy efficient items such as power switches, refrigerator thermometers, and cutting mats as well as light bulb exchanges to help them lower their utility costs. (CAP Action P-1)
- DEP continued to co-lead the Maryland Coalition of Counties and Cities for Climate Action, a statewide climate coalition of local governments that meets regularly to discuss state and local policy and programmatic issues. (CAP Action P-10)
- DEP partnered with Community CHEER, Montgomery Parks, and the Long Branch Community Center to host a MLK community cleanup at Long Branch Community Center. Over 40 community members learned about recycling and waste reduction. (CAP Action P-1)
- DEP and the HHS' Latino Health Initiatives hosted the 1<sup>st</sup> ever Climate Stories– Our Grain of Sand/Nuestro Granito de Arena film festival at the AFI Silver Theatre (AFI Silver Theatre and Cultural Center) as part of the [Climate Stories Ambassadors initiative](#). (CAP Action P-1)
- The Community Justice Academy (CJA) development is still underway with the County partnering with frontline organizations and community members to develop a strategy and programming for equitable resilience. The partners meet regularly and have been making progress on power building & belonging and moving towards community ownership of climate resilience initiatives. (CAP Action P-5)
- DEP is planning for a new Durable Medical Equipment Reuse Program, where various medical equipment items in good working condition will be accepted as drop off items at the Transfer Station. Items will be sanitized, repaired (if necessary) and provided to adults and children with mobility needs at no cost. This program is a partnership with the Maryland Department of Aging.
- DEP is planning a new mattress and box spring recycling program. These items will be accepted at the Transfer Station. Items will be deconstructed, and parts will be recycled.
- DEP is working to expand its clothing and textiles recycling program and will be able to accept a wider variety of materials for recycling. Items will be accepted as drop-off items at the Transfer Station.
- DEP 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 in a portion of Silver Spring and a portion of Potomac. As of March

31, 2023, more than 466,000 pounds of food scraps have been recycled through Phase I of this pilot program. A total of 1,049 households are actively participating in Phase I.

- DEP awarded a contract for collection of food scraps to service Phase II of the pilot. Food scraps recycling carts and starter kits, including educational materials and dos and don'ts were delivered to 325 households in the Bethesda pilot area and weekly recycling collection service began March 27, 2023. Recruitment continues in both the Bethesda and Gaithersburg pilot areas, with a goal of enrolling 1,700 households in total.
- DEP continues its award-winning Commercial Food Scraps Recycling Partnership Program, soliciting new 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. As of March 31, 2023, more than 1.6 million pounds of commercially generated food scraps have been recycled through this program. All the partners that have graduated from this program continue to recycle their food scraps on their own.
- DEP 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. The volunteer residents are providing valuable data and feedback pertaining to the use of these rodent-proof compost bins.
- DEP is planning an initiative to test the feasibility of distributing rodent-proof compost bins designed for food scraps through a multi-day truckload distribution event. This distribution event will occur at two locations, one in the Up-County area and one in the Down-County area where 400 compost bins will be distributed to pre-registered residents at each location. Events are expected to occur at the end of April and beginning of May. Residents will be asked to evaluate their experience at these events and with the use of these rodent-proof bins for food scraps composting.
- DEP is planning for its first in-person seminar dedicated entirely to Implementing a Food Scraps Recycling Program in the workplace. During this seminar, we will provide education to commercial properties impacted by Maryland's new regulation on food scraps - COMAR 26.04.13 Food Residuals-Organics Recycling Waste Diversion.
- DEP continues working with businesses, non-profit organizations, and local, state, and Federal government facilities, as well as multi-family (apartment and condominium) properties providing technical assistance and support to establish recycling programs for food scraps.
- DEP conducted an in-person business waste reduction and recycling seminar on February 9, 2023, highlighting efforts of businesses and organizations implementing Zero Waste programs, including implementation of food scraps recycling efforts.

- DEP conducted an in-person multi-family waste reduction and recycling seminar on March 23, 2023, highlighting the efforts of several multi-family properties that have implemented food scraps recycling programs for their residents.
- DEP continues to provide outreach and education on the benefits of grasscycling and composting to residents, multi-family properties, and businesses and organizations. A direct mailer postcard on composting yard trim materials on-site via backyard composting was being prepared for mailing to almost 220,000 single-family residents.
- DEP 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. A total of 350 backyard yard trim compost bins were distributed to residents in the 3<sup>rd</sup> Quarter.
- DEP'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. A task order was awarded to an engineering contractor to conduct a survey and on-site waste sort/audit of selected commercial food establishments and food assistance providers to estimate the amount of edible food available for recovery, as well as several other relevant factors associated with successful edible food recovery.
- DEP began planning efforts to participate in the 2023 Food Waste Prevention Week scheduled for April 10-16, 2023, including launching the Food is Too Good to Waste educational awareness campaign.
- DEP continues to explore opportunities with WorkSource Montgomery, Office of Procurement, and the Montgomery County Economic Development Corporation (MCEDC) to discuss how our work at the economic development-climate change-equity nexus can be leveraged and complementary.
- County staff participated actively in the 2023 General Assembly session to advocate for state policy priorities in alignment with Climate Action Plan goals to decarbonize the built environment, advance the deployment of clean energy, and accelerate the transition to climate-friendly transportation choices. County officials and staff met with members of the General Assembly, testified in Committees, and submitted written testimony on more than 30 bills to advance priorities aligned with the Climate Action Plan. Legislation under consideration by the General Assembly this year included bills related to the development of community solar and offshore wind energy; expansion of energy efficiency programs; support for electric vehicles and associated infrastructure; funding for bus rapid transit service; and support for more equitable and inclusive planning decisions and infrastructure investments.



- DEP staff continued to participate in meetings of the Maryland Commission on Climate Change to advocate for state policy priorities in alignment with the Climate Action Plan. The State Climate and Energy Policy Manager is now a full member of the Commission's Mitigation Working Group, which strategizes on reducing greenhouse gas emissions.
- County staff actively participated in proceedings and working groups of the Maryland Public Service Commission (PSC) to advocate for regulatory changes to statewide energy conservation programs to better support low-income residents and achievement of the State's energy and climate goals. County staff provided testimony to the PSC regarding the future of the EmPOWER Maryland program and participated in PSC work groups related to the future of the region's electric grid, energy efficiency programs serving low-income families, and electric vehicle charging infrastructure.
- DEP promoted ENERGY STAR Tax Free Weekend (February 18-20) by encouraging residents to switch to energy-efficient appliances.
- The Regional Winter Salt Outreach group (DEP, WSSC Water, MDE, City of Gaithersburg, Howard County, MDOT/SHA, Interstate Commission on the Potomac River, Northern Virginia Region- Coastal Program, Izaak Walton League of America, and the Metropolitan Washington Council of Governments) continued to meet to coordinate jurisdictional Winter Salt messaging. WSSC purchased Salt Wise mugs and DEP, among other group members have been planning a radio campaign with WAMU for late 2023 and considering submitting a behavior change grant with CBT in August. (CAP Action A-15)
- DEP and Izaak Walton league of America (IWLA) began discussions to host a Saltwise contractor webinar training in August for winter professionals/contractors for the 2023/2024 season.

### **Department of Finance**

- The Department of Finance has supported telework (remote work) for its employees where it is appropriate and where direct customer interactions do not occur. As a result, over 65% of the Department's total hours per week are done remotely while removing many cars from the roads and contributing to lower emissions. (CAP Action G-13)

### **Department of General Services**

- The Department of General Services (DGS) completed the 572 kW Animal Shelter Solar and Microgrid project. There is a Ribbon Cutting ceremony scheduled on June 13<sup>th</sup>, 2023. (CAP Action E-4)

- The Scotland Recreation Center resilience hub has completed construction phase; expected permission to operate (PTO) is June 2023. (CAP Action E-4)
- EMTOC Smart Energy Depot contract signed, and design work is being completed. Smart Energy Depot will be used to provide renewable energy to power electric fleet. (CAP Action E-4)
- Applying for Federal EV charging grant while leveraging fleet EV chargers to optimize grant opportunity and EV charging public use. (CAP Action T-6)
- The County is re-evaluating a third party to install EV public charging stations on County facilities. (CAP Action T-6)
- Fleet will be evaluating in “telematics” to assist in the electrification process with plans to request budget in FY25. (CAP Action T-6)
- The MCPD Pilot test EV police vehicle has been received and piloting Mach E within Department. As Fleet strives towards electrification for police vehicles, there are instances when hybrid police vehicles are needed for purchase to comply with pursuit performance standards. (CAP Action T-6)
- Fleet is finalizing the technical scores and recommendation for an additional (100) 40’ “Low Floor” all battery electric buses (BEB) Electric Bus RFP for 100 Electric buses scheduled to be awarded in Q3 of FY23. (CAP Action T-6)
- Fleet Management Services has in service / or will be available for service this year: (CAP Action T-6)
  - Library Services received a Kenworth K270 “Class 8” all electric box truck and will be online early April 2023.
  - Fleet will pilot Fall 2023 an electric loader in partnership with DOT highway.
  - Fleet implementing an electric van for library services, electric van will receive late June early July 2023.
- Fleet exploring the purchase of electric box trucks to support Alcohol Beverage Services’ delivery fleet. OES working with OEHMS to identify and quantify list of next potential resilient hub sites; expected completion August 2023. (CAP Action A-8)
- Phase I transition study focused on a.) eliminating vehicles due to underutilization b.) downsizing and replacing them with a smaller vehicle and c.) identifying County vehicles that can be replaced with zero-emission vehicles. Phase I study completed early Winter 2022. (CAP Action G-13)
- Phase II – will focus on developing a department specific zero emission strategy identifying immediate opportunities as well as areas of future focus to be addressed by new technology development or additional funding.

**Department of Health and Human Services**

- The Latino Health Initiative and DEP hosted the “Climate Change Film Festival: Our Grain of Sand” at the AFI Theatre and Cultural Center in Silver Spring on February 23. The event, presented in English and Spanish, highlighted the Climate Stories Ambassadors Initiative in which County Climate Stories Ambassadors developed, recorded, and shared stories of climate change. Locally, the initiative has resulted in the collection of more than 100 stories that capture residents’ voices, their emotional responses to the changing climate and their commitment to building a more positive future. The County hopes to build on the ambassadors’ leadership and momentum to drive broad-based climate action and tap into residents’ experiences and concerns to co-create climate solutions. (CAP Action P-1)
- Latino Health Initiative’s (LHI) David Del Pozo, along with Ana Arriaza from DEP, were guests on En Sintonia, the Montgomery County Council radio program with Marcela Rodriguez on February 10, 2023, and on Montgomery Al Dia, Montgomery County’s radio show on Radio America 900AM with Lorna Virgili on February 21, 2023, to promote the “Nuestro Granito de Arena” Climate Change film festival at AFI. (CAP Action P-1)
- In February and March, the Latino Health Initiative delivered another 6-week cohort of Charlemos Con Zumba, a virtual and interactive physical activity series that combines Zumba with a weekly organized discussion on climate related topics. An average of 32 participants attended. Charlemos con Zumba continues to be a great space for community members to access community resources, education on environmental topics, and have social connections with other participants. Community partners from DEP and Montgomery Parks joined the sessions to deliver climate awareness raising conversations with participants. Participants also received climate actions kits to encourage them to make changes at home. (CAP Action P-1)
- The Latino Health Initiative added a Climate and Health Education page to its [website](#) which includes Climate related programming and 13 participant climate stories videos. (CAP Action P-4)
- The Office of Community Affairs Climate Action Team hosted an interactive Lunch & Learn workshop for HHS staff, on the Climate’s Impact on Chronic Disease, as part of the Equity Lunch & Learn Series, to raise awareness and build internal capacity within HHS. Future Climate themed Lunch and Learn events are being planned. The Climate Action Team includes staff from all OCA units, including the African American Health Program, Asian American Health Initiative, Latino Health Initiative, Community Action Agency, and Equity Team. (CAP Action G-1)
- In March, staff from Services to End and Prevent Homelessness (SEPH) placed a climate themed art installation in the 2<sup>nd</sup> floor lobby at Piccard Drive in an effort to create a soothing and welcoming setting for clients and staff, highlighting the connection between climate and mental health. Staff have also implemented new recycling bins and signage to educate and encourage staff and clients alike to consider their climate impact.

## Department of Transportation

- MCDOT, working together with Howard County, secured a Federal Congressional earmark for \$3.35M to fund vehicles for an extension of the US29 Flash service to Columbia, MD. DOT is actively working with Howard County to start this service in FY25. (CAP Action T-1)
- Design is underway for the MD 355 and Veirs Mill Road Bus Rapid Transit (BRT) projects. (CAP Action T-1)
  - The Veirs Mill Road BRT project is working on 65% design to be completed in the Summer. The team is now working with the CMAR contractor and independent cost estimator to progress preconstruction activities.
  - The MD 355 BRT project has completed preliminary engineering. The team will start developing the RFQ to bring the progressive design-builder on board at the beginning of 2024.
- Planning was completed for the US 29 BRT Phase 2. Preliminary engineering is underway. (CAP Action T-1)
- Planning is underway for the New Hampshire Avenue BRT, North Bethesda Transitway. (CAP Action T-1)
- MCDOT is continuing to advance tactical bus lanes along Georgia Avenue in Silver Spring, University Boulevard in Wheaton, and Veirs Mill in Wheaton. Implementation is planned for Summer 2023. (CAP Action T-1)
  - A tactical bus lane can be implemented quickly, does not require road reconstruction, and is typically run on a curb lane or a parking lane. Tactical bus lanes are created using paint to designate the bus lane and with signage to outline the bus lane restrictions.
- Planning, design, and construction of several bike facility projects on-going: Woodmont Avenue Cycletrack, Bethesda Avenue Cycletrack, Montgomery Avenue/Lane Cycletrack, 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, Good Hope Road Shared Use Path, Good Hope Road Shared Use Path Extension, and Dale Drive Shared Use Path. (CAP Action T-2)
- MCDOT received a Transportation Planning Board Transportation Land Use Connection (TLC) grant to plan for rethinking and restarting the FLEX microtransit system operated by Ride On. (CAP Action T-2)
  - The current FLEX program operates similar to a ride-hailing service like Uber or Lyft but is limited in service area boundaries and service hours. The service was discontinued during COVID. It has recently restarted but ridership is lower than pre-COVID levels.

- This TLC study will evaluate travel behaviors and conditions, market opportunities, and service delivery options to reimagine FLEX for the future. The study will build upon a FY 2019 TLC-funded study which evaluated the first six months of FLEX and identified new areas for possible expansion.
- Updates to County Code submitted by MCDOT were approved by County Council on October 25, 2022. These code updates implement the Complete Streets Design Guide, which had been approved by the Planning Board in 2021, to make it legally binding and actionable. Chapters updated included: Chapters 49 – Streets & Roads, 50 – Subdivision of Land, and 59 – Zoning. (CAP Action T-4)
- Recommended revisions to Chapter 49 Regulations are now underway, which will further define, interpret, and apply the updates made to that portion of the County Code. (CAP Action T-4)
- The Zero Emissions Bus Transition Plan team will conduct a Risk Assessment Workshop with MCDOT, DGS, DEP, OMB, Finance, and CEX to evaluate overall risk and propose mitigation strategies. (CAP Action T-5)
- Transportation analysis regarding use of Zero Emissions buses and coordination with the study *Ride On Reimagined* continues. (CAP Action T-5)
- Modeling of Fleet Transition to ZEV vehicles is under development. (CAP Action T-5)
- Federal Hydrogen Fuel Cell Grant: evaluating hydrogen and bus supply options; preliminary analysis of costs and general design for microgrid at EMTOC on-going. (CAP Action T-5)
- MCDOT, in partnership with Pepco, installed eight EV charging station ports in Garage 58 in Silver Spring and four EV charging station ports in Garage 40 in Bethesda. (CAP Action T-7)
- Four EV charging station ports were installed in Garage 7 in Silver Spring. (CAP Action T-7)
- Efforts continue in coordination with Pepco to plan for installation of additional EV charging stations in County parking facilities. (CAP Action T-7)
  - Four EV charging station ports have been installed in Garage 57 in Bethesda.
  - Coordination with Pepco is ongoing to install two charging station ports in Lot 34 in Wheaton.
- MCDOT is continuing to collaborate with PEPCO and has submitted three additional locations for curbside charging. These locations have been reviewed and approved by the Parking Division. (CAP Action T-7)
  - PEPCO has responded that they are currently not advancing the curbside charging program, due to a reduction in current funding. However, these locations will remain viable options with the expectation that PEPCO will eventually advance them in a future program.

- MCDOT’s Commuter Survey was conducted for the first time since the pandemic in Fall 2022. A total of more than 9,600 responses were received. Analysis of the results has been ongoing but some macro-level results have become available. (CAP Action T-8)
  - The survey is used to obtain data from employers and multi-unit residential projects on how those working and living in the County are getting to work.
  - Results help develop alternative transportation services and provide insight to help guide future incentives and promotional efforts.
  - Data is used to determine progress toward the Non-Auto Driver Mode Share (NADMS) goals established for various areas of the County. NADMS includes transit, car/van pooling, cycling/scootering, walking and telework modes of accessing work sites. NADMS goals for each area of the County are established by County Council in Master Plans and in the County’s Growth and Infrastructure Policy.
  - Results from the survey indicate an overall County NADMS of 55 percent for employees commuting to work during the morning peak period,
    - The prior survey, conducted in Fall 2019, indicated a much lower morning peak period NADMS of 31 percent. The difference appears to be attributable to the larger numbers of employees who are now teleworking.
  - Data was also collected on commute modes of residents in multi-unit communities within the County’s six Transportation Management Districts. That data is still being analyzed and will be combined with employee data to calculate the “blended” NADMS for areas with those goals.
- Bike Learn-to-Ride and e-scooter classes continued to be offered this spring as demand for these classes has continued to grow. (CAP Action T-8)
  - Classes held in various locations around the County in the fall and spring are taught by certified instructors under arrangements with the Washington Area Bicycle Association (WABA).
  - Bulk of the cost paid by MCDOT so County residents can take the class for \$10. Bikes and helmets supplied by WABA for use during the class.
  - E-scooter classes are conducted following the bike classes at the same places, with instruction by County-approved shared e-scooter program vendors.
- Commuter Outreach teams conducted meetings and events with employers located in the County and employees working at those locations throughout Q3. A total of more than 2,800 direct contacts were made with employers and employees and over 18,000 other outreach contacts were made using “broadcast” methods, including newsletters, e-blasts, and social media. (CAP Action T-8)

- These outreach efforts inform businesses and their employees about commuting benefits like FareShare, a cost-matching program offered by the County; changes in transit services and schedules; and assistance with other mode choices. These services are supported in part by grants from the Metropolitan Washington Council of Governments and the Maryland Transit Administration.
- MCDOT continues to install pedestrian hybrid beacons at mid-block crossings that are unprotected. (CAP Action T-9)
- 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 or 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)

### **Montgomery County Green Bank**

- The Montgomery County Green Bank closed on a 31.5 kW solar PV project with Sandy Spring Monthly Meetings, a faith-based organization. This brings The Green Bank's total in solar supported efforts to 633.87 kW among 8 organizations including nonprofits, affordable housing, and faith-based institutions. (CAP Action E-3) .
- The Montgomery County Green Bank supported two renewable energy residential loans (one geothermal and one solar PV) through the Clean Energy Advantage Program.
- The Montgomery County Green Bank closed on 6 loans to homeowners in support of energy efficiency improvements generating nearly \$5,000 a year in energy savings for a total of 29 in FY23. These homeowners used the new Clean Energy Advantage statewide program done in collaboration with the Maryland Clean Energy Center and using EmPOWER funding through the participation of six utilities. (CAP Action B-2)
- The Montgomery County Green Bank has 13 contractors under agreements (and 5 more in the works) and 77 studies presently underway for its technical assistance program with a dedicated \$750,000 of funding to support commercial property owners to complete 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 pipeline for potential FY23 closing includes two energy efficiency projects with two condominium properties that would support over \$2 million in clean energy improvements. (CAP Action B-3)

- The Montgomery County Green Bank closed on two more EV Charger installations under the Electric Vehicle Charger Infrastructure program for affordable multifamily properties in the county using a grant from General Motors. The Green Bank has a total of three projects being supported by the program and is working on three more projects. (CAP Action T-3)
- The Green Bank's charter was amended by the Montgomery County Council in March 2023 to add resiliency as an area of focus for the Green Bank.
- The Montgomery County Green Bank continued its work in FY23 to engage and educate the community by hosting or participating in 95 events reaching over 2,900 people, including with contractors, community groups, associations, and property owners.

### **Montgomery County Public Schools**

- Work continues on designs for installation of rooftop solar production sites at 8 MCPS sites, a pilot parking lot canopy with EV charging station, a pilot of solar parking lot lighting, and purchasing of off-site ground mounted solar in the PJM region. (CAP Action E-4)
- Last year, MCPS 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. Fifty schools were selected, audits began during Q3; both projects are nearing the 30% completion mark. (CAP Action B-3)
- 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. (CAP Action B-3)
- MCPS has begun installation of wireless indoor air quality (IAQ) sensors in all classrooms, media centers and all-purpose rooms. The project is expected to be completed by fall 2023.
- Construction of four new schools to open Fall 2023 according to the new Green Globes Standards continues.
- MCPS developed a work plan for a 2023 grant received from the Maryland Energy Administration, Decarbonizing Public Schools. This project examines the educational facilities construction projects and investigates opportunities to improve energy efficiency and reduce greenhouse gas consumption and emissions. The project will cover a review of new and existing facilities, create language for MCPS design guidelines, and examine renewable energy opportunities. The final report is expected in December 2023.



- MCPS continued operation of 85 electric school buses this winter, across 5 of the 6 service area depots. MCPS has partnered with Highland Fleet to upgrade a total of 326 school buses to electric by 2025. So far, MCPS electric buses have driven more than 150,000 miles. (CAP Action T-5)
- MCPS has begun to work towards replacing fleet diesel and gasoline vehicles, as appropriate, with electric, hybrid, and/or other more efficient or cleaner-fuel vehicles. Two fleet plug-in hybrid SUVs were delivered in December as a part of our fleet replacement program. A fleet electric cargo van is expected to be delivered in the upcoming months, and four additional fleet electric vehicles have been ordered in FY23. (CAP Action T-6)
- MCPS collaborated with Montgomery County Department of Environmental Protection (DEP) on expanded projects both for stormwater management and carbon sequestration. As a result, MCPS partnered with DEP to request funding from the Chesapeake Bay Trust 5-Million Tree Initiative to plant 1400 trees across 43 school sites. (CAP Action S-2)
- As part of our commitment to address climate resiliency and mitigate stormwater runoff, MCPS partnered with DEP to plant eight trees at Diamond Elementary School. The tree planting is estimated to sequester 5,400 pounds of carbon dioxide and intercept 75,600 gallons of stormwater over the next 20 years. Additionally, trees provide a number of other critical environmental and health benefits which support healthy school learning environments for students and staff including shading and cooling building surfaces (lowering energy consumption), improving air quality, muffling noise, and intercepting stormwater runoff. (CAP Action S-2)
- MCPS authorized and filled a new position of Live Infrastructure Program Manager, whose work focuses on improving green roofs, bioretention facilities, school gardens, and other green infrastructure improvements, resiliency, and climate adaptation measures. (CAP Action A-8)
- MCPS curriculum supervisors and instructional specialists are reviewing the recently released MSDE Environmental Literacy standards framework in preparation for the development of a comprehensive MCPS Environmental Literacy Plan. Those standards include understanding of the environmental impact of human activities and the individual and collective responses to those impacts. (CAP Actions P-12, P-13)
- MCPS has provided funding for summer employment to begin the curriculum drafting process for Environmental Literacy and Climate Change Education. (CAP Action P-12, P-13)
- MCPS is developing a high school Environmental Justice course that includes research, investigation, and action focused on the disparate effects of climate change on people of color and those living in lower-income areas. Walt Whitman HS students began the first pilot Environmental Justice course in late January. (CAP Action P-13)
- MCPS staff partnered with One Montgomery Green to develop the Climate Explorers program, an extracurricular program to be piloted this spring that will introduce students to core climate change concepts and the primary ways Montgomery County contributes to the climate change crisis. The program will also support students in developing plans to reduce

greenhouse gas emissions (GHG) at their high schools. (CAP Action P-16)

- MCPS continued planning the second annual Youth Climate Summit for April 22 at Tilden Middle School. The full-day summit is designed to educate MCPS students about climate change and equip them with the tools to create climate action projects in their communities. (CAP Action P-16, P-18)
- Green Schools leaders in MCPS and partner nonprofits, including the Maryland Association for Environmental and Outdoor Education (MAEOE), Nature Forward (formerly the Audubon Natural Society), and the Montgomery County Council of Parent-Teacher Associations (MCCPTA) continue working together to support increasing the number of certified Green Schools in MCPS and recertification on a 3-4 year cycle. MCPS school teams submitted 8 new applications and 27 recertification applications in the month of March. Results are expected in April.
- MCPS continues to actively support schools to implement food waste reduction programs to address countywide food insecurity in our communities and start composting programs at some schools. Several active student leaders, staff, and parents are working to launch programs in our schools. At this present time, there are 33 schools participating in just food recovery, 25 schools composting, and 19 schools are participating in both food recovery and composting programs.

#### **M-NCPPC Parks**

- Montgomery Parks received a \$7.5 million from the Safe Streets and Roads for All (SS4A) grant program. The SS4A grant money will be applied to three major parks and trails in the county: Sligo Creek Stream Valley Park and trail, Matthew Henson State Park and trail, and Wheaton Regional Park. The parks department will deploy four strategies to improve safety at the access points, including:
  - developing safe trail connections to neighborhoods.
  - providing safe crossings for people walking, biking, and driving through intersections.
  - creating separated spaces for all users of the transportation network in dense multimodal areas.
  - developing a permanent program of low-volume streets into neighborhood greenways. (CAP Action T-2)
- Montgomery Parks has set a goal to transition all handheld 2-cycle gas powered lawn equipment to electric in the next two years, and to transition all gas-powered mowers to electric in the next six-to-seven years. We currently have replaced about 60% of our handheld 2-cycle gas equipment with electric (265 out of 444 units). (CAP Action T-11)

## M-NCPPC Planning

- Planning Board reviewed the Veirs Mill Road Bus Rapid Transit and Bicycle and Pedestrian Priority Area Mandatory Referral and provided comments to MCDOT. (CAP Action T-1)
- The Planning Board conducted a public hearing for the Pedestrian Master Plan. (CAP Action T-2)
- Montgomery Planning and MCDOT kicked off the Shared Streets Guidelines project. (CAP Action T-2)
- The original scope for the Bikeway Branding Project is complete and the Planning Department and MCDOT will be piloting one of the outcomes of the project -- a wayfinding approach -- in the North Bethesda area. (CAP Action T-2)
- Montgomery Planning's 'No Net Loss of Forest' amendments to the Forest Conservation Law were adopted by the County Council and County Executive. The amendments incentivize strategic protection of existing forests, encourage planting new forests in areas of the county where forest cover is lacking, and expand options to create forest ecosystems and increase long-term resilience of planted forests. (CAP Action S-1)
- A Nature-Based Climate Solutions report on stakeholder engagement has been completed. Opportunities are being explored for potential contract work by the Trust for Public Lands (TPL) to make refinements to the TPL Decision Support Tool to facilitate the modeling of County-specific scenarios. (CAP Action S-2)
- The Patuxent Reservoirs Watershed Geodatabase has been completed and is hosted by WSSC-Water. The web app for the geodatabase is also complete and hosted by Prince George's County. (CAP Action A-15)
- Montgomery Planning continues to participate in the DEP-led effort to develop a Comprehensive Flood Management Plan for the County. Phase 1 of the project is underway and deals with summarizing the existing framework related to flooding impacts, regulations, policies, and responsibilities. (CAP Action A-14)
- Montgomery Planning staff have started creating climate assessments for ZTAs and Master Plans. One Climate Assessment has been completed for a ZTA. The Takoma Park Master Plan and the Fairland-Briggs Chaney Master Plan teams are currently applying the Quantitative Tool for estimating GHG emissions impacts and are working on using the checklists and templates to report out the results of the quantitative analysis and recommendations for Adaptive Capacity and Community Resilience. Staff are working with the consultant who developed the model to resolve questions about the operation of the model and to understand the outputs. The Great Seneca Plan is in an earlier stage of development but is initiating work on the Climate Assessment for that master plan. (CAP Action G-7)

## **Office of Agriculture**

- Per ZTA 20-01, when the Hearing Examiner reviews an application for a community solar (up to 2 MW) installation in the AR zone, this review must consider the recommendations provided by the Office of Agriculture (OAG). The OAG provided comments in support of one such installation. The Montgomery Planning Department subsequently included the OAG's comments of support in its recommendation to the Hearing Examiner to approve the solar installation and associated Forest Conservation Plan. (CAP Action E-4)
- The Office of Agriculture received data from the Maryland Department of Agriculture showing that, through the use of Best Management Practices (BMPs), Montgomery County farmers in 2022 reduced their greenhouse gas emissions by 13,096 tons of CO<sub>2</sub> equivalents. (CAP Action S-4)
- The Office of Agriculture received data from the Maryland Department of Agriculture showing that, through the use of good nutrient management practices and BMPs, Montgomery County farmers in 2022 reduced their nitrogen and phosphorus inputs to waters of the state by 31,784 and 1,563 pounds, respectively. (CAP Action S-5)

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

- Through work funded by the American Geophysics Union's Thriving Earth Exchange grant, OEMHS staff is leading a team that is developing a tool to accurately map the County's tree canopy and shade, and integrate it with land use and land cover, impervious surfaces, and heat maps. This tool can then be utilized in concert with maps of vulnerable or high-risk communities to determine areas at highest risk of urban heat island effect and guide agencies and partners in prioritizing tree planting and green infrastructure projects equitably. It will also aid in the development of a more accurate baseline measurement of the current percentage of tree canopy in more urbanized areas of the County. (CAP Action S-2)
- Work continues with the Thriving Earth Exchange team, which is developing a tool to integrate mapping of the County's tree canopy, land use and land cover, impervious surfaces, and heat maps. This tool can then be utilized in concert with maps of vulnerable or high-risk communities to determine areas at highest risk of urban heat island effect for mitigation efforts and resource prioritization. OEMHS staff continued to generate temperature alerts for the public through Alert Montgomery during extreme cold events in Q2. (CAP Action A-3)

- OEMHS hired our Climate Adaptation Program Manager who will support resiliency hub efforts, as well as other OEMHS Climate Actions. The Climate Adaptation Program Manager will conduct climate and flood risk community outreach and education in Q4. (CAP Action A-3, A-8, A-16, A-20).
- OEMHS staff are working with a community partner organization with grant funding through the Maryland Energy Administration to identify additional county locations for resiliency hub scoping. To encourage prioritization of facilities located in vulnerable communities and those already utilized for sheltering, staff worked with a Climate Fellow to develop a map of locations already identified by the partner organization, in addition to sites under consideration and those identified by DGS for future resiliency hub buildouts. The map includes data identifying the County's most vulnerable communities, utilizing the US Census Social Vulnerability Index (SVI), the COG Equity Emphasis Areas, and the federal government's Justice40 Initiative tracts. This work lays the foundation for development of future resiliency hub sites, will help demonstrate the need for federal and state grant funding opportunities, and will also assist the County in prioritizing resources for areas of greatest need. (CAP Action A-8).
- OEMHS completed the installation of flood sensors in the County's most frequently flooded sites, with the final sensor installed at the Burnt Mills Dam. This was the last sensor covered under the grant funding from the Department of Homeland Security. Data generated by the sensors on water levels and flood stages at dams is now fed directly to the ECC, OEMHS, MCPD, MCFRS, MCDOT, dam owners, and neighboring jurisdictions that may be impacted. Work has begun to install sensors at ten more sites and purchase software to connect the sensor data to real time maps published by the National Weather Service for public use. (CAP Action A-16,A-20)
- The Hazard Mitigation Plan update is in progress. We are meeting in Q4 to discuss the results of the hazard identification community survey. (CAP Actions A-3, A-16, A-20)
- OEMHS continues to evaluate Hazard Mitigation grant processes and opportunities. We have planned a multi-department meeting to discuss project identification in Q4. (CAP Action G-7)
- The Climate Change Communication Coalition (C4) has been formed and is meeting regularly as it develops a comprehensive plan and coordinates outreach efforts across county government. OEMHS staff works with the C4 group to help scope and coordinate the comprehensive outreach plan for the County. In the interim, OEMHS continues to actively promote Alert Montgomery sign-ups and flood insurance subscription through outreach events around the county. Staff also developed a map of the newly installed flood sensors, which can be utilized at outreach events to demonstrate areas at higher risk of flooding. (CAP Actions P-1,P-3)

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

- OMB compiled and reviewed climate information with FY24 budget requests and transmitted the information to the County Executive for inclusion in his FY24 Recommended budget. (CAP Action G-9)
- OMB is preparing for FY25-30 CIP submissions by reviewing the capital budget climate questions and seeing if improvements can be made for the next budget cycle. (CAP Action G-9)
- OMB is also participating in discussions to bring a new capital budget climate/environmental impact tool to Montgomery County and testing it during the FY25-30 CIP development. (CAP Action G-9)

### **WSSC Water**

- WSSC is planning to add 11.8 MW solar in June 2024. The solar facility will be located in Washington County, Maryland and provide 11.8 MW via power purchase agreement. (CAP Action E-4)
- Two additional ChargePoint electric vehicle charging stations are being installed in the WSSC RGH headquarters garage, for a total of 8 RGH garage charging stations for combined employee and fleet vehicle charging. (CAP Action T-6)