Climate Change

LINKAGE TO COUNTY RESULTS AREAS

- A Greener County
- A Growing Economy
- Thriving Youth and Families
- Effective, Sustainable Government

PROGRAM CONTACTS

Contact Adriana Hochberg, Climate Change Officer, at 240-620-3005, or Vicky Wan, Acting Deputy Director of the Department of Environmental Protection at 240.777.7722 for more information.

What's New for FY23:

Address Flooding Issues

- The Department of Environmental Protection (DEP) is gaining a Flood Program Manager, a Flood GIS Specialist, and a new Flood Control Study capital project is proposed by the County Executive. These new resources will support the development of a Flood Management Program for the County, including development of comprehensive strategies for planning for, responding to, and communicating about, flooding issues; and identification of areas at high risk of flooding due to the built environment.

Enhance Climate Adaptation and Preparedness

- The Office of Emergency Management and Homeland Security is gaining a Climate Adaptation Program Manager to provide climate adaptation and preparedness education and outreach with vulnerable communities, address inequities in access to County resources, and work on resilience hubs.

Conduct Equitable Community Engagement

- DEP is receiving resources to support the development of a Community Justice Academy, with Community Ambassadors who will co-create integrated health, equity and quality-of-life solutions that center on the needs and desires of low-income and Black, Indigenous, and Other People of Color communities in the County.
- DEP is receiving resources to launch a Community Justice Fund to advance small projects co-conceived and co-created by Community Ambassadors in cooperation with their respective community members and County staff.

Implement Building Energy Performance Standards

- In anticipation of the passage of a Building Energy Performance Standards law, the DEP is receiving operating funding to support the Building Energy Performance Standards (BEPS) program, and gaining four new BEPS positions: a multi-family/affordable housing manager; a technical compliance engineer; a stakeholder engagement and outreach manager; and an administrative support staff member.

Support Greenhouse Gas Reduction and Adaptation Measures in Low Income Housing

- DEP is receiving resources to launch an Efficiency & Climate Resiliency Pilot Program for low-and-moderate housing to support energy efficiency and climate resiliency projects for low-and-moderate income Montgomery County residents.

Enhance the County's Climate Governance Capacity

- The County Executive's Office is gaining a Climate Funding and Performance Specialist who will identify funding opportunities for climate initiatives, develop grant proposals, and track and report on the progress of climate initiatives.

Accelerate Nature-based Carbon Sequestration

- MCDOT's Urban Forest program is being expanded to address the tree maintenance backlog and increase the number of street trees planted to improve the urban forest health.
- DEP is gaining a Natural Climate Solutions Program Manager to initiate and accelerate implementation of carbon sequestration and reforestation projects as identified in the County's Climate Action Plan.
- DEP is also receiving resources to purchase or develop a tool to help the County make land use decisions using overlay data such as flood zones, equity priority areas, tree canopy, and impervious surfaces to reveal and measure the broad environmental, health, economic, and equity-related co-benefits of natural climate solutions and help prioritize projects that maximize nature-based benefits.

Support Greenhouse Gas Reduction in New Buildings

- The Department of Permitting Services will gain two new positions: a Sustainability Program Manager and an Electrification Program Manager. The Sustainability Program Manager will work directly on the development of the energy and green building code amendments in alignment with the Climate Action Plan. The Electrification Program Manager will develop and implement code amendments for the electrification of both the commercial and residential building sectors, focusing on solar photovoltaic implementation/compliance, onsite energy storage compliance, and electric vehicle charging compliance.
- DEP is gaining resources to review the Climate Action Plan and Thrive 2050 and recommend changes to County zoning and code to conform with the County's goals.

Support Greenhouse Gas Reduction in Existing Residential Buildings

- DEP is gaining a Residential Energy Program Manager to design and implement policies that improve energy efficiency in residential buildings.
- DEP is also receiving resources to launch a New Electrification Incentive Program to incent electrification in existing residential homes, multifamily, and commercial buildings.

Implement Equitable Climate Economy Recommendations

- DEP is gaining a new position to begin implementing recommendations in the High Road Economic Inclusion Framework, an analysis being completed in 2022 that integrates climate, equity, and economic development in the County. This new position will also provide support to businesses that wish to explore the transition to employee ownership (e.g., worker cooperative).

Support Greenhouse Gas Reduction in the Transportation Sector

- The Capital Bikeshare program is gaining additional resources for station maintenance.
- MCDOT's Transportation Demand Management program is gaining resources to support the NextGen Transportation Demand Management Program; the White Oak Transportation Management District; and countywide efforts. Funds will also be used to install micromobility corrals for e-scooters and bikes.
- MCDOT's Transit Division is gaining resources to expand its part-time operator complement by 20 positions.
- MCDOT's TravelSmart Ambassador Program is gaining a new outreach position to ensure that residents, businesses, employees, organizations, and visitors are aware of all transportation programs and services with special emphasis on equity to ensure that under-served and vulnerable populations are reached.
- MCDOT is gaining a new position to support new service expansions such as eXtra and Flex.

Undertake Climate Communications Campaigns

- DEP is receiving resources to launch a Broadscale Climate + Alert Montgomery Communication Campaign, drawing on evidence-based research to determine target behaviors and identify target audiences.

Support Clean Energy Efforts

- The Office of Agriculture is gaining an Agricultural Business Development Specialist who will assist with on-farming composting and urban agriculture initiatives; food security; agrivoltaic farming, and regenerative farming; racial equity and social justice initiatives; and farm alcohol production and agritourism.
- DEP is receiving resources for Agrivoltaic Technical Assistance through a partnership with the University of Maryland to assess the viability of growing table crops beneath ground-mounted solar arrays.

Ongoing Work of County Departments:

Department of Housing and Community Affairs
The Energy Efficiency Program assists homeowners and low-income residents in reducing home energy use by providing energy inspections, air leak identification, insulation, and energy efficient lighting.

Department of Permitting Services (DPS)
Through Green Building program reviews, DPS enforces the County's requirement for new construction, additions, and alterations to conform to the International Energy Construction Code. New commercial construction and additions of 5,000 square feet or greater must conform to the International Green Construction Code.

Department of Transportation (MCDOT)
MCDOT continues to build an extensive network of bikeway facilities including protected bike lanes, particularly in areas associated with the Purple Line and Bethesda Metro Station projects, and those in BiPPA and master plan areas. Capital Bikeshare offers stations throughout the County, providing a low-carbon alternative for short trips; Bikeshare is gaining additional resources in FY23 for station maintenance. The shared E-bike and E-scooter Pilot Program provides additional low-carbon, low-cost options for residents, employees, and visitors for short trips and to connect with transit; additional funding will enable many more micromobility corrals to be installed in FY23 to encourage proper parking for that program's shared vehicles as well as for personal bikes and scooters.

Ride On, the county's public bus system, provides an affordable alternative to driving. MCDOT facilitates and encourages the use of public transportation with programs like FareShare, which works through employers to assist employees with their commuting costs, and the Commuter Choice Tax Credit. These programs provide incentives for employers to buy-down the cost of transit and vanpooling for their employees.

Express bus programs including FLASH and Ride On Route 101 provide fast, reliable bus service along major County corridors.

Office of Emergency Management and Homeland Security (OEMHS)
OEMHS is working closely with County departments to prepare for the current and future impacts climate change will have on weather-related disasters. As climate change increases the intensity of rain events, OEMHS has a hydrologist position to help identify areas that will become prone to flooding and help the County prepare for, mitigate, and respond to the impacts. OEMHS assists DEP and other County agencies pursue State and Federal grants to prepare for the effects of climate change. OEMHS identifies critical infrastructure that may be vulnerable to climate change and working with owners of the infrastructure to prepare and mitigate those vulnerabilities (including dams, roads, etc).

Office of Agriculture (OAG)
OAG supports the farm community in its utilization of renewable energy through accessory solar and regenerative agricultural practices such as no till farming, crop rotation and others. OAG promotes Best Management Practices (BMP) such as cover crop to help sequester carbon. The Soil Conservation District works with local farmers in promoting conservation practices that help to reduce greenhouse gases such as conservation tillage. Conservation tillage practices reduce trips across fields by use of equipment that produces greenhouse gases. In addition, the Soil Amendment Program offers free delivery of Leafgro to farmers to increase the organic material in the soil, retain moisture, and promote soil health.

Office of the County Executive
The Climate Change Officer leads the County-wide implementation of the Climate Action Plan.

Department of Environmental Protection
DEP provides leadership for the County's actions leading towards reducing greenhouse gas emissions. DEP administers the County's Benchmarking Law, whereby building owners with properties greater than 50,000 square feet use a standard metric to measure energy usage, identifying energy savings opportunities. DEP manages residential energy programs to assist county

residents with energy efficiency opportunities. DEP also administers the Montgomery Energy Connection, a merger-funded program whose goal is to be a trusted source of information about home energy efficiency and renewable energy options for residents.

DEP administers the Tree Montgomery Program, a program that plants shade trees for property owners, free of charge. Additional programs for tree planting are implemented in partnership with the MCDOT.

DEP provides curbside collection services to all single family residences for recyclables including cardboard and paper, commingled material such as plastics, glass, and yard trim. These materials are then sorted and marketed to recycling processors or turned into compost material and sold to customers, keeping large volumes of material out of the waste stream.

Department of General Services
DGS' Office of Energy and Sustainability ensures County operations are environmentally sensitive and integrates sustainability into County decision making. Over 7.6 megawatts (MW) of electricity are generated from solar panels on County facilities. A 6.0 MW installation is planned for the decommissioned Oaks Landfill and in FY23 DGS will complete Phase I of the Brookville Bus Depot electric bus charging station installation which will include a 2.0 MW solar installation and microgrid. DGS also leads the initiative to transition to a zero emissions fleet of County vehicles and buses.

Climate Change Non-Departmental Account (NDA)
Funds in this NDA are used to implement the Climate Action Plan. This NDA includes costs for three positions within DEP to focus on Electric Vehicle (EV) adoption, equitable community engagement, and a State-level energy policy. FY23 uses of the Climate Change NDA include support for equitable community outreach; continued implementation of Community Choice Energy; Building Energy Performance Standards support; urban heat mapping efforts; strategic planning for EV charging and clean energy development; climate communications and public engagement; paid climate fellows and interns; agrivoltaic project support; and consultant support for buildings codes and solar efforts within the DPS.

Department of Human Resources
The Department of Human Resources has rolled out the County's new Telework Policy to encourage MCG staff to reduce vehicle miles traveled. The Department conducts virtual trainings related to climate change and works to build awareness among all County staff about climate change.

Department of Health and Human Services (DHHS)
The various public-facing HUBs within the County are building community resiliency. Through its focus on the social determinants of health, the DHHS minority programs are keenly aware of the impact of climate change on communities of color and are committed to better incorporating climate and the environment into its work. The Latino Health Initiative has conducted a series of Latino community conversations to assess the knowledge, attitudes, and practices of a sample of Latino community members regarding environment related practices associated to consumer waste and recycling.

Community Use of Public Facilities (CUPF)
CUPF covers the personnel cost of an energy management position in Montgomery County Public Schools (MCPS) to monitor community use of school buildings and control the HVAC settings in each school based on the weekly schedule. CUPF continuously fine tunes the MCPS' energy management weekly schedule to reduce unneeded energy use. CUPF makes every possible effort to consolidate community use into buildings by not placing groups in an empty building when a building nearby already has scheduled use.

Department of Correction and Rehabilitation
The Department's Diversion community service work crews remove debris/waste, and work crews paint electric car ports at County facilities and use green chemicals to remove county graffiti.

Office of Procurement
The Office of Procurement works with other County departments to employ sustainable procurement practices and specifications to help reduce environmental impacts and total cost of ownership. Examples include: (1) language incenting meatless menu options as well as local produce sourcing in cafeteria solicitation, and (2) responsible disposal or donation of County surplus to maximize return and reduce waste for the County.

Public Libraries (MCPL)
MCPL partners with other County and community partners, including DEP, DHHS, and Pepco to place informational and resource tables at libraries to inform residents about access to energy assistance and energy conservation programs. MCPL also

partners with DEP to make items such as compost bins, thermal cameras, reusable and recyclable bags available to residents. MCPL offers climate change educational programs and workshops for residents of all ages. For adults and seniors, these include workshops to help residents manage energy usage and explore energy efficient technology. Programs are planned for large audiences to disseminate the information in a wider manner as well as for small groups, where conversations about the personal impact on climate change and energy saving of individual residents can be explored. For children, teens, and families, MCPL offers educational programs about the impact of climate change on oceans and the creatures that inhabit them in support of the 2022 Summer Reading Challenge!, "Oceans of Possibilities." As part of this program, children and teens will have the opportunity to make tangible contributions towards conserving the Chesapeake Bay by planting trees, oysters, and providing healthy habitats for Bay animals.

Climate Change Efforts in the CE's Recommended FY23 Budget

The chart below details the budget numbers associated with the initiatives and programs discussed in this chapter. The County Executive's recommended FY23 budget dedicates $253.8 million to climate change efforts.

Spending in Support of Climate Change Efforts in the FY23 Budget						
		FY23 CC Approved				
Department	Program	GF	CIP	Other Operating Funds	RideOn	Non-County
OAG	Agricultural Business Development Specialist Position -- New FY23	$58,479				
	Cover Crop Program	$70,000				
	Soil Amendment Program	$4,215				
	Total Office of Agriculture	**$132,694**				
CEX	Climate Funding and Performance Specialist Position -- New FY23	$75,782				
	Climate Change Officer	$26,583		$177,905		
	Subtotal County Executive's Office	**$102,365**		**$177,905**		
	Total County Executive's Office	**$280,270**				
Climate Change Planning NDA	Climate Action Plan Implementation	$691,677				
	Total Climate Change Planning NDA	**$691,677**				
DEP	Natural Climate Solutions Program Manager -- New FY23	$75,782				
	Flooding Program Manager -- New FY23	$76,578				
	Flooding GIS Specialist -- New FY23	$86,080				
	Community Justice Academy Support -- New FY23	$200,000				
	Community Justice Fund -- New FY23	$100,000				
	BEPS Program Operating Funding -- New FY23	$700,000				
	Multi-Family/Affordable Housing Manager -- New FY23	$76,578				
	Technical Compliance Engineer -- New FY23	$89,543				
	Stakeholder Engagement/Outreach Manager -- New FY23	$76,578				
	Admin/Helpline Program -- New FY23	$70,975				
	Efficiency & Climate Resiliency Pilot Program for LMI Housing -- New FY23	$675,000				
	Sustainability Zoning and Code Review	$150,000				
	Decision Support Tool License from TPL/UDI -- New FY23	$20,000				
	Residential Energy Program Manager -- New FY23	$76,578				
	Funding for New Electrification Incentive Program -- New FY23	$1,000,000				
	High Road Economic Development Implementation -- New FY23	$132,749				
	Project Equity Worker Coop Implementation -- New FY23	$50,000				
	Broadscale Climate + Alert Montgomery Communication Campaign -- New FY23	$150,000				
	Agrivoltaic Tech Assistance -- New FY23	$50,000				
	The County's Benchmarking Law: Building owners are to use a standard metric to measure energy usage, identifying energy savings opportunities. DEP offers assistance to building owners with compliance	$39,999				
	Energy Connection: A program whose goal is to be a trusted source of information about home energy efficiency and renewable energy options					$423,483
	Tree Montgomery Program: A program that plants shade trees for property owners, free of charge, and implemented in partnership with the Department of Transportation	$750,000				
	Staff focused on climate efforts	$2,160,709				
	Other climate-focused programs	$322,713				
	County Recycling Programs			$60,865,988		
	Subtotal Environmental Protection	**$7,129,862**		**$60,865,988**		
	Total Environmental Protection	**$67,995,850**				

Department	Program	FY23 CC Approved				
		GF	CIP	Other Operating Funds	RideOn	Non-County
DGS	Office of Energy and Sustainability: Ensures County operations are environmentally sensitive and integrates sustainability into County decision making.	$825,414	$3,731,000			
	Brookville Bus Depot Microgrid	$949,000				
	Green Fleet: DGS is pursuing an all-electric fleet of County vehicles and buses.			$2,000,000		
	Increase the availability of electric vehicle charging stations at public parking facilities and other County locations.			$150,000		
	Subtotal General Services	**$1,774,414**	**$3,731,000**	**$2,150,000**		
	Total General Services	**$7,655,414**				
DHCA	Program Energy Efficiency Program: Assists homeowners and low-income residents in reducing home energy use by providing energy inspections, air leak identification, insulation, and energy efficient lighting.[1]					$551,680
	Total Housing and Community Affairs					**$551,680**
DPS	Climate Action Plan Engineer (Sustainability Program Manager and Electrification Program Manager) -- New FY23			$158,948		
	Green Building Program Review: Enforces the County's requirement for new construction, additions, and alterations to conform to the International Energy Construction Code. New commercial construction and additions of 5,000 square feet or greater must conform to the International Green Construction Code.			$1,028,548		
	Total Permitting Services			**$1,187,496**		
DOT	Bikeshare -- New FY23	$196,800				
	Transportation Demand Management (TMD) Support -- New FY23			$261,000		
	Part-time Operator Positions -- New FY23			$66,400		
	Climate - Urban Forest -- New FY23	$810,000				
	TravelSmart Ambassador Program -- New FY23			$100,000		
	Service Planning Position -- New FY23			$88,110		
	Ongoing Urban Forest Efforts	$4,560,752	$3,100,000			
	Capital Bikeshare, e-scooters, and e-bikes: Capital Bikeshare offers stations throughout the County, providing a low-carbon alternative for short trips. The E-bike and E-scooter Pilot Program are another option for residents and visitors.	$1,441,611				
	Green Fleet: Electric bus replacements.		$13,800,000			
	Commuter Services: Facilitate and encourage the use of public transportation through Transportation Demand Managemant and programs like FareShare, the Commuter Choice Tax Credit, and Get In.			$4,542,535		
	RideOn Bus service, including express bus programs.				$146,111,070	
	Subtotal Transportation	**$7,009,163**	**$16,900,000**	**$5,058,045**	**$146,111,070**	
	Total Transportation	**$175,078,278**				
OEMHS	Climate Adaptation Program Manager -- New FY23	$105,000				
	Staff and programs on hazard mitigation planning.	$138,144				
	Total Emergency Management and Homeland Security	**$243,144**				
Countywide Total	**Subtotal Montgomery County**	**$17,083,319**	**$20,631,000**	**$69,439,434**	**$146,111,070**	**$551,680**
	Total Montgomery County (CIP and PSP)	**$253,816,503**				