



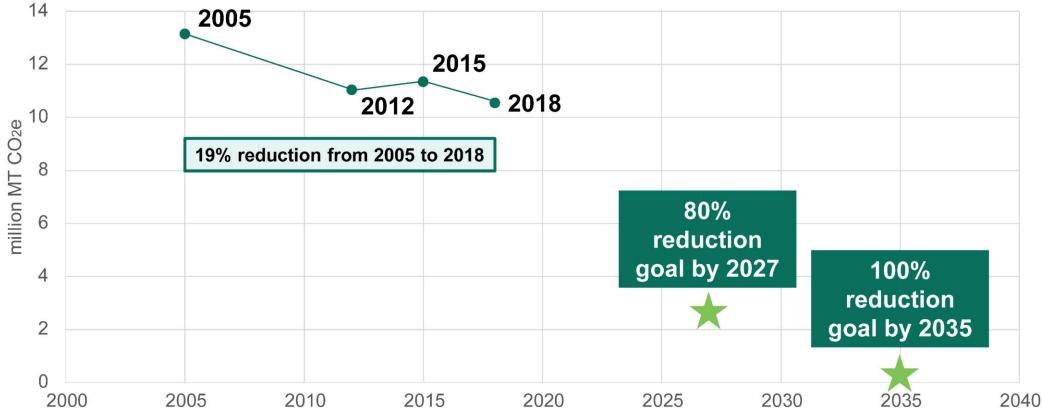
PRESENTATION FOR MWCOG ACPAC - SEPTEMBER 20, 2021

"When we have a fact-based view of climate change, we can see that we have some of the things we need to avoid a climate disaster, but not all of them. We can see what stands in the way of deploying the solutions we have and developing the breakthroughs we need. And we can see all the work we must do to overcome those hurdles."

--Bill Gates, How to Avoid a Climate Disaster

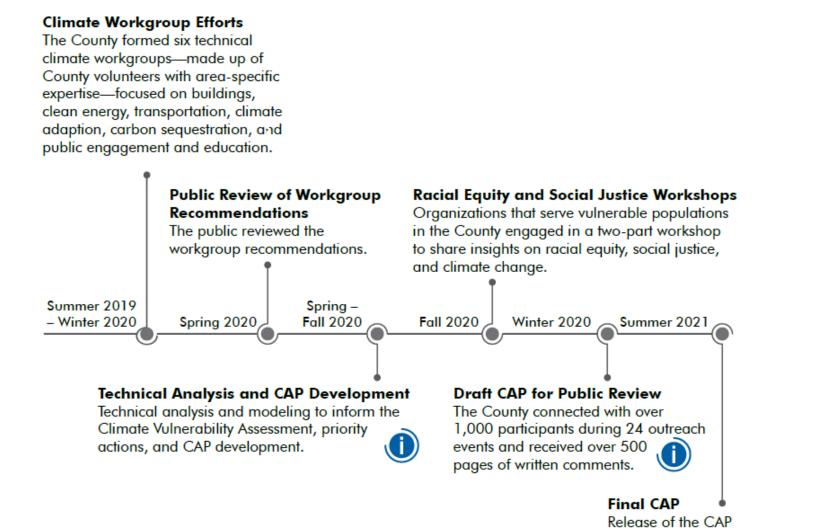
County GHG Emissions Progress and Goals





Source: Metropolitan Washington Council of Governments (MWCOG) Montgomery County GHG Inventory

Climate Planning Process



6 Technical Climate Workgroup Members Workgroup Meetings Racial Equity and Social Justice 2 Workshops Community Conversations with 30 Resilience Ambassadors ORGANIZATIONS PARTICIPATING IN THE CLIMATE PLANNING PROCESS: 20 Business 22 Environmental Conservation 10 Civil Rights and and Climate **Religious** Groups Groups 8 County Advisory 9 Education Groups Groups 7 Adaptation, / Federal Agencies (Unofficial Presence) Resilience and Energy and International Associations Organizations 5 Budget, Finance, 4 Utilities and Philanthropic Groups **4** Municipalities and

Groups

Groups

2 Public Health

3 Chambers of Municipal Advisory Commerce **2** Transportation Groups Environmental Buildings Group Justice Group

Localized Climate Hazards

- •Downscaled climate projections for 2035, 2050, and 2100
- •Key Takeaways:
 - **1** risk of moderate, severe & extreme drought
 - number of high heat days
 - extreme precipitation & precipitation totals
 - high winds

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	Baseline							203				
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43	44	45	46	47	48	49		43	44	45	46	
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57	58	59	60					57	58	59	60	

4 days

12 days

2100

20

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41

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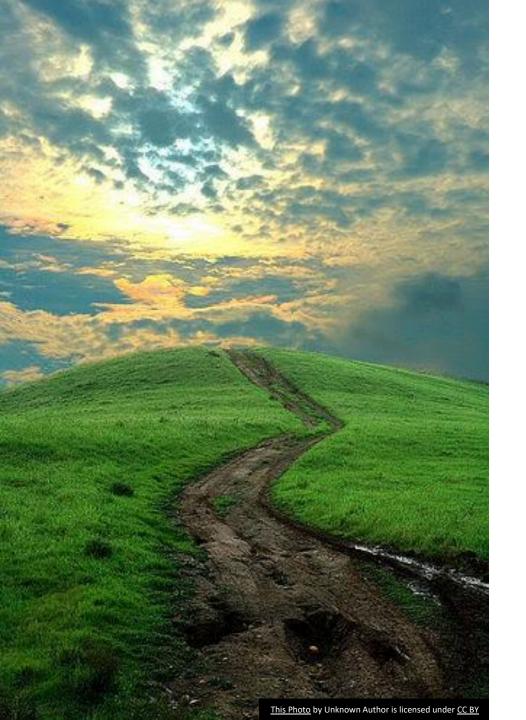
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4.5 Days above 95°F (RCP 4.5)							1	8.5	Additi

4.5 1	4.5	4.5	4.5 4.5	4.5 5	4.5 6	4.5		
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57 8.5	58 8.5	59 8.5	60 8.5					
28 - 60 days								

dditional days above 95°F (RC

Additional days above 95°F (RCP 8.5)

Figure 14: Projected average number of days above 95°F in Montgomery County for GHG Representative Concentration Pathway (RCP) 4.5 and 8.5



The CAP lays out a Path to Meet the County's Zero GHG Emissions Goal by 2035

- **1**. Reduce Emissions in the Energy, Buildings, and Transportation Sectors
- 2. Center Racial Equity and Social Justice
- 3. Address Residual Emissions and Carbon Sequestration
- 4. Reduce Risks from Climate Hazards (Resilience & Adaptation)
- 5. Identify Resources to Pay for Climate Action
- 6. Enhance Climate Governance
- 7. Engage the Community as Partners in Climate Action
- 8. Take the Next Steps

Two companion reports

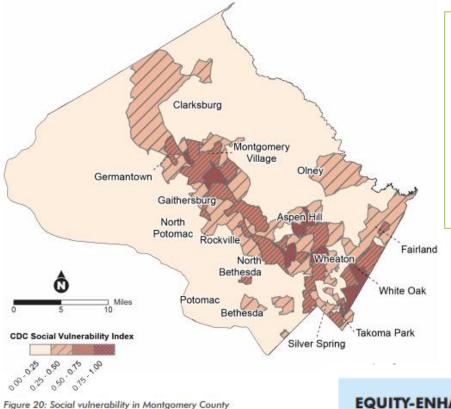
CLIMATE ACTION PLAN (CAP)

FY22 CLIMATE WORK PLAN

- Strategic plan to achieve County climate goals by 2035
- •86 actions across 7 sectors
- Identifies GHG reduction actions
- Identifies localized climate hazards & actions to increase resilience and adapt to a changing climate
- Identifies equity-enhancing measures to address racial equity and social justice implications of climate action

- •Annual implementation plan
- •Enables flexibility in CAP implementation
- Identifies legislative & regulatory agenda for the coming year
- •Aligns staff and funding resources
- •75 of 86 CAP actions are moving forward in FY22

montgomerycountymd.gov/climate



Centering Racial Equity & Social Justice in the CAP

EQUITY-ENHANCING MEASURES

- Balance the costs and percent of renewables in the electricity mix. If there is a premium associated with offering a higher level of renewable electricity, the County will need to consider ways to offset the cost premium for low-income residents.
- Develop and promote an awareness campaign on how to access the CCE program and its associated benefits. Ensure the awareness campaign is developed in multiple languages.

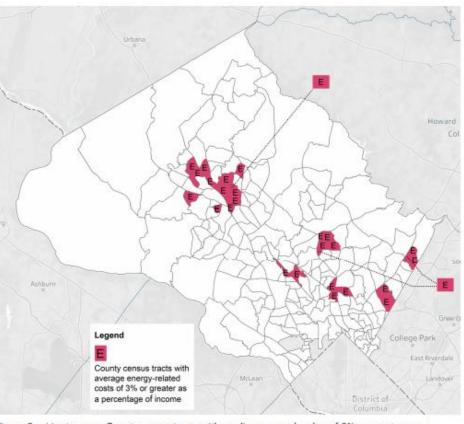
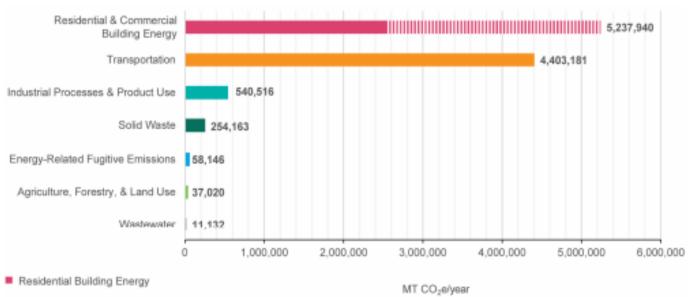


Figure 5: Montgomery County census tracts with median energy burden of 3% or greater as a percentage of Income $^{\rm 42}$

- Identifies communities that are likely to have less ability to adapt to the impacts of climate change
- Equity-enhancing measures included within each action description – See CCE example (left)

GHG Reduction Actions



III Commercial Building Energy

Figure 25: Montgomery County 2018 GHG inventory

 Significant shifts needed in the way we generate and use energy
how we heat and cool our homes, businesses and public buildings; how we fuel vehicles; and our consumption patterns

•25 GHG Reduction actions centered in **Buildings**, **Transportation**, and **Clean Energy**. Examples:

- Community Choice Energy
- Natural Gas Ban
- Expand Solar Installations
- Building Energy Performance Standards
- Net Zero Building Codes
- Private Vehicle Electrification Incentives & Disincentives
- Expand Public Transit, Active Transportation, & Shared Micromobility Network
- Zero Emissions Buses & Fleet

Climate Adaptation & Sequestration Actions

- •The Plan identifies 6 **nature-based carbon sequestration** actions, including:
 - Retaining and increasing forests
 - Retaining and increasing tree canopy
 - Regenerative agriculture
 - Increasing carbon in soils through improved agricultural practices

•The 20 **climate adaptation** actions include:

- Water infrastructure resilience & water supply protection
- Resilience hubs
- Updating green streetscape and green infrastructure standards
- On-site water reuse
- Update floodplain maps

Governance, Public Engagement and Personal Actions

•16 **Climate Governance** Actions, incl.:

- Climate Change Academy
- Incorporating climate competencies into MCG job descriptions
- Incorporate climate considerations into the budgeting processes
- Develop climate financing strategies
- Develop climate equity metrics
- Consolidate County climate data
- Conduct climate vulnerability detailed assessments

•19 Public Engagement Actions, incl:

- Forming a climate change communications coalition
- Establishing a community justice academy
- Establishing statewide climate coalition of local governments

•The CAP calls for both system-level changes and **personal actions**, including:

- Actions to lower carbon footprint
- Actions to reduce home electricity usage
- Actions to lower electricity use in businesses
- Actions to increase climate resilience

Climate action is underway





- Brookville bus depot microgrid & EV bus charging groundbreaking
- Paddington Square community solar ribbon-cutting
- EV wayfinding signs installed; EV bus procurement underway
- Building Energy Performance Standards bill with Council
- •2018 International Green Construction Code regs with Council
- Transportation Demand Management regs public comments
- Briefing with White House OMB officials about climate budgeting
- Community Choice Energy PSC workgroup convening
- Energy Compact submitted to the United Nations
- Sustainable economic development analysis underway
- See FY22 climate work plan for full list of near-term actions

Key Takeaways

•Significant effort will be necessary to meet the County's climate goals.

- •Public and private resources must be leveraged to implement solutions.
- •Climate action is already underway, including legislation & regulations pending before Council
- •The climate action implementation phase must center racial equity and social justice considerations in order to ensure equitable outcomes
- •Different/new governance and community engagement approaches will be necessary to be more inclusive of all voices.