MEMORANDUM

March 9, 2020

TO: Transportation and Environment (T&E) Committee

FROM: Keith Levchenko, Senior Legislative Analyst

SUBJECT: **Briefing:** County's Climate Change Planning Efforts[1]

PURPOSE: To receive an update from Executive Branch staff and Climate Planning Workgroup members on the County's development of its Climate Change Action and Resilience Plan

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Agenda

- Background/creation and status of workgroups – Adriana Hochberg, Assistant Chief Administrative Officer (and Director of County Climate Policy)
- Summary of Workgroup Recommendations – Workgroup representatives
  - Clean Energy: David Blockstein
  - Buildings: Michal Freedman
  - Transportation: Irene Lane
  - Adaptation: Karen Metchis
  - Sequestration: Sylvia Tognetti
  - Public Engagement: Daphne Pee (needs to go last b/c unable to arrive before 2:30)
- Next Steps – Adriana Hochberg
  - Consultant Phase
  - Continued Public Engagement
  - Short-term Actions

Attachments
- Climate Planning Overview (from the Department of Environmental Protection Climate Action Planning Webpage[2]) (©1-9)

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[1] Key words: #Climate Change, Global Warming, Greenhouse Gas Reductions
[2] https://www.montgomerycountymd.gov/green/climate/climate-action-planning.html

On March 12, the T&E Committee will receive an update from Adriana Hochberg, the County's Director of County Climate Policy on the County's development of a Climate Change Action and Resilience Plan. Ms. Hochberg will also describe the next steps of the process including: the consultant's work, continued public engagement, and short-term actions already underway.

The Committee will also hear from representatives from each of the climate planning workgroups who will provide summaries of their workgroup's recommendations.

Council Resolution: "Emergency Climate Mobilization"

The County has been active for many years in studying the County's greenhouse gas emissions, developing goals and strategies, and implementing numerous initiatives. However, the current effort stems from the December 2017, Council approval of Council Resolution 18-974, "Emergency Climate Mobilization." This resolution supported an accelerated goal of reducing greenhouse gas emissions by 80 percent by 2027 and 100 percent by 2035, as well as to initiate "large scale efforts to remove excess carbon from the atmosphere."

This resolution led to the transmittal to the Council in June of 2018 of a Climate Mobilization Workgroup Report by Executive Branch staff. This report noted the "massive cultural shift" and "dramatic changes" required to meet the greenhouse gas reduction goal.

Climate Change Action and Resilience Plan

In order to move the County toward the County's aggressive greenhouse gas reduction goals, a climate change planning process was initiated in the Summer of 2019 overseen by Ms. Hochberg. This process included the creation of five workgroups looking at different aspects of the issue:

- Clean Energy
- Buildings
- Transportation
- Adaptation and Sequestration
- Public Engagement

The Department of Environmental Protection provided staff support and meeting facilitation for the workgroups. Other County departments such as: The Department of General Services, Department of Transportation, and the Office of Emergency Management and Homeland Security provided staff support as well.

These workgroups were tasked with developing recommendations to be further evaluated and prioritized by a consultant with the goal of creating a Climate Change Action and Resilience Plan by the end of 2020. The workgroup recommendations were recently rolled out at a Town Hall meeting on February 27. A summary document is attached on ©1-9. The full set of recommendations is available on the County website at:
https://www.montgomerycountymd.gov/green/climate/climate-workgroup-recommendations.html

Attachments
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Climate Planning Overview
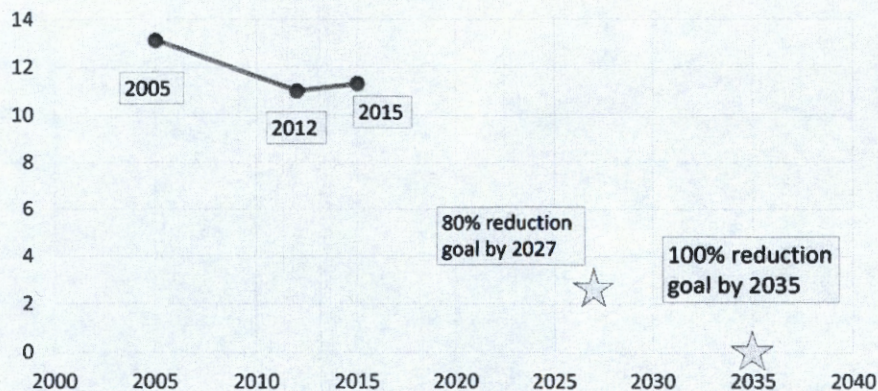
What is the Climate Action & Resilience Plan?

The Plan, currently under development, will be a roadmap to achieve zero emissions in Montgomery County by 2035. Plan components will include:

- Prioritized actions for reducing greenhouse gas emissions & adapting to a changing climate
- Implementation plan for actions
- Cost estimates and co-benefits
- Identification of equity challenges and opportunities

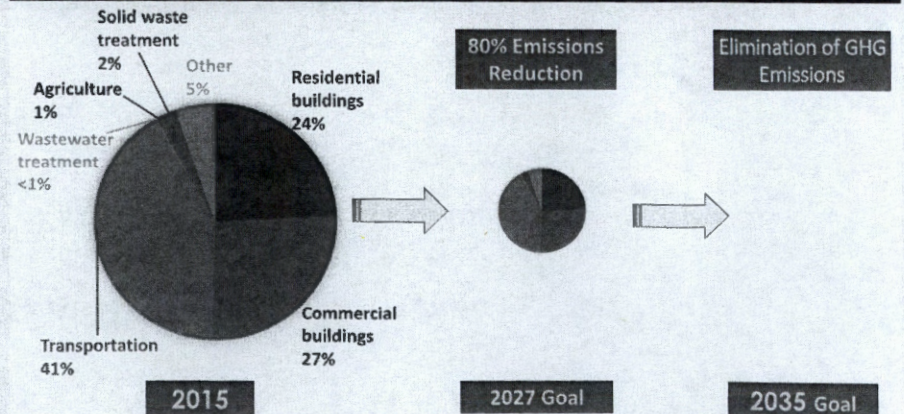## When will the Climate Action & Resilience Plan be done?

- July 2019 – February 2020: Workgroups convene and develop recommendations
- February – April 2020: Public review of Workgroup recommendations
- Spring – Fall 2020: Consultant technical analysis; continued public engagement
- Late 2020: Issue Draft Plan and provide opportunities for public comment
- Early 2021: Finalize Climate Action & Resilience Plan

Montgomery County's Measured Greenhouse Gas Emissions
(million metric tons of CO2e)

2005

2012

2015

80% reduction goal by 2027

100% reduction goal by 2035

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

Montgomery County Greenhouse Gas Emissions Profile and Goals

80% Emissions Reduction

Elimination of GHG Emissions

Solid waste treatment 2%

Other 5%

Agriculture 1%

Wastewater treatment <1%

Residential buildings 24%

Commercial buildings 27%

Transportation 41%

2015

2027 Goal

2035 Goal

Buildings
Community-Based Workgroup
Recommendations

Goal 1 - Understand the current and planned building stock in Montgomery County

1. **Perform research on the existing building composition** in the County (e.g., property use type, energy end uses, density, current technologies, building code compliance).

2. **Evaluate future development in new construction pipeline.**

Goal 2 - Expand access to programs and financing for commercial and residential buildings to make improvements

1. **Develop central repository of all financial incentives** that are available to Montgomery County commercial and residential building owners for energy efficiency (and renewable energy) upgrades.

2. **Create a "Retrofit Accelerator" program** to provide unbiased and individual guidance to commercial and residential owners to facilitate retrofits to existing buildings and design assistance for net-zero energy new buildings.

3. **Expand available incentive and financing program**s.

4. **Develop a training program/scholarship** in partnership with a University or Trade Association for facility managers/building operators on the latest energy efficient technologies.

5. **Develop/expand an appliance trade-in program** to encourage energy-efficiency appliance upgrades.

Goal 3 - Reduce GHG emissions from newly constructed/ planned commercial and residential buildings
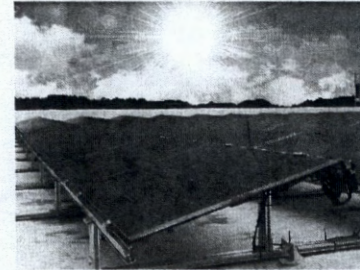
1. **Increase Montgomery County's involvement in building code adoption process** to advance stronger energy efficiency standards in buildings.

2. **Adopt a path to net-zero energy and/or carbon building code** for new commercial and residential construction

3. **Adopt a path to electrification** in new construction.

4. **Consider embodied carbon requirements for building materials.**

Goal 4 - Reduce GHG emissions from existing commercial and residential buildings

1. **Implement/expand building labeling and transparency programs.**

2. **Implement a performance requirement** for existing buildings.

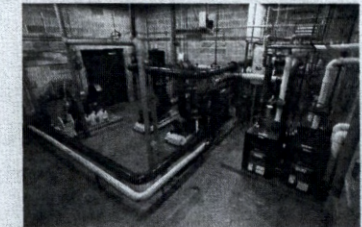3. **Adopt a path to net-zero energy/carbon building code** for existing commercial and residential buildings.

4. **Adopt a path to electrification in existing buildings.**

5. **Reduce building heat transfer.**

Goal 5 - Improve water conservation and efficiency in buildings (energy-water nexus)

1. **Implement water efficiency requirements** for new buildings.

2. **Develop water efficiency incentives** for existing buildings.

3. **Modify building code to allow greywater** re-use in buildings.

Overarching Goals

1. **Strengthen land use policies**: Provide a foundation for maximizing carbon sequestration and increasing resilience.

2. **Accelerate the implementation of nature-based solutions** as carbon sequestration strategies across all County programs and policies.

3. **Move from silos to systems change - taking a "whole systems" approach**: Enable innovation to increase carbon sequestration in ways that maximize co-benefits for adaptation.
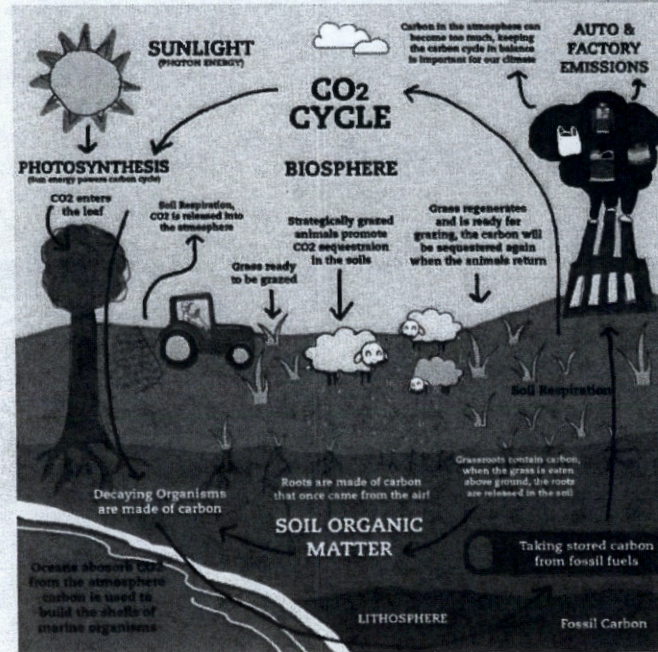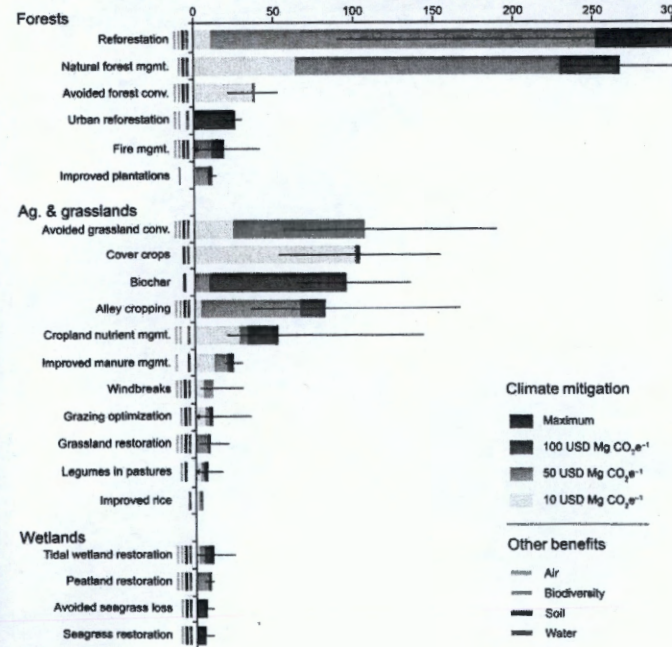

Natural Climate Solutions

- Carbon sequestration: "process of **storing carbon in a carbon pool**".[1]

- **Carbon cycle** (see graphic): how carbon moves from the atmosphere to plants through photosynthesis, from plants to animals through food chains, from plants and animals to soils. At each stage: carbon is released and can be stored in trees, plants, roots, micro- and macro-organisms, soil, and water.[2]

- **Nature-based carbon-capture** methods (see chart): **land conservation and restoration, improved forest land management, restoring and protecting wetlands and grasslands, and improving agricultural land management** (like cropland and grazing practices, using cover crops, and compost application).[3] These methods are being studied globally as strategies to reduce emissions, sequester carbon, and provide additional **co-benefits: improved water filtration, flood protection, soil health, plant productivity, biodiversity habitat protection, pollinator protection, public health, and economic development.**[4]

(3)

Sequestration
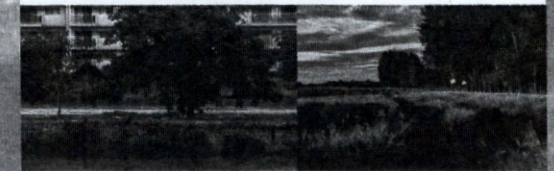### Community-Based Workgroup Recommendations

Sector-Specific Goals

4. **Protect existing trees and double the tree canopy** in County's urban, suburban, and other non-forest areas, leading to a net increase in the amount of carbon sequestered in trees to 2030 and beyond.

5. **Prevent loss of natural wetlands and expand where possible**: Establish a strict policy of no further loss of the County's natural wetlands, and expand wetlands where possible.

6. **Increase the County's forests** to 37% forest area by 2027 and 45% by 2035 (as compared to 34% in 2001-2016).

7. **Transition to regenerative agriculture**: Engage and support farmers, gardeners, and their organizations in an aggressive transition to regenerative agricultural practices.

8. **Restore healthy soils**: Restore the Earth's carbon, water, and energy cycles as a key climate solution by restoring the soil's fertility, microbial activity, aggregate stability, and moisture holding capacity. Adopt promising new research, policies, financing instruments, and practices on soil organic carbon.

9. **Establish a County-wide composting system and increase compost use**: Close the loop by establishing a County-wide food and other organic waste composting system for government, commercial and residential buildings to reach a minimum of 70% diversion, and increase compost use to improve soil health and increase carbon sequestration.

Clean Energy
Community-Based Workgroup Recommendations

Goal 1. Green the electricity supplied to County residents and businesses

1. Modify existing or develop new **laws and policies at the State level to support greening the electricity supply**.

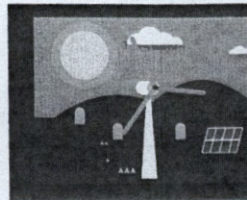2. Develop a **Community Choice Energy program**.

Artwork by Iron & Earth (CC BY-SA)

Goal 2. Expand use of distributed renewable energy

1. Establish **engagement strategies, programs and financial tools to address cost barriers to onsite renewables and storage**.

2. Assess feasible **public and private locations for solar and wind installations** of various scales in Montgomery County and adjacent jurisdictions.

3. Expand use of **solar on public facilities**.

4. Support **modification of the State's net-metering law**, including addressing cap for individual projects (2 MW) and total project volume cap (1,500 MW).

5. Support **expansion of community solar**.

6. Working **with the Public Service Commission and electric utilities**, support an **assessment of the ability of utilities to incorporate additional distributed energy**.

7. Review the **feasibility of implementing more energy conversion efficiency technologies** in Montgomery County (i.e. co-generation, co-process, and heat recovery).

8. Review the **feasibility of creating/expanding other clean renewable energy technologies in Montgomery County (other than wind and solar)**.

9. Establish **demonstration projects** to co-locate PV solar with agricultural production (such as grazing) and pollinator meadows.

10. Develop **clean energy incentives for low-income and moderate-income households in certain zip codes**.

Goal 3. Expand use of renewable energy to power buildings

1. Evaluate **policies requiring the electrification of new, substantially modified, and existing buildings**.

2. Evaluate **policies prohibiting the use of natural gas in new, substantially modified, and existing buildings**.

3. Evaluate **policies requiring incorporation of solar, battery storage systems, and/or vehicle charging stations in new, substantially modified, and existing buildings**.

Goal 4. Encourage economic development related to renewable energy

1. Increase **education in renewable energy and sustainability**.

2. Establish a **Green Technology Innovation Fund to attract and support** promising business start-ups that offer solutions to reduce **GHG emissions and/or contribute to essential clean energy infrastructure**.

3. Encourage **social enterprises, non-profits, and small and local businesses to develop renewable energy solutions**.

4. Encourage **union workers to be contracted and develop renewable energy solutions**.

5. Promote an **economic transition that is just and fair for all workers, especially those that have been laid off by "conventional" power production**.

6. Emphasize the **clean energy future in K-12 school curricula** (Italy example as model) or **extracurricular programs**, especially in collaboration with Thomas Edison H.S. Use **solar and storage on all schools to educate students on environmental and energy issues**.

7. Explore more **public-private partnership opportunities** to support innovation.

Goal 5. Establish a dedicated, secure funding source to support renewable energy programs and financial incentives

1. Assess and implement a **carbon tax** in Montgomery County.

2. Develop **clean energy incentives for low-income and moderate-income households in certain zip codes, including Prince George's County**.

Adaptation

Community-Based Workgroup Recommendations

Goal 1 - Prioritize people and communities that are the most vulnerable and the most sensitive to the impacts of climate change

1. Adopt strategies and actions that focus on building resilience for vulnerable and marginalized communities

2. Prioritize reducing health risks of the most vulnerable populations.

Goal 2 - Reduce the risks and impacts of higher summer temperatures.

1. Establish county-wide temperature reduction goals.
2. Promote cool and energy efficient building standards for both the public and private sectors.
3. Expand the county's urban canopy and greening programs.
4. Promote landscaping in the private sector to expand shade and reduce urban heat islands.

Annual Days of Extreme Heat Per Year in Maryland's 8th District

Heat index above	Historical	By midcentury	By late century	By late century, if we limit warming to 2°C
90°F	27 days per year	71 days per year	101 days per year	65 days per year
100°F	3 days per year	31 days per year	58 days per year	20 days per year
105°F	1 days per year	16 days per year	39 days per year	9 days per year

With no action to reduce global heat-trapping emissions, the average frequency of extreme heat in this district would rise as shown here. Taking rapid action to reduce emissions and cap future global warming at 2°C (3.6°F) would limit the increase in extreme heat days. For more information and detailed data, visit www.ucsusa.org/killer-heat.
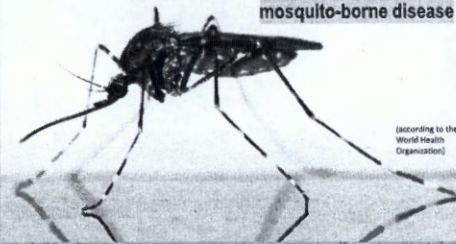
Goal 3 - Reduce risks and impacts of more intense storms.

1. Improve hydrological and meteorological data collection and analysis of wet weather and storms, considering climate change over the next 30 to 100 years, and incorporating trends in land use/land cover change.
2. Adopt aggressive requirements for all new development to transition Montgomery County to realities of climate change.
3. Work with homeowners, businesses and the building and services sectors to retrofit existing homes and buildings to protective standards.
4. Initiate a comprehensive review of transportation infrastructure, dams, and other public utilities and undertake efforts to improve preparedness and resilience.

Goal 4 - Protect public health from climate-driven impacts.

1. Integrate climate change risks into Montgomery County health and human Services, hazard mitigation, and emergency response operations
2. Minimize food, water and vector borne disease.
3. Protect the most vulnerable from asthma, heart attacks, and other respiratory illnesses.
4. Guard against increasing Risks of motor vehicle accidents and drowning
5. Undertake a vigorous public outreach campaign aimed at empowering the public with the knowledge and support to avoid and minimize health effects of climate change.

Climate change increases the risk of **mosquito-borne disease**

(according to the World Health Organization)

Goal 5 - Ensure the availability and sustainability of quality drinking water supplies to support a growing and thriving Montgomery County.
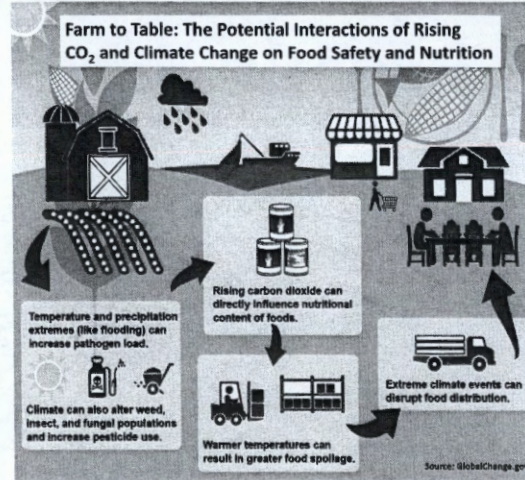
1. Expand programs to develop localized self-sufficiency and resilience to water shortages.
2. Protect water quality that threatens potability of water supplies.
3. Integrate actions that recognize the inter-dependency and co-benefits between water, energy, and other resilience strategies.

Goal 6 - Conserve and restore habitat to support healthy populations and ecosystems, reduce non-climate stressors on natural resources, and promote climate-resilient agriculture.

1. Conserve, expand, and connect natural and protected areas.
2. Restore degraded habitat and enhance suburban habitat.
3. Manage invasive and non-native species.
4. Reduce non-climate stressors on native species and ecosystems.
5. Promote climate-resilient agricultural practices.

Goal 7 - Support economic opportunities and address economic challenges for climate adaptation.

1. Business and development: minimizing disruption and maximizing opportunities.
2. Financing adaptation.
3. Incentivizing adaptation.

Farm to Table: The Potential Interactions of Rising CO_2 and Climate Change on Food Safety and Nutrition

Temperature and precipitation extremes (like flooding) can increase pathogen load.

Climate can also alter weed, insect, and fungal populations and increase pesticide use.

Rising carbon dioxide can directly influence nutritional content of foods.

Warmer temperatures can result in greater food spoilage.

Extreme climate events can disrupt food distribution.

Source: GlobalChange.gov

Goal 8 - Conduct a vigorous outreach and engagement campaign to accelerate adaptation and resilience.

1. Build public awareness about the County's actions on hazard mitigation and adaptation to climate change.
2. Build community preparedness strategies to increase resilience.
3. Engage the business community about the potential impacts and opportunities posed by climate change.
4. Work with other jurisdictions to develop rules, amend codes, and build capacity for adaptation.

Goal 9 - Reevaluate and update county operations, strategies, and codes to account for the risks of climate change impacts as well as to reduce greenhouse gases.

1. Create a common set of projections for Montgomery County using moderate to high projections of greenhouse gas scenarios.
2. Conduct a bottom-up evaluation of county departments, operations, and facilities and update county codes, operations, and services.
3. Implement and Improve the County Hazard Mitigation Plan.
4. Revise county codes, operations, and services to incorporate consideration of impacts of climate change.
5. Update Data, information, and monitoring to inform risk assessments.

Continuous Improvement, Institutionalization, and Accountability

Goal 1 - Government capacity - Develop county leadership, staff, organization and fiscal capacity to implement government-wide climate action programs across all departments and agencies
1. Evaluate current government culture, structure, assets and support systems to develop interventions that will ensure successful implementation of the Climate Action Plan
2. Establish working groups to implement the CARP
3. Build workforce capacity for change and leadership

Goal 3 - Government Leverage Points - Integrate climate awareness and action into County decision making, policies and institutional culture
1. Incorporate consideration of GHG emissions into the budgeting, finance and procurement processes

Goal 4 - Economic development - Strategically integrate economic development and climate goals to advance both
1. Encourage green business entrepreneurism, innovation and investment
2. Promote the production and sale of local products and services
3. Aggressively promote businesses that embed social and environmental practices into their day-to-day operations

Goal 5 - Unions, Labor and Jobs - Partner with unions and businesses to advance climate goals, identify clean energy job opportunities and facilitate a just transition to a fossil-free economy
1. County management, labor and environmental organizations should embrace the collaborative concept of *Bargaining for the Common Good* to advance climate goals that benefit both union members and the wider community
2. Proactively consider both economic opportunities and the adverse impacts associated with the transition to a carbon free economy

Goal 2 - Partnerships and Stakeholders - Build and institutionalize community and State jurisdictional partnerships to generate a critical mass of stakeholder support, and to foster collaboration, collective action, and equitable implementation
1. Identify stakeholder concerns and possible co-benefits to climate action by inviting input and incorporating feedback from stakeholders
2. Communicate status and results of CARP to the public and other stakeholders
3. Develop coalition of civic and business leaders to ensure ongoing communication between the County and the community
4. Stimulate "social entrepreneurism" by establishing a grant program to support community-based innovations to address the County's climate goals
5. Build collaborative support among other MD jurisdictions to address ambitious climate change policies at the State level

Empowering & Engaging Youth Through Education

Goal 1 - Community as a Resource: Develop increased opportunities for students to participate in climate change experiences outside the classroom
1. Encourage youth and their families to patronize businesses whose main goal is to reduce GHG emissions
2. Develop climate change opportunities that engage students in climate discussions/activities
3. Partner with federal and local agencies, non-profits and other County departments

Goal 3: At home: encourage climate change education in the home setting
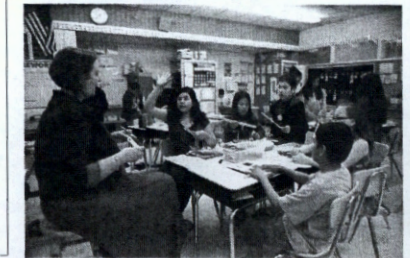1. Practice sustainability at home from a young age for the child

Goal 4 - Incorporate climate change education in the students' everyday lives
1. Promote commitment among students to help reduce their carbon-footprint and learn about climate change

Goal 2 - PK-12 Formal Education: Develop increased opportunities for students to participate in climate change education and experiences in the classroom of private, public, and home school communities
1. Frame the conversations of adults/educators with students/children away from fear/worry about climate change, to how to empower students with knowledge about what climate change is, how it will impact them, and what they can do in their daily lives to assist
2. Develop the students' knowledge on climate change through new and already existing activities provided by the school
3. Ensure that students have an opportunity through the science curriculum to analyze data and draw conclusions about climate science
4. Empower students to take action on environmental and climate issues
5. Ensure that homeschooled families have access to climate change information and data
6. Ensure that private schools in the county have access to current climate change information and data
7. Facilitate access by students to their schools' (public, private and homeschool) data on their environmental impact

Goal 5: Incorporate climate change in extracurriculars
1. Allow students to learn about climate change outside of the regular classes

Public Engagement: Community-Based Workgroup Recommendations

Evidence-Based Communications & Behavior Change

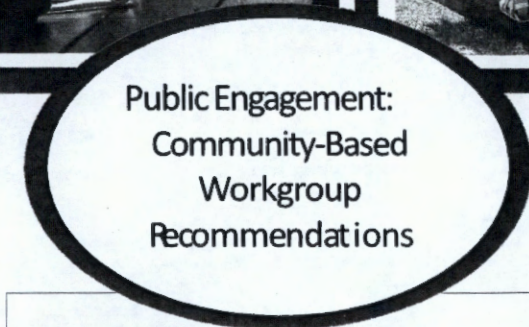**Recommendation 1: Increase and stimulate internal climate action communications across County divisions.**
1. County should host an internal government kick off climate change meeting to elevate the issue and demonstrate it's a county government priority that all agencies should support.
2. County should integrate climate change messages throughout the government to change internal behaviors and decisions.
3. Any legislation from county council should align and prioritize the work of the workgroups.
4. Establish an interagency climate change group with leadership from each division and comm leads; meet quarterly.

Recommendation 2: Showcase county's climate action activities and commitment via external communications
1. County should institutionalize a steady drumbeat of outreach from EVERY division.
2. Communicate county's progress in implementing climate action recommendations (Data & Results). Integrate climate change messages into county outreach.
3. Include climate change connection messages when there are emergency events.
4. As county implements emission reducing activities, publicize examples for community.

Recommendation 4: Prioritize communicating climate change solutions that require and benefit most from public stakeholder engagement and support.
1. Prioritize what benefits most from public engagement (using resources wisely).
2. Use the process flow to determine what actions are promoted in the campaign.

Recommendation 3: Develop and Use Evidence-based Communication Messages
1. Based on communication theory and effective practices, create a communication message box of core messages that should be shared in ALL external communications.
2. Create Communication Process flow (slide 19). The process flow will help to determine which recommendations will be highlighted in the campaign.
3. Core Messages include: Health, Local, Urgency, Legacy, and Economics. "Your health and our community will benefit from these changes!"
4. Establish additional core messages relevant to each County division.
5. Provide regular trainings on communications research and behavior change related to climate change for government communications officers.

Recommendation 5: Engage and facilitate action through ongoing external stakeholder actions (meet residents where they are)
1. Implement broad public relations campaign to encourage stakeholder engagement that supports broader and more significant urgent county changes.
2. Form a standing Climate Change Communication Commission or Committee of Climate Change Ambassadors from the community.
3. Develop and implement business outreach strategy.
4. Develop and implement strategies for various stakeholder groups.

Recommendation 6: Engage community as partners and support their needs so they will take action on a personal level and support Montgomery County activities.
1. Make the community feel seen, heard, and valued by placing humans and human needs at the center of the communication work.
2. Move away from extracting information from people to inform the plan and bring people in as partners so they contribute to and are a part of the plan.
3. "Implementation partners" could be youth (receiving SSL hours or college credit for their work), faith communities (receiving small grant), etc. - some "compensation" that shows value for time and commitment.
4. What do you need? ...and what climate action will help address that need. (focus on listening rather than telling so that people can see themselves in it).
5. Use the volunteer ambassadors to facilitate the dialogue in neighborhoods.
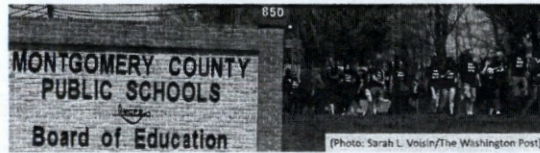
Racial Equity, Social Vulnerability and Community Partnerships

1. Build Strategic Partnerships to Meaningfully Engage Frontline / Underserved / Vulnerable Communities as Owners of Climate Action & Resilience Plan

a) Coordinate an inclusive and well-resourced process for feedback/participation from underserved and structurally vulnerable communities, so that community members have ownership in the evolving Climate Action and Resiliency Plan (CARP)
   - Meet communities where they are at and seek ideas and engagement that will advance ownership for underserved residents, and develop out CARP in a way that lifts up diverse cultures of Montgomery County rather than targeting outcomes that will perpetuate inequities and conformity
   - Recognize that specific goals of CARP will not align with community priorities, and an equitable CARP requires intersectional work at the County level & at MCPS that advances community priorities around housing, education, policing reform and other key issues
b) Engage key stakeholders for implementation of Climate Justice Conversations
c) Resource community members to engage and integrate their feedback with services and stipends - such as participation and transportation stipends, childcare, food
d) Develop network to sustain community outreach and engagement, inclusive of diverse Montgomery County communities and not limited to engaged and better-resourced residents. Possible names: Community CAN (Climate Action Network) or Community CARE (Climate Action & Racial Equity) Network
e) Build visibility campaign to communicate Montgomery County values and action on equity to residents
f) Develop metrics that demonstrate accountability to inform residents of climate goals, progress and benefits

2. Integrate Climate & Energy Justice Into County Systems

a) Integrate across functions (Hiring, Staff training, Procurement, Development, etc.)
b) Integrate across service areas (HHS, MCPS, DEP, Recreation, etc.)
c) Practices & processes integrate climate & energy justice (e.g. into equity training for county staff)
d) Seek informed partners
e) Recognize the County's own internal challenges (e.g. Information Silos) and external threats (e.g. federal/national anti-immigrant chilling effect) undermining engagement of diverse communities
f) Reform the development process in Montgomery County for sustainable outcomes that promote real community engagement & power, and improved environmental & health outcomes
g) Use a deep intersectional systems change approach, building on recent work toward dedicated progress on racial equity & social justice

MONTGOMERY COUNTY PUBLIC SCHOOLS Board of Education 850

(Photo: Sarah L. Voisin/The Washington Post)

3. Ensure Funding Sources for Climate Change work

a) Utilize traditional and innovative means
b) Allocate budget to programs (e.g. Racial Justice Office, Minority Initiatives) engaging communities on climate as well as programs within agencies that support decentralized equity work - without prioritizing funding to both resource County capacity and engagement of community members, we cannot achieve the systems change necessary to lead on an equitable energy future that benefits all and includes all Montgomery County communities
c) Create sustainable funding workgroup

- Ensure that the County selects at **least one consultant with energy justice expertise (through a racial equity lens)** in the next phase of this process

- **Launch efforts to reform the development process** through an equity lens -- calls for its own workgroup

- **Fund equity work** and prioritize expanding funding and exploring new funding opportunities.

- **Provide context and support for Racial Equity & Social Justice Office** to incorporate elements of climate & energy justice into intersectional training curriculum for all County Employees & Advisory Committee Members (key stakeholders in an inclusive process)

Highest near-term priorities include...

- **Start the process of deep community engagement and continuous feedback *now*** -- take the first steps toward working with equity partners on a well-resourced process for input and participation from underserved communities on the evolving Climate Action & Resilience Plan (CARP) and a resiliency study, and begin to connect engaged community members and key stakeholders through a first version of a Climate Action Network / Community CARE Network; engage Ethnic Advisory Committee Members, MORE Network, Racial Equity & Social Justice Committee

Photo: Neville Elder/ The Elders , People's Climate March.

Key Considerations

Photo: Interaction Institute for Social Change

Be Real about the Challenges for Vulnerable Communities

Montgomery County has made strong commitments to inclusive values in the current federal era. Despite efforts to date by the County to communicate these values, the federal government's policies and treatment have endangered many residents, including immigrants, communities of color, LGBTQ communities, and people with disabilities and chronic health conditions. The damage has been done. We need to be realistic about the challenges involved in engaging communities -- and that we must meet these challenges with a ferocious justice response. We are continuing on a journey to build a better Montgomery County for all, and we have a long way to go.

Seek Informed Partners

At least one consultant the County works with on the Climate Action Plan should have the following energy justice skills: a) an intersectional lens to community-driven solutions and a racial justice focus, b) an understanding of The Jemez Principles for Democratic Organizing; and c) a background in the fundamentals of environmental justice and energy burden -- including the impacts of extractive development and pollution on frontline communities, and the higher percent of income low-income families must spend on utility bills

Work Intersectionally

People of color in Montgomery County represent close to 50% of the County's population, and experience significantly worse outcomes across many areas of policy. To pursue progress in climate and energy equity, the County must move forward from institutionalizing racial equity and social justice towards intersectional policy improvements that will target closing these gaps while bettering the lives of all residents. See the statistics and recommendations from the Racial Equity Profile.

Target Communications and Benefits Appropriately

The County should target / tailor communication efforts and benefits appropriately to differing audiences. Underserved community members should be primary beneficiaries and invited to learn how changes will benefit them and only asked to participate if resourced to do so. Community members with comparatively more privilege and resources should be given opportunities to step up and contribute to a more equitable and sustainable Montgomery County.

Engaged in a Well-Resourced, Inclusive Process

The County must prioritize near-term investments in funding deep equity work, including resourcing community members to engage in an inclusive process on evolving the Climate Action Plan in development.

Systems Change is Key...

to building a racially and socially just Montgomery County that leads on decisive, game-changing action to address the climate crisis, mitigate the impacts, protect our environment, and improve the health of our communities.

Don't Silo!

Silos in government and in our community challenge our collective ability to achieve real progress. The County must continually seek to identify and remove barriers to communication and collaboration

Transportation: Electric and Alternative Vehicles
Community-Based Workgroup Recommendations

Personal Electric Vehicles (EVs)

Goal 1 - Minimize use of existing Internal Combustion Engine (ICE) vehicles via accelerated decommissioning

1. Provide compelling financial incentives to get rid of ICE vehicles
2. Give special attention and incentives to financial considerations for low-income residents
3. Promote lower Vehicle Miles Traveled (VMT) of ICE cars by making driving ICE more expensive, taking into account equity concerns (with waivers that would be phased out over time)

Goal 2 - Decrease purchases of new and used ICE vehicles

1. Provide financial disincentives for purchase of high Greenhouse Gas (GHG)-emitting vehicles
2. Pass legislation, regulation, and/or ordinance discouraging or restricting sale and/or registration of ICE vehicles

Goal 3 - Speed transition to EVs by incentivizing EV purchases

1. Improve financing options and incentivize via financing
2. Eliminate or reduce county fees and/or taxes when purchasing EVs
3. Provide & publicize non-financial perks to EV owners
4. Leverage potential partners (who stand to benefit financially with increased EV adoption) to incentivize purchases
5. Provide increased financial incentives for low income residents, especially those dependent on cars

Goal 4 - Increase overall public acceptance and desirability of EVs

1. Educate general public to transform views and expectations on EVs as obvious choice in car sales
2. Improve/demystify EV/ZEV car-buying experience
3. Develop cadre of trained professionals to assist with these goals
4. Mandate or incentivize dealerships to promote EVs
5. Increase ZEV options for public if/when technology develops
6. Ensure that county operations convey preparedness and confidence

Goal 5 - Set clear targets and benchmarks to gauge success

1. Establish oversight group to identify and reach consensus on targets, gauge progress, create and modify strategies

Charging Network

Goal 6 - Increase access to public charging stations

1. Identify target number of charging stations
2. Commit to significantly increasing number of publicly available chargers
3. Increase access to charging stations in county govt buildings & county-owned parking lots

Goal 7 - Increase installation of chargers, and EVSE chargers in particular, at homes & businesses

1. Reduce barriers to EVSE installation
2. Offer financial incentives to install charging stations in existing buildings
3. Align real estate sales and rental required procedures to expedite expanded infrastructure
4. Ensure every new building in the county is EVSE-ready
5. Ensure EV owners in existing apartment buildings have access to charging

Goal 8 - Increase access to charging at the workplace

1. Identify & implement incentives

Goal 9 - Expand public access via innovative placement and providers

1. Ensure that all residences have access to charging within a set distance
2. Increase ease of commuter charging
3. Ensure emergency charging is available via mobile chargers
4. Use emerging/innovative steps in latter half of the 21st century

Goal 10 - Increase access to charging for out-of-town travelers

1. Require all temporary lodging (hotels, etc.) provide EVSE access

Goal 11 - Develop and optimize partnerships to achieve goals

1. Establish productive working relationships with appropriate partners (including clean energy providers) to reach consensus, identify areas of mutual benefit & achieve economies of scale
2. Work with clean energy providers to charging potential of clean energy sources

Goal 12 - Increase consumer confidence via education and outreach

1. Ensure that consumers & users are well-informed re: charging infrastructure & have high degree of confidence that charging is available to meet needs

Alternative Vehicles

Goal 13 - Increase the use of less energy-intensive non-traditional vehicles

1. Promote and facilitate broader use of smaller, less-energy-intensive, non-traditional vehicles

Transit

Goal 14 - Ensure all County public transit buses are electrified

1. Accelerate transition to 100% electric transit buses - either battery electric or water-based hydrogen fuel cell
2. Research and act upon innovative practices to minimize County costs
3. Track and ensure accountability on progress

Goal 15 - Electrify all first-mile/last-mile transit

1. Ensure that all first-mile/last-mile (on demand) transit is electric

Goal 16 - Ensure electrification of taxi and ride-share vehicles

1. Establish goals and deadlines and implement strategies to achieve 100% electrification of taxi fleet and car sharing services

Goal 17 - Ensure all MoCo school buses are zero-emission

1. Accelerate adoption of EV School Buses
2. Use innovative measures to expand use and reduce net cost
3. Track and ensure accountability on progress

Goal 18 - Ensure that all private and other buses operation in the county are zero-emission

1. Ensure that all transit vehicles belonging to other entities are ZEV

Medium & Heavy-Duty Vehicles

Goal 19 - Expand the use of clean fuels in medium- and heavy-duty trucks and other commercial vehicles

1. Require full electrification of vehicles as where technologically feasible
2. Minimize emissions of vehicles until electrification is viable
3. Encourage electrification (battery or water-based fuel cell) of heavy-duty vehicles where technology is not currently viable

County Fleets

Goal 20 - Minimize barriers to electrifying county fleet

1. Ensure charging infrastructure is adequate

Goal 21 - Electrify county automotive (and similar) fleet

1. Accelerate transition of county-owned automobiles and other vehicles to all-electric
2. Reduce size of county administrative fleet

Goal 22 - Use contracting requirements to speed and expand transition to electric vehicles

1. Use contracting requirements (in the permitting bid process) to specify electric vehicles where possible, and low-emission practices where not yet possible

Other Fleets

Goal 23 - Facilitate and simplify process for fleet purchase of EVs

1. Demonstrate financial sense of EVs to fleet managers/owners
2. Streamline charger requirements

Goal 24 - Provide financial incentives for fleet purchase of EVs

1. Incentivize electrification via taxes & fees
2. Provide direct financial incentives
3. Incentivize via preferential treatment in purchasing

Goal 25 - Use targeted legislation to achieve goals

1. Mandate fleet transition to EVs

Advocacy

Goal 26 - Ensure that state policies encourage synergy with MoCo programs

1. Work with Maryland legislature to enact policies and legislation that incentivize electrification
2. Advocate for legislation to rid grid of carbon-based energy sources in order to achieve carbon-free charging
3. Work with Public Service Commission (PSC) to allow policies that incentivize electrification
4. Advocate for Maryland to meet or exceed CAFE (fuel efficiency) standards for most progressive US state

Goal 27 - Ensure that interstate policies encourage synergy with MoCo programs

1. Work with legislators from surrounding states to achieve regional GHG reduction goals

Goal 28 - Ensure federal policies encourage synergy with MoCo programs

1. Advocate for strong Federal support, subsidies, and technology development to spur EV adoption

Transportation

Walkable and Bikeable Communities

Goal 1 - Prioritize planned bicycle and pedestrian projects

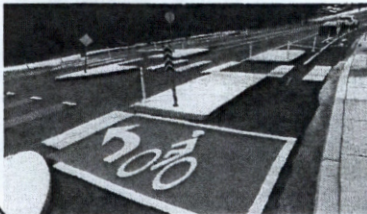1. Implement Bicycle Master Plan and Pedestrian Master Plan projects

Goal 2 - Ensure low-stress infrastructure exists for cycling and walking

1. Prioritize projects that achieve a low-stress cycling/walking network
2. Improve wayfinding for bicycling routes
3. Ensure resiliency in the face of increased extreme weather events

Goal 3 - Enhance Safe Routes to School activities and school zone infrastructure

1. Prioritize cycling/walking to school
2. Instruct all elementary school students how to ride a bicycle and be safe pedestrians
3. Increase multimodal transportation options for students

Goal 4 - Modify roads to better serve non-motorized transportation needs

1. Identify roads with high volume of car traffic to be put on a 'road diet' - reducing lanes, increasing sidewalk capacity, adding bike lanes, adding stormwater/rain gardens, tree canopy, lane changes during rush hour, traffic calming devices
2. Repurpose space that currently serves vehicles to be used by non-motorized modes
3. Modify traffic flow

Goal 5 - Ensure availability of non-motorized vehicles.

1. Expand and regulate dockless transportation options

Goal 6 - Familiarize citizens with bicycling and walking through outreach and transportation demand management

1. Prioritize cycling/walking to school
2. Instruct all elementary school students how to ride a bicycle and be safe pedestrians
3. Increase multimodal transportation options for students

Photograph: Evy Mages

Transportation Demand Management

Goal 1 - Increase Public Transit Ridership

1. Improve transit services
2. Increase availability of transit benefit programs to reduce the cost of transit

Goal 2 - Implement Improvements to Auto-Based Infrastructure to Support GHG Goals

1. Retrofit existing roads and right-of-ways (ROW)s to obtain optimal efficiency
2. Retrofit existing parking to support goals

Goal 3 - Adopt Policies to Support Reduction in Vehicle Use

1. Adopt policies to reduce auto, TNC, and truck use
2. Adopt policies to reduce road construction

Goal 4 - Adopt Policies to Promote Supportive Land Use & Development

1. Adopt policies to promote infill development & use of existing transit resources
2. Adopt policies to increase provision & use of non-auto options

Goal 5 - Implement Community-Wide Climate Awareness Outreach & Incentives Strategy

1. Create additional touchpoints for carbon emission awareness

Goal 6 - Additional Transportation Demand Management Ideas That Are Not Covered Above (That Will Reduce GHG Emissions Significantly)

1. Carbon Tax