Prince George's County Department of the Environment

CLIMATE PRIORITIES

A Vision for RESILIENCE in Post-Pandemic Prince George's County







Climate Priorities Briefing 2/15/22

- The Urgency of Now
 - Nithin Gudderra, Oxon Hill High School Junior
- Climate and the County
 - Mary Abe, Department of the Environment
- About the Plan
 - Dawn Hawkins-Nixon, Department of the Environment
- Opportunities in Climate Action
 - Takisha D. James, Mayor of Bladensburg
 - Donald Belle, Member of the Climate Action Commission, PGCPS

• County Leadership Call to Action

- Gary Allen, Maryland Forestry Foundation
- Andrea Crooms, Director of Department of the Environment



THE TIME IS NOW, AND THE NEED IS URGENT

Nithin Guderra Junior in the Science & Technology Program at Oxon Hill High School

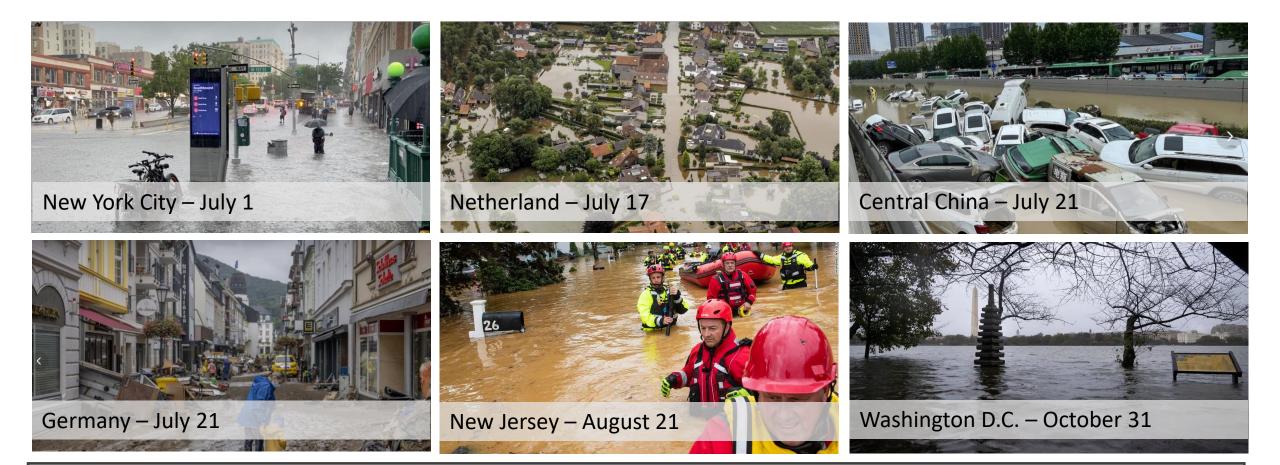
Nithin Gudderra, Prince George's County Resident, Student of Oxon Hill High School

"The fate of our world depends on the leaders around the world today. As a young person, it often feels like those who have contributed the most towards climate change really don't care about the implications it has on our futures. We are going to face worse consequences, worse than what we face presently. I'm unsure what my future will look like; I want to have children, but in a few years even that idea may be morally and ethically wrong.

Taking a look around the world, California is burning, sea levels continue to rise and the oceans continue to warm as glaciers melt. The fact of the matter is that we, people of all ages today; are responsible for protecting our world and ensuring that there is a safe future for the billions of people that come tomorrow. I can't pass laws and policies, but I can and will continue to use my voice to advocate and fight for a better and brighter future for all because I care.

Now, for those who read this, do you care?





Climate Impacts Are Already Here

2021, A Summer of Floods

If we don't stop climate change now, your predicted future, based on your current age Your life will be significantly altered by climate change 15% Impacts growing with each Severely and fully impacted by global passing year, you will experience extremes of severe weather warming. Social unrest, 12% famine, wars, mass Will live to experience catastrophic extinction, food and Will live to see changes. Economic collapses, water wars, massive global economic Will live though increasing social famine, mass migration, mass economic and 9% failures, start of unrest, economic downturns as extinction of species, government failures. mass extinction, financial losses mount from unprecedented storms, heat waves. unprecedented increase of catastrophic events. storm events 6% Finance of pensions, safety nets at brink of collapse. **Current Age: Current Age: Current Age: Current Age:** 3% 0-15 Years **16-34 Years** 35-54 Years 55-85 Years 0% 0-4 35-44 45-54 55-64 65-74 75-84 85+ 5-9 9-14 15-17 18-20 21-24 25-34

Prince George's County Population by Age*) *2019 Census- 909,327 Residents

Stage of Life by Year 2050 Representing 68 % of Prince George's County's Current Population:

26% of current population: This is most people in leadership and much of workforce today. You will be 75-85+, elderly on fixed incomes, physically very vulnerable to climate hazards.

22% current population: This is me. My siblings, schoolmates, your sons, and daughters. We are in positions of power and middle to late career. We have older kids and caretaking the elderly, which would be most of you now in leadership.

14% current population: <u>My Parents, your younger brothers, sisters, friends</u> who are hitting retirement age, beginning to rely more on social infrastructure and a fixed income.

6% of current population: Today's newborns, infants, toddlers, and your grandchildren. Now adults with families, they are assuming leadership roles and becoming the primary tax base for the future and current needs of society.



We Must Act Now While WE Still Have a CHOICE

Without immediate changes, over 68% of the current population of our County will live to experience severe impacts from climate change.



CLIMATE ACTION PLAN

DRAFT PLAN AS PREPARED BY

PRINCE GEORGE'S COUNTY CLIMATE ACTION COMMISSION

OCTOBER 15, 2021





CLIMATE AND THE COUNTY Where we are, and where we need to go

Mary Abe Natural Resources and Resiliency Programs Lead, PGC Department of the Environment

Our County is Experiencing More Frequent and More **Intense Events**

Landslide

from

homes

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cause	
widespread	
power	
outages and	
offline water	
pumps	

saturated soils caused **Drought and** water main excessive and sewer heat cause failures, 20+ uptick in brush fires evacuated

Prolonged heat wave and extreme temperature s, at least one heatrelated death in the County

	2013		2016		2018		2020
2012		2014		2017		2019	0374

Failed water main amid heat wave caused 150,000+ residents in MD to lose water for days

Record Heavy snowfall precipitation from Winter event caused **Storm Jonas** extensive caused flooding, power opening of outages and sinkhole, at least one lighting death in the strikes County

Heavy precipitation cause extensive flooding and property damage, vehicle rescues



Inaction is no longer an option



A CLIMATE SECURITY PLAN FOR AMERICA

A PRESIDENTIAL PLAN FOR COMBATING THE SECURITY RISKS OF CLIMATE CHANGE



possibility of many feet of sea-level rise and coastal cities that may need to be abandoned; hundreds of millions of displaced persons around the world; billions of new people globally requiring more energy, more food, and more water, and a climate that makes that more difficult to accommodate; new weather patterns, a million lost species, and major disruptions to natural resources around the world; and potentially wide-reaching changes in the global order.



September 2019

Edited by John Conger, Francesco Femla and Caltlin Werrell

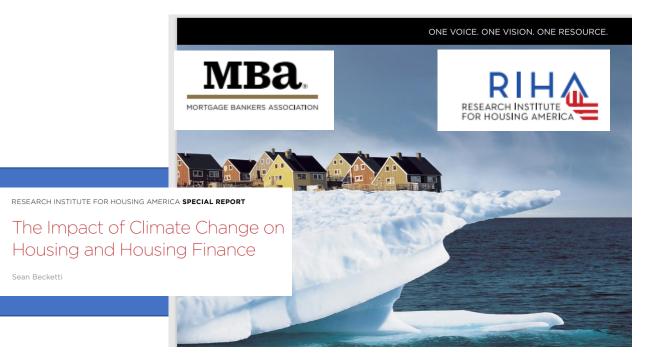
CENTER FOR Chaired and Elliott School of partnership International Affairs THE GEORGE WASHINGTON UNIVERSITY

The Center for Climate and Security | 1025 Connecticut Ave., NW - Suite 1000 - Washington, DC 20036

Insurance companies, major banking institutions, creditors, relators, and more are beginning to heavily weigh climate risks as a factor for approving investments.

From Mortgage Bankers Association

RIHA's study underscores the need for the mortgage industry to better address the growing impacts of climate change and prepare for increased reporting to regulators and investors on the quantitative estimates of climate-related risks. ⁹⁹



From BlackRock

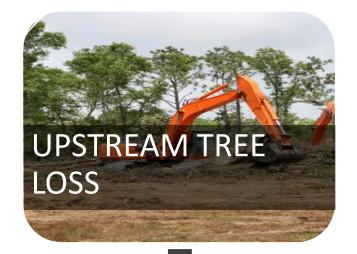
We believe climate risk is investment risk. That is why we are incorporating it into our portfolio design, as part of a series of actions BlackRock is taking to prepare for a net-zero world.

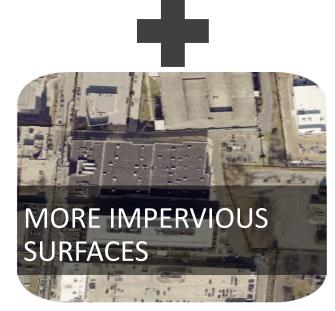
BlackRock Corporate Sustainability

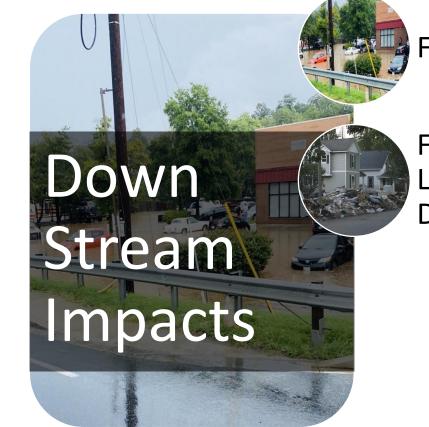
Launching climate-aware return assumptions

We believe climate risk is investment risk. That is why we are incorporating it into our portfolio design, as part of a series of actions BlackRock is taking to prepare for a net-zero world.









Flooding

Financial Loss / Social Distress

Financial Loss and Claims

- 1. Climate Risk
- 2. Investment Risk
- 3. Health Issues
- 4. Inequity
- 5. Lost Economic

Opportunities

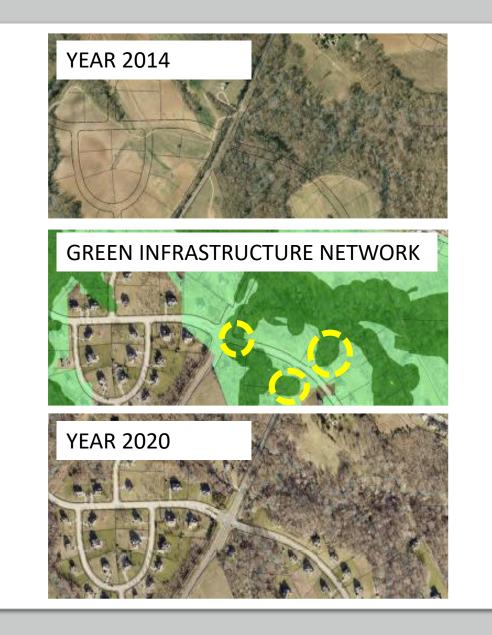
In a climate altered future, for a thriving Prince George's County, we must change our relationship with land and nature.

Land development choices are squarely within our local sphere of control to reduce our contributions to global warming and build resilience.

Transformational Leadership is Needed

PLAN 2035 could be an excellent foundation to jump start our transition to a carbon neutral Prince George's County

But for sustainable land use policy to work, we must first follow it.

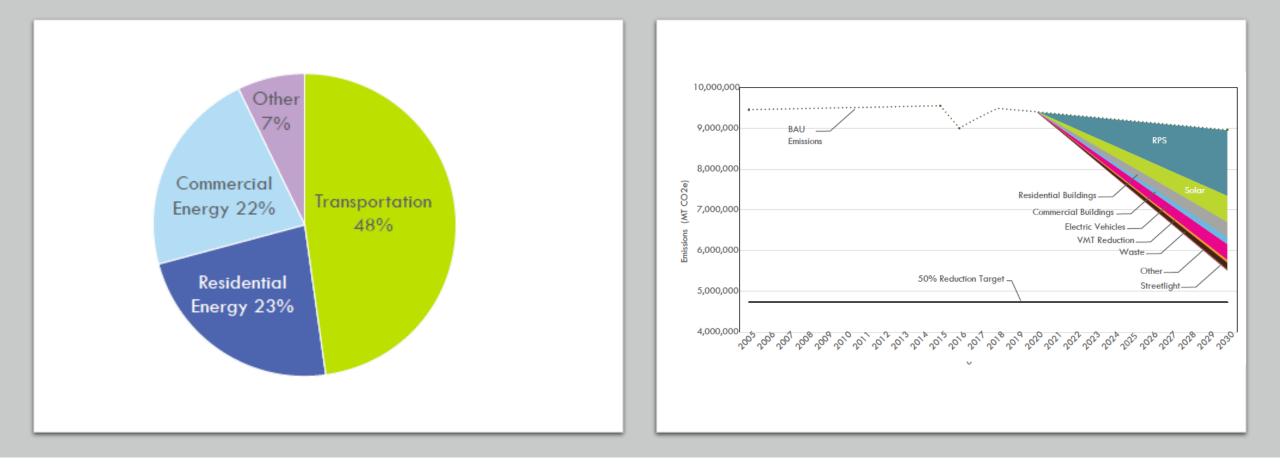


So how is land use a climate change contributor? <u>Answer:</u> Forests, wetlands, riparian buffers, and streams replaced by lawns, scattered trees, piped under streams, impervious roads, sidewalks, roofs, and parking lots results in:

- Increase temperatures
- Increased runoff
- Carbon released from soil disturbance,
- Increased air and water pollution from loss of natural filters
- Loss of habitat

For no cost to us, forests, riparian buffers, streams(natural resources) serve as natural sponges absorbing and filtering water, cleaning the air, cooling the temperatures, sequestering carbon, and providing critical habitat.

Natural resource areas will be increasingly critical for our resilience to extreme precipitation events which will only increase in frequency, duration, and intensity as our climate changes.



Can we achieve a 50% GHG reduction?

Prince George's County can get most of the way there, but we need to advocate for State action for the last mile.

RECOMMENDATIONS

Dawn Hawkins-Nixon

Chair of the Climate Action Commission, Associate Director for Sustainability Division, PGC Department of the Environment



- Win-win solutions. Opportunities to both reduce emissions and advance resilience high-yield (or win-win) solutions were prioritized throughout the planning process, and they deserve special emphasis in the plan.
- Leading by example. Opportunities for County government to help others to take action and help speed the adoption and acceptance of new policies and practices.

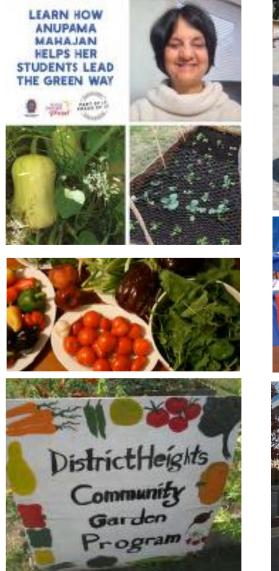


• Equity and inclusion. Opportunities to ensure inclusivity and equity in developing and implementing climate actions.

A Call for Transformational Leadership and Change

#1 Climate Leadership
#2 Community Health
#3 Transition to Renewable Energy
#4 Clean Transportation
#5 Green Business Development
#6 Residential Resilience
#7 Justice and Equity
#8 Public Engagement













OPERATIONAL- COUNTY ACTIONS

Actions needed to bring the other recommendations to life.

CO-1 Build internal capacity to plan and implement climate action

CO-2 Lead by example and ensure transparency in climate action

CO-3 Ensure meaningful, equitable community engagement

CO-4 Commit to clean and renewable energy

CO-5 Strengthen land use regulations to better align individual land use decisions with State and County policies related to smart growth, natural resource conservation, and green infrastructure



MITIGATION

These immediate (1-3 year) recommendations represent our contribution to preventing the worst effects of climate change, **our part in the global solution.**

Power County operations with 100% renewable energy					
Increase deployment of solar PV in the residential and commercial sectors by expanding partnerships, incentives, and financing solutions					
Accelerate deployment of resilient energy systems					
Accelerate deployment of EVs and charging infrastructure by County and other public agencies					
Develop a community-wide EV deployment strategy					
Support telecommute policies to reduce VMT and enhance County resiliency					
Increase investment in Activity Centers					
Accelerate implementation of deep energy retrofits and community-wide efficiency and weatherization efforts					
Establish building benchmarking requirements and energy and water consumption standards					
Expand County waste reduction and diversion efforts					
Enact and enforce "No Net Loss" tree conservation regulation and policy to maintain and expand street tree canopy and forest as a land cover					



Why our Code of Ordinance must now be significantly revised and cyclically updated here forward?

<u>Answer:</u> Rainfall numbers not only determine how stormwater systems are built, but also roads, highways, bridges and housing developments. With ongoing climate change, our code does not address rapidly escalating climate induced precipitation and extreme weather events.

Due to the increasingly unpredictable storm events, the CAP also recommends reviewing, revising, and adopting new updated requirements every three years.

This will impact floodplains limits as our regulatory design storm are revised to reflect " a new normal". This will also impact required minimum riparian buffers, setbacks, stormwater management, and storm drain systems.

ADAPTATION/ RESILIENCE

These immediate (1-5 year) recommendations represent our contribution to preventing the worst effects of climate change, **our part in the global solution.**

Integrate climate resilience criteria into long-range County plans, policies, and CIP programs by 2026				
Implement climate resilient stormwater management and expand flood mitigation programs				
Prioritize preserving and restoring natural resource areas and agricultural open space to reduce flood risk				
Evaluate and address climate risk to dams and levees				
Require community-wide climate resilient green infrastructure				
Expand information and assistance to the public regarding Impacts of climate risks and opportunities to implement climate actions				
Reduce exposure of vulnerable populations to extreme heat				
Establish resilience hubs to serve the needs of vulnerable communities				
Adopt codes, standards, and practices to support climate- ready green buildings and development				
Promote a healthy food system supported by low-carbon, regenerative agricultural practices				



OPPORTUNITIES & VISION *The County we want to be*

Mayor Takisha D. James Member of Climate Action Resident Advisory Group & Mayor of Bladensburg

> **Donald Belle** Member of the Climate Action Commission, PGCPS

Climate Change CHOICES: What will our lives be like for 68% of Prince George's County Population by Year 2050?

"With failure to act by the mid-2020's, climate change worst case scenario has come to pass. The air is polluted, making you cough. You have to check the air quality before even opening a window. When you do go outside, your eyes water and you have to wear a mask — on bad days, a high-tech mask, that is if you can afford it. Depending where you live, the temperature can be as hot as 140 degrees Fahrenheit for more than a month each year. In public restrooms, you have to pay to use water. "

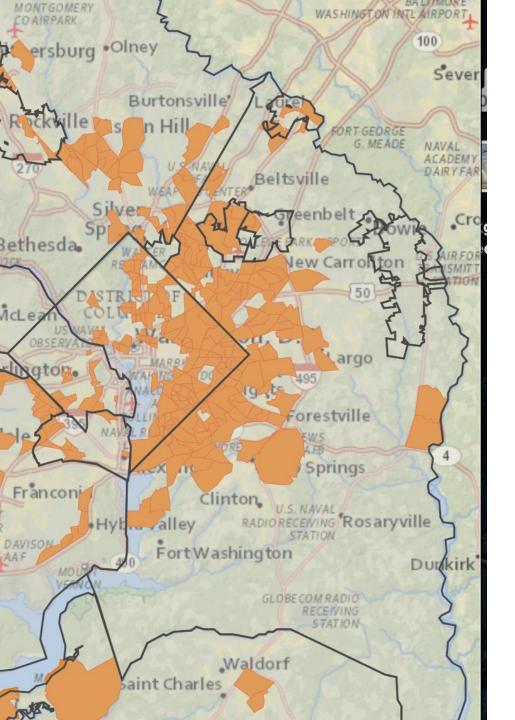
OR

"By decarbonizing our economy rapidly, now down to near zero by mid-century, our plant is now more livable planet and with a vibrant economy at the same time. Our city streets are filled with trees and fewer cars and Americans can travel via high-speed electric railroads. Instead of fossil fuels, countries now rely on things like renewable energy (wind, solar, geothermal and hydro), with artificial intelligence in machines and appliances making everything more energy efficient. The air is even cleaner than what it had been since before the Industrial Revolution-the catalyst for the start of our earth's climate change. "

From: <u>The Future We Choose: The Stubborn Optimist's Guide to the Climate Crisis-</u> Christiana Figueres & Tom Rivett-Carnac

Generational Opportunity to Thrive and Prosper





Prince George's County is Particularly Vulnerable







Office Directory > Board of Education > Climate Change Action Plan (CCAP) Focus Work Group

Climate Change Action Plan (CCAP) Focus Work Group



STATE UNIVERSIT



OUR EDUCATIONAL INSTITUTIONS: Critical for a Prosperous and Equitable Carbon Neutral Future



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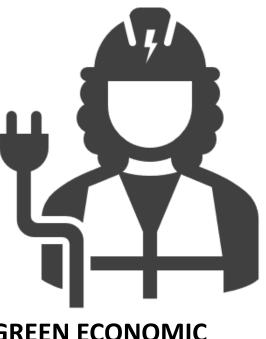


COMMUNITY RESILIENCE AND INFRASTRUCTURE

Prince George's Proud means investing in infrastructure and long-term value, transforming land use, creating resilience hubs, and making green space and multi-modal transportation available.

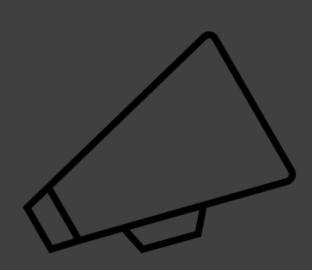
RESIDENTIAL RESILIENCE

Protecting our homes from Climate Impacts- flooding, extreme heat and lowering our energy costs



GREEN ECONOMIC DEVELOPMENT

Building the right policy environment and developing and retaining the workforce of the future to become the Silicon Valley of the Green Economy



CALL TO ACTION The role of Leadership in Climate Action

Gary Allen Climate Action Commissioner, President of Maryland Forestry Foundation, Resident

> Andrea Crooms Director of PGC Department of the Environment

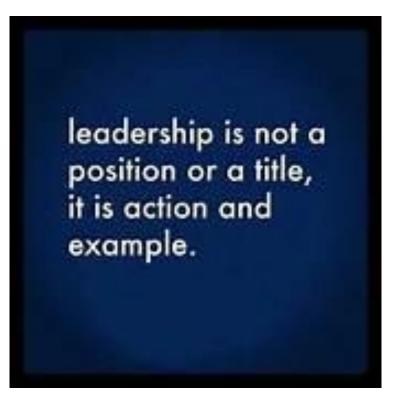


ACTION REQUIRED Don't let this report sit on a shelf and gather dust

AFFIRM THIS COUNTY CAN

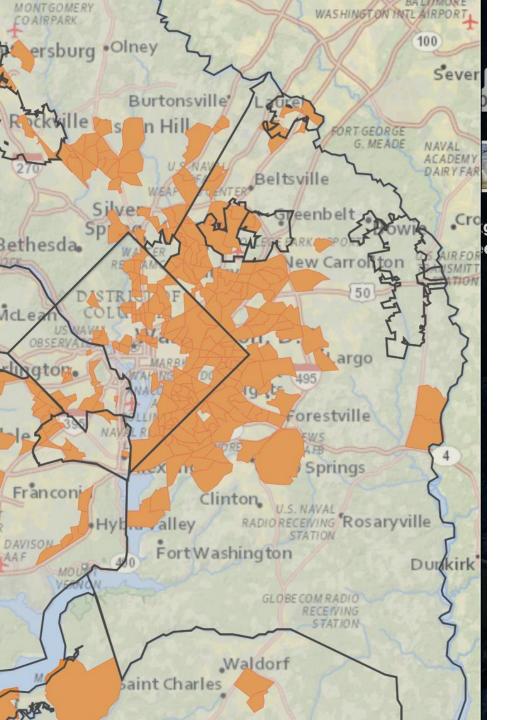
⁶⁶PEOPLE MAY DOUBT WHAT YOU SAY, BUT THEY WILL WHAT YOU D ~LEWIS CASS







PERSONAL LEADERSHIP



LEGACY ISSUE

- Prince Georges County takes pride in being the nation's largest minority led county. Every recent regional survey the data shows climate change has greater adverse impact on citizens of color!
- The actions recommended today will define the quality of life for the next generation of our residents

Bold Action is Required



We Cannot Afford to Fall Behind

State and Regional Goals

- Maryland Greenhouse Gas Emissions Reduction Act
 - 40% emissions reductions below 2006 by 2030 with stretch goal of 50% reductions
- MWCOG Board Resolution R45-2020
 - 50% emissions reductions below 2005 levels by 2030
 - Becoming a Climate Ready Region by 2030
 - Incorporate equity principles and expand education on climate change to members

Jurisdictions Already Leading:

- State of Maryland
 - Frederick County
 - Montgomery County
 - City of Bowie
 - City of Frederick
 - City of Greenbelt
 - City of Rockville
 - City of Takoma Park W
- District of Columbia
- Metropolitan
 Washington Council of Governments

- Virginia Commonwealth
 - Arlington County
 - Fairfax County
 - Loudon County
 - Prince William County
 - City of Falls Church
 - City of Alexandria
 - Washington Metropolitan Area Transit Authority
- Washington Suburban Sanitary Commission



"Prince Georgians are ready to tackle climate change, together." " I am Prince George's Proud to say that because of the efforts of the Climate Action Commission, we have numerous tools to protect our community from the impacts of a changing climate, and lead the transition to a carbon-neutral, resilient, and climate-ready future.

With the release of this report, I have tasked the Department of Environment, working in concert with leaders across County government, to integrate climate action and resiliency planning across our government portfolio, enabling our County to better deliver services and make a difference in the lives of all our residents. "

Ingela alsobrooks

ANGELA ALSOBROOKS Prince George's County Executive

