MARYLAND COMMISSION on **CLIMATE CHANGE**

Dr. Suzanne Dorsey, Commission Chair



Welcome & Housekeeping



Keep microphones muted



Chat has been disabled



Use Q&A capabilities to ask questions, which will be addressed as time allows at the end of the presentation

Dr. Suzanne Dorsey

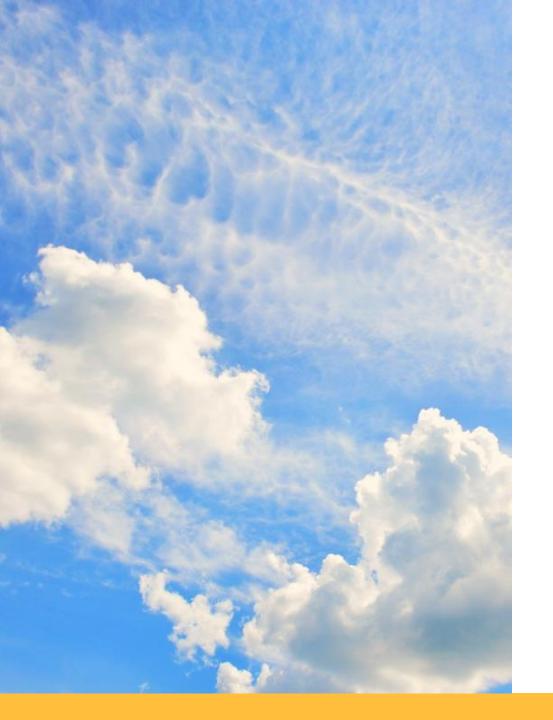
MDE's Deputy Secretary

Chair of the Maryland Commission on Climate Change

Previous Experience

- MDE Assistant Secretary
- Executive Director of the Harry R. Hughes Center for Agro-Ecology at the University of Maryland
- Executive Director of the Bald Head Island Conservancy and Smith Island Land Trust
- Commissioner of the North Carolina Division of Coastal Management
- Professor at the University of North Carolina at Wilmington and Salem College





CLIMATE CHANGE IN MARYLAND

Dr. Suzanne Dorsey

Senator Paul Pinsky

Representing the 22nd District of Prince George's County in the State Senate

Chair of the Education, Health and Environmental Affairs Committee

Main Sponsor of Climate Solutions Now Act

Member of Maryland Commission on Climate Change

Previous Experience

- State Legislature Serving in Senate since 1995
- High School Education Specialist and Consultant



Kim Coble

Executive Director of the Maryland League of Conservation Voters

Co-Chair of the Maryland Commission on Climate Change, Co-Chair of the Mitigation Working Group

Previous Experience

- Chief Operating Officer at US SIF: The Forum for Sustainable and Responsible Investment
- Vice President of Environmental Restoration and Protection
- Maryland Director of the Chesapeake Bay Foundation



Michael Powell, Esq.

Member of Gordon Feinblatt's Energy & Environmental Practice Group

Member of the Maryland Commission on Climate Change, Co-Chair of the Mitigation Working Group

Previous Experience

 Principal Counsel for the Maryland Department of the Environment





MARYLAND CLIMATE CHANGE COMMISSION

Kim Coble

Maryland Commission on Climate Change Purpose

Advise the Governor and General Assembly on ways to:

- mitigate the causes of,
- prepare for,
- and adapt to

the consequences of climate change



Maryland Commission on Climate Change History

2007 Commission was originally established in 2007 through an executive order

The Commission produced a climate action plan that was the catalyst for the original Greenhouse Gas Reduction Act.

A second executive order expanded the scope of the Commission and it's membership

The Commission was codified into law

The Commission is an independent, statutory body and all meetings are open to the public

Maryland Commission on Climate Change Membership

- 29 Representatives from state agencies, the legislature, business, and non-profit organizations
 - Chair, 3 Co-Chairs
 - Standing Members
 - Senate President Appointed Members
 - House Speaker Appointed Members
 - Local Government Appointees

Maryland Commission on Climate Change Annual Reports

- Since 2015, the MCCC has produced an annual report summarizing the issues it considered that year and presents recommendations to the Governor and Maryland General Assembly.
- The 2021 Annual Report presented 54 recommendations.

Maryland Commission on Climate Change Workgroups

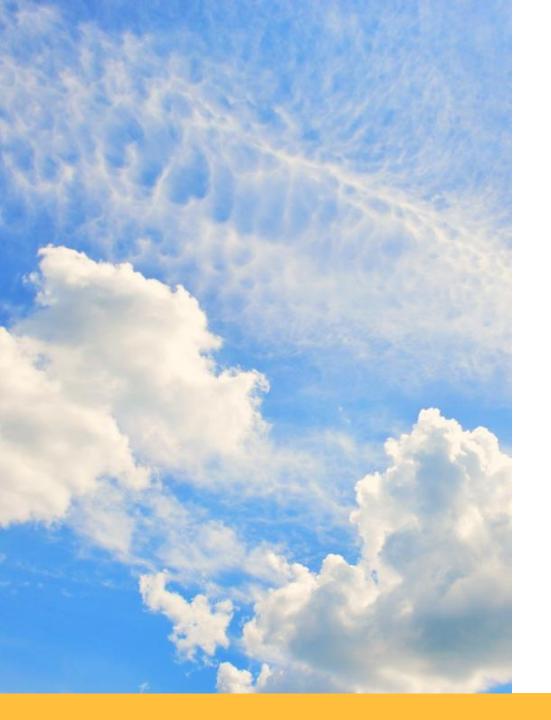








Scientific and Technical Working Group



CLIMATE SOLUTIONS NOW ACT

Senator Paul Pinsky

Climate Solutions Now Act of 2022 (SB528) Climate Goals



- Reduce GHG emissions by 60% by 2031, baseline of 2006
 - Dept must finalize plan by December 31, 2023
- Reach net-zero emissions by 2045
 - Final Plan by December 31, 2030
 - Revised plan December 31, 2035

Climate Solutions Now Act of 2022 (SB528) Building Emissions



- Starts a 15 month planning process to electrify all new residential and commercial buildings
 - Explicitly states the intent of Md General Assembly is to electrify new and existing buildings at the end of study
- Requires that by 2030, 75% of electricity procured for use in state facilities comes from no- or low-carbon sources

Climate Solutions Now Act of 2022 (SB528) Building Emissions con't



- Development of a Building Energy Performance Standards for large buildings (> 35,000 sq feet) to achieve 20% reduction in GHG by 2030 and net zero by 2040
- Creation of Climate Transition and Clean Energy Hub a clearinghouse for info and Technical Assistance on reducing GHG from Buildings

Climate Solutions Now Act of 2022 (SB528) Transportation



- After 2025 requires purchase of electric school buses as funding (federal infrastructure funds) becomes available
- Establishes an electric school bus pilot program based on partnership between utilities and school districts
- Requires the electrification of the state vehicle fleet by 2031 and state light-duty vehicle fleet by 2036 and calls for an evaluation of charging infrastructure needs

Climate Solutions Now Act of 2022 (SB528) Environmental Justice



- Exempts community solar from property taxes if it provides more than 50% of the energy to low and moderate-income (LMI) households
- Report to assess state funds spent reducing GHG & co-pollutants and the percent of funding directed to disproportionately affected communities
- Creates a process to identify impacted communities and develop strategies to address impacts; includes public participation
- Requires that at least 40% of the newly created Climate Catalytic Capital Fund monies go to LMI communities

Climate Solutions Now Act of 2022 (SB528) Labor



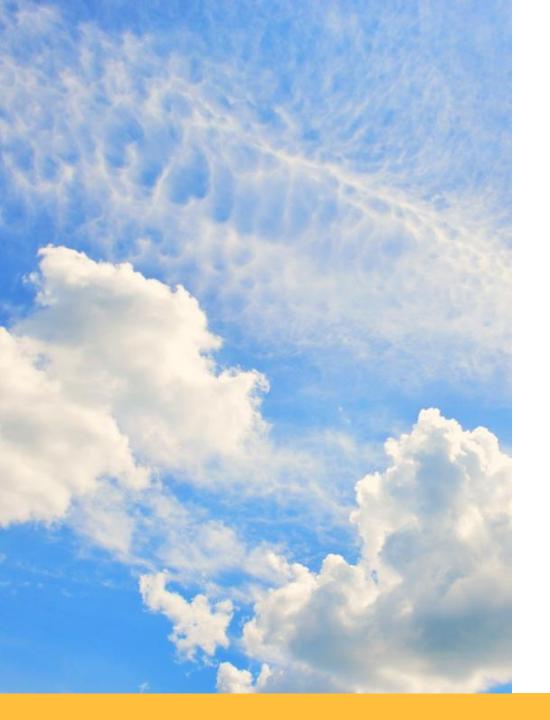
- The federally funded portion of utility projects must
 - pay the prevailing wage and benefits
 - offer health care and retirement benefits
 - participate in an apprenticeship program
 - recruit Maryland workers
- Creation of a "Just Transition" workgroup to address potential job loss and creation

Climate Solutions Now Act of 2022 (SB528) Other Important Aspects

- Creates Climate Catalytic Capital Fund and allocates resources to finance innovative clean-energy strategies and complement private investment
- Creates 3 workgroups in addition to Just Transition:
 - Energy Industry Revitalization
 - Energy Resilience and Efficiency
 - Solar Recovery and Reuse
- Increase percentage of utilities investment in energy efficiency starting in 2022
- Calls for an annual assessment and report of electric distribution system support of state climate goals

Climate Solutions Now Act of 2022 (SB528) Other Important Aspects

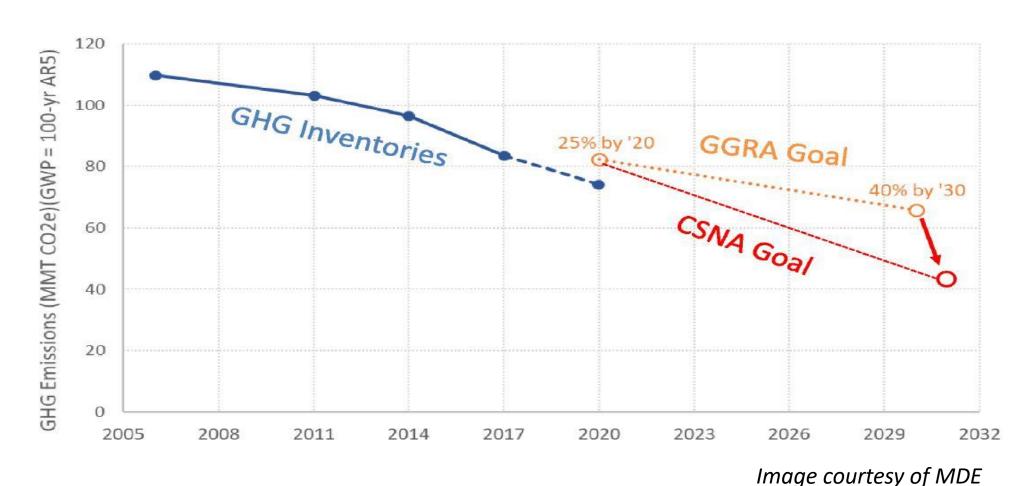
- Expands the Chesapeake Conservation Corps to engage more young people of color to work to reduce and mitigate greenhouse gas pollution in disproportionately affected communities
- Funding for Healthy Soils Program
- State shall coordinate with utility providers to apply for and access federal funds, including funds from IIJA
- Incorporate methane emissions in emission reduction plans
- Agencies long-term planning consider climate impacts and funding and impact and funding to disproportionately impacted communities



NEXT STEPS AND FUTURE TOPICS

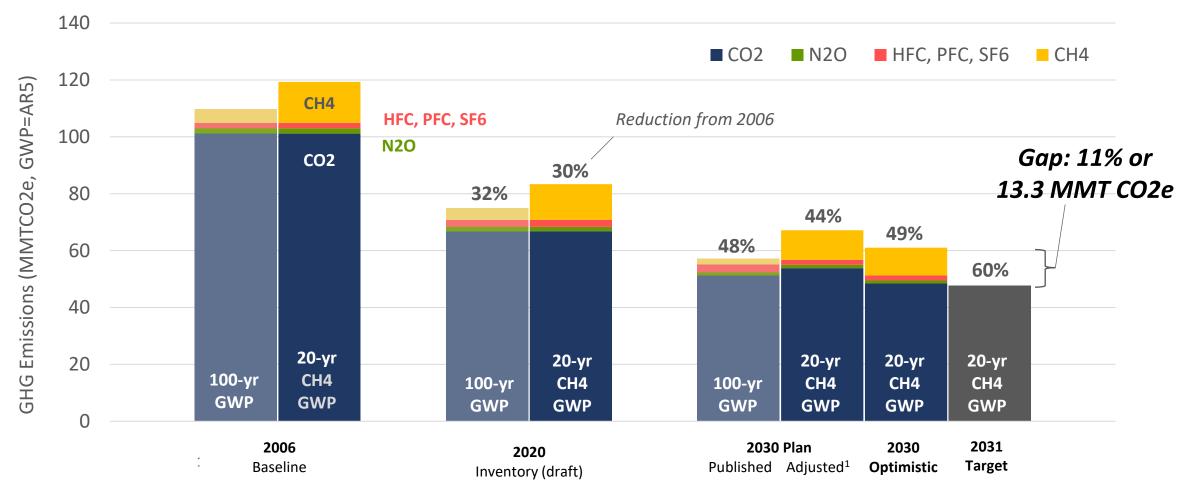
Michael Powell

The Building Measures Are Not Enough The low hanging fruit has already been picked



The Gap between the Optimistic Scenario and 60x31

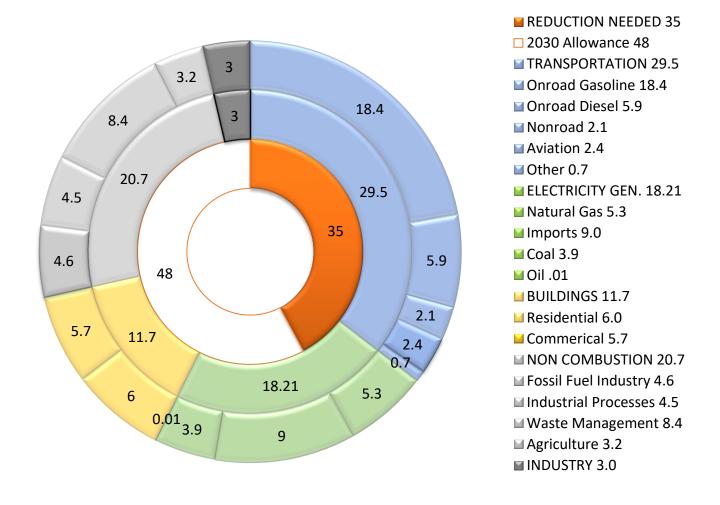




¹ Reflects updated estimates for landfills, jet fuel, and ODS substitutes and 20-yr GWP for methane

Draft results. Numbers are subject to change.

2020 inventory and Reductions Needed by 2031 (Approximate Million Metric Tons)



Transportation Push for Electric Vehicles



- Manufacturers are making Zero Emission Vehicles (ZEVs), the Volkswagen settlement, and federal funds are paying for more charging infrastructure.
- The Maryland Clean Cars Act of 2022 extended the excise tax credit
 - But the number of qualifying vehicles was reduced (excluding the brand that produced over 75% of the ZEVs on the road) and limited the available funding.
- In 2020, Maryland committed to 600,000 ZEVs by 2030 and anticipated 300,000 by 2025.
- Out of 5,228,065 vehicles, Maryland currently has 30,587 ZEVs and 17,804 plug-in hybrids on the road.
- Registered ZEVs are increasing but not fast enough. Current measures appear unlikely to meet the goals.

How Should We Reduce Mobile CO₂? *Issues for Transportation*

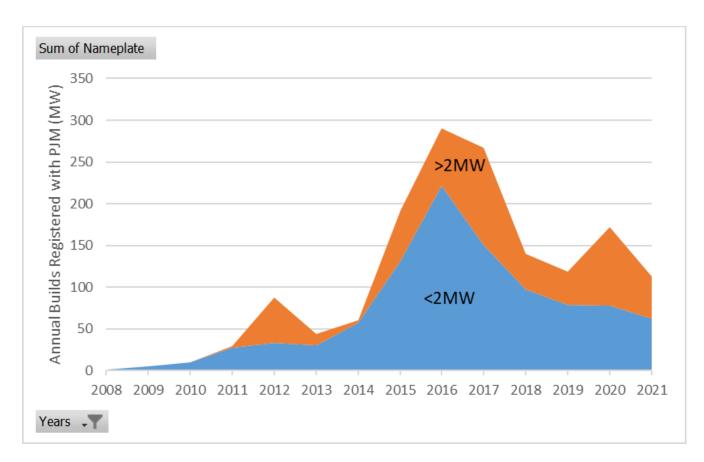


- 'The chicken and the egg?' do we incentivize vehicles, chargers or a little bit of both?
- Where should the chargers go? highways, homes, workplaces?
- Do we provide incentives for expensive vehicles (which are currently the most common ZEVs)?
- Do we emphasize replacement of vehicles that consume the most petroleum (e.g., low mpg vehicles or drivers with long commutes)?
- Do we provide incentives for used vehicles?
- How much should we emphasize mass transit?
- If petroleum consumption declines, how do we replace the gasoline tax?

New Renewable energy and storage Renewable Energy Projects Face Considerable Hurdles

The pace of installation of new renewable energy capacity at PJM has declined, not increased.

- Bottlenecks at PJM a new plan hopes to reduce the backlog.
- Tariffs on Chinese imports Biden has suspended the tariffs for two years.
- Local opposition to new solar farms (NIMBY?)



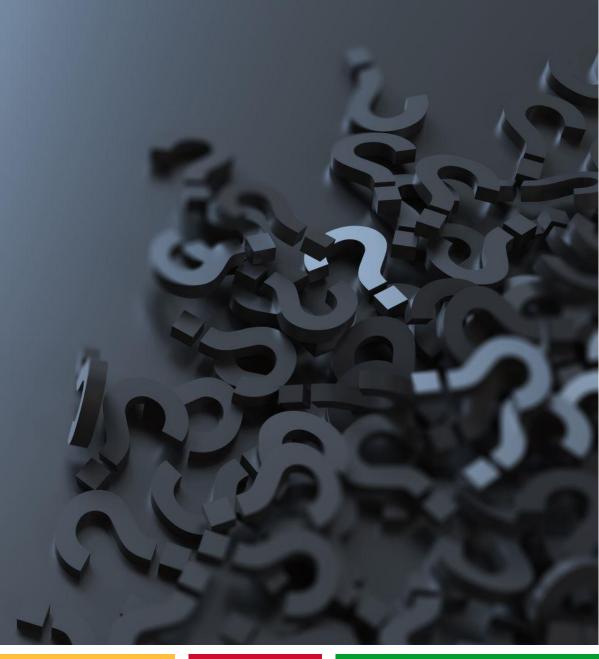
Mitigation Working Group <u>Tentative</u> 2022 Agenda



- ✓ May Light-duty vehicles accelerating ZEV adoption (subgroup meetings likely)
- ✓ June 21st Electricity solar project siting, 100% Renewable Study, etc.
- July 19th Buildings taking stock of building policies after CSNA
- August 16th Heavy-duty vehicles options for faster emissions reductions
- September 23rd Industry findings from the GGRA Manufacturing Study
- October 18th Finalize recommendations for the 2022 MCCC Annual Report
- December 20th Review modeling inputs/outputs for the 60x31 plan

Subjects and Dates may change.

Questions & Answers



Dr. Suzanne Dorsey, Commission Chair

MARYLAND COMMISSION on **CLIMATE CHANGE**

THANK YOU

www.mde.maryland.gov/MCCC