

# MDE Food Summit: Climate Action

Tuesday, March 19, 2024



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Maryland Department of the Environment



# Agenda

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- Overview of Maryland's Climate Pollution Reduction Plan
- MDE Grants and Technical Assistance
- Maryland's Climate Pollution Reduction Grant (CPRG) for Planning



# About MDE

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**Mission:** To protect and restore the environment for the health and well-being of all Marylanders.

**Vision:** Healthy, vibrant and sustainable communities and ecosystems in Maryland

**Administrations:** Air, Land, Water



Secretary Serena McIlwain and Governor Wes Moore at a climate change funding press conference on February 16, 2024.

Photo by Patrick Siebert



# Part 1: Overview of the Plan



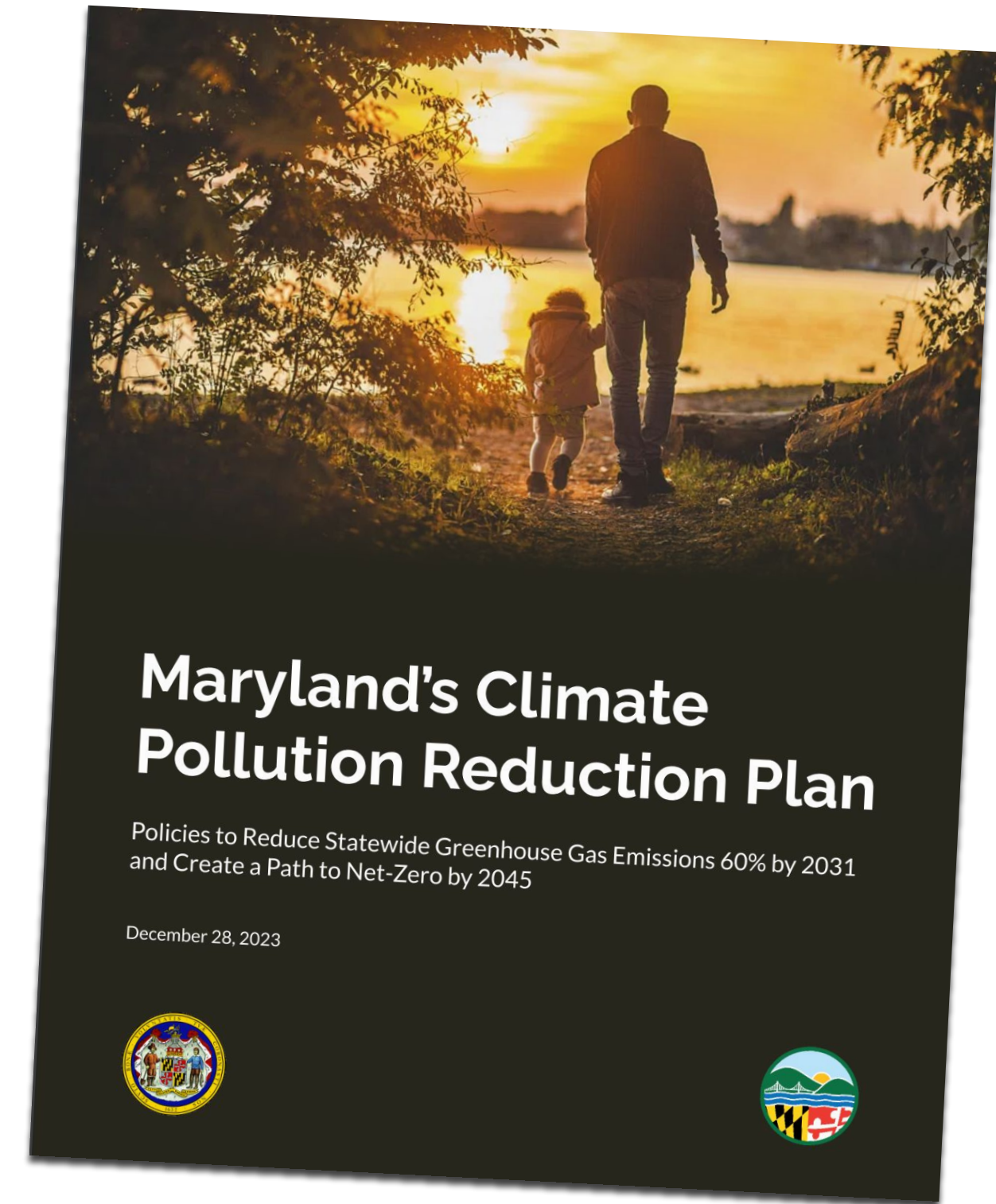


# What is the Climate Pollution Reduction Plan?

MDE's final plan to:

- Reduce statewide greenhouse gas emissions **60% by 2031** (from 2006 levels)
- Set the state on a path to achieve **net-zero emissions by 2045**
- **Create net economic benefits** for Maryland

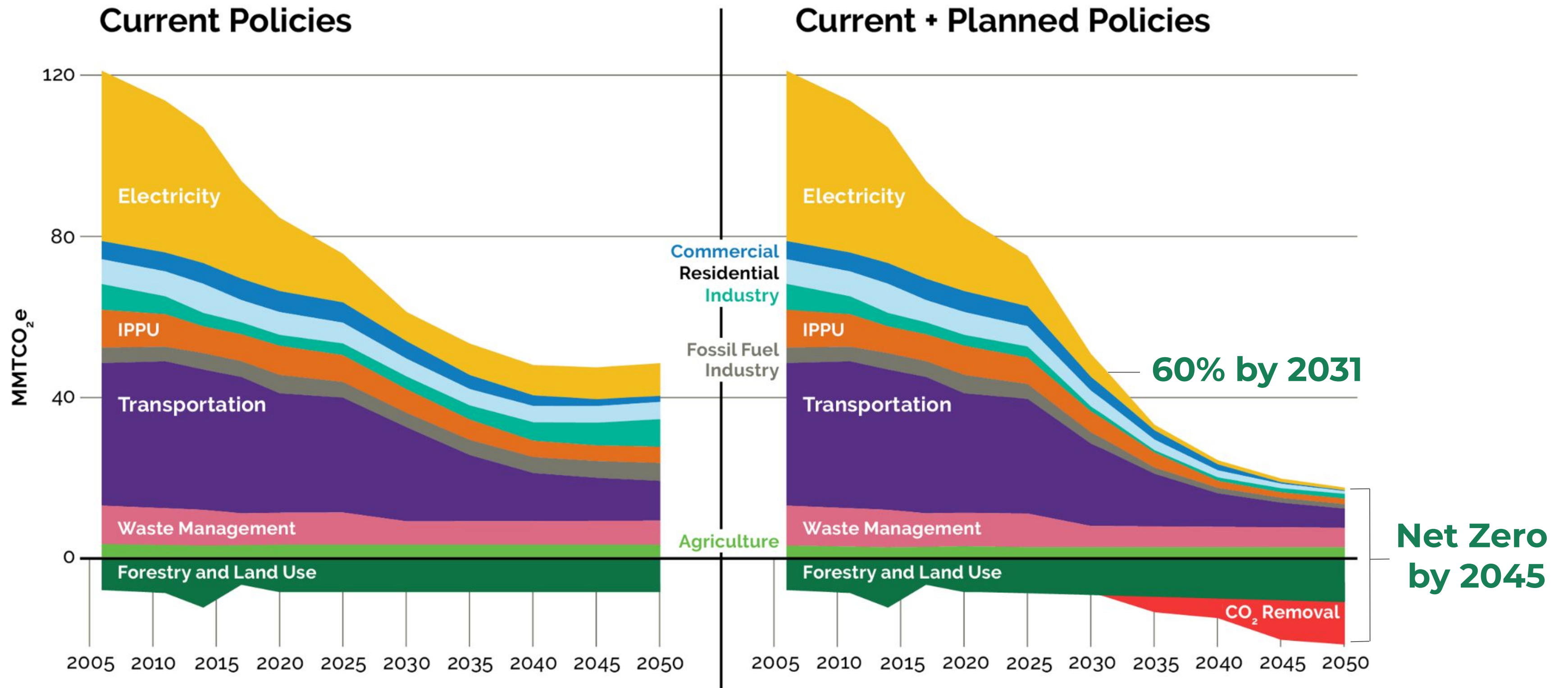
The full plan is available at [mde.maryland.gov](https://mde.maryland.gov)





# Achieving the State's Goals

42 policies that, if fully implemented, will achieve Maryland's goals







# Maryland has Already Come so Far

Maryland once had the worst air quality in the eastern half of the U.S.

8 coal-fired power plants in 2006 (2 left today)

Countless cases of respiratory illness and hospitalizations



# From the Dirtiest Air to the Cleanest

In 2022, Maryland met all national air quality standards for the first time since the Clean Air Act was established over 50 years ago







# New Investments

With new funding sources established, the state will provide at least **\$1 billion** annually to incentivize:

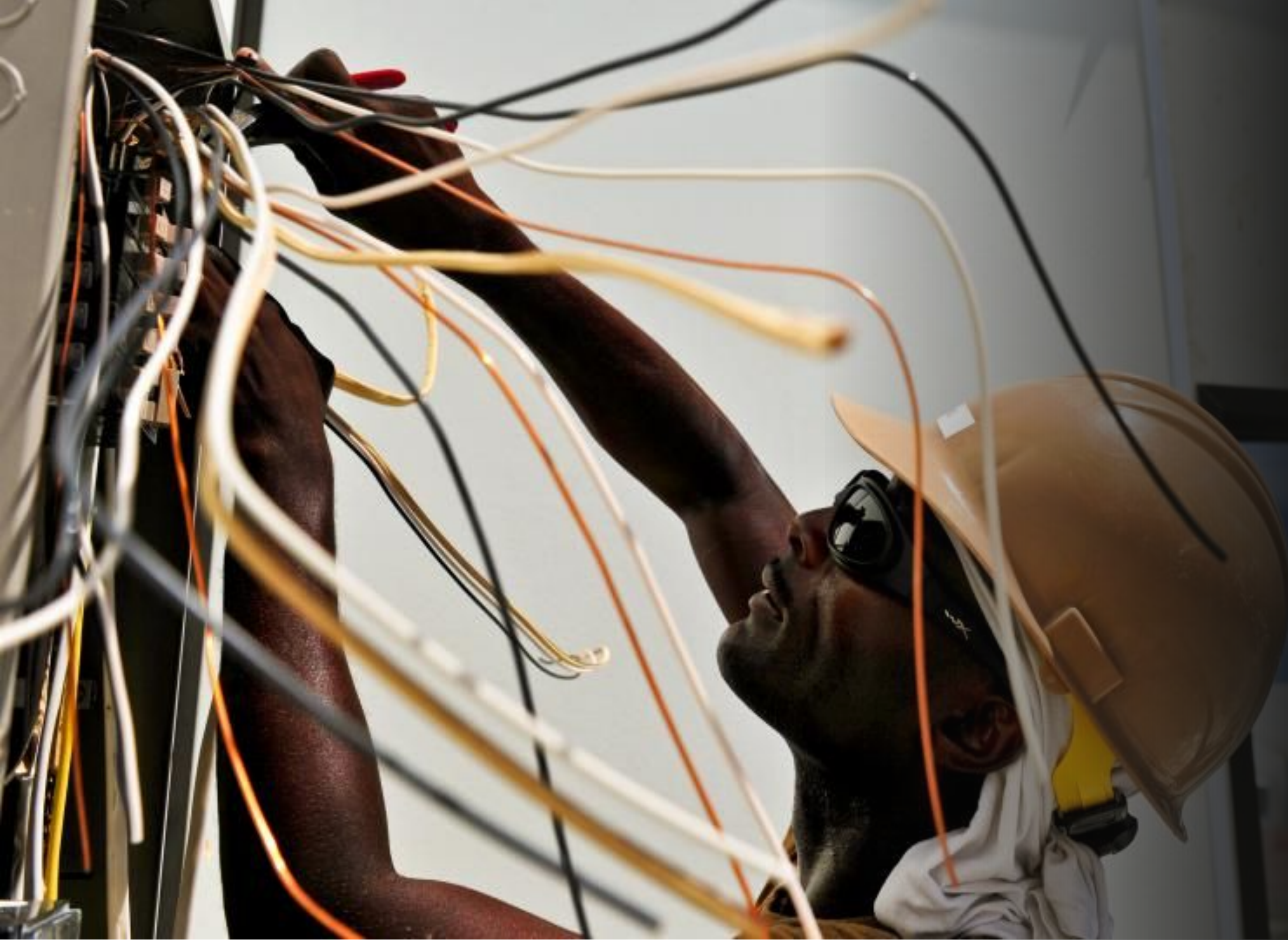
- Building electrification
- Transitioning to EVs
- Industrial decarbonization
- Waste sector decarbonization
- Forestry and land use
- Workforce development
- and more







# Economic Benefits



In addition to lowering household energy costs and creating 27,000 jobs, this Plan will also

**increase total personal income by \$2.5 billion**

and grow Maryland's **gross domestic product by \$5.3 billion** between now and 2031

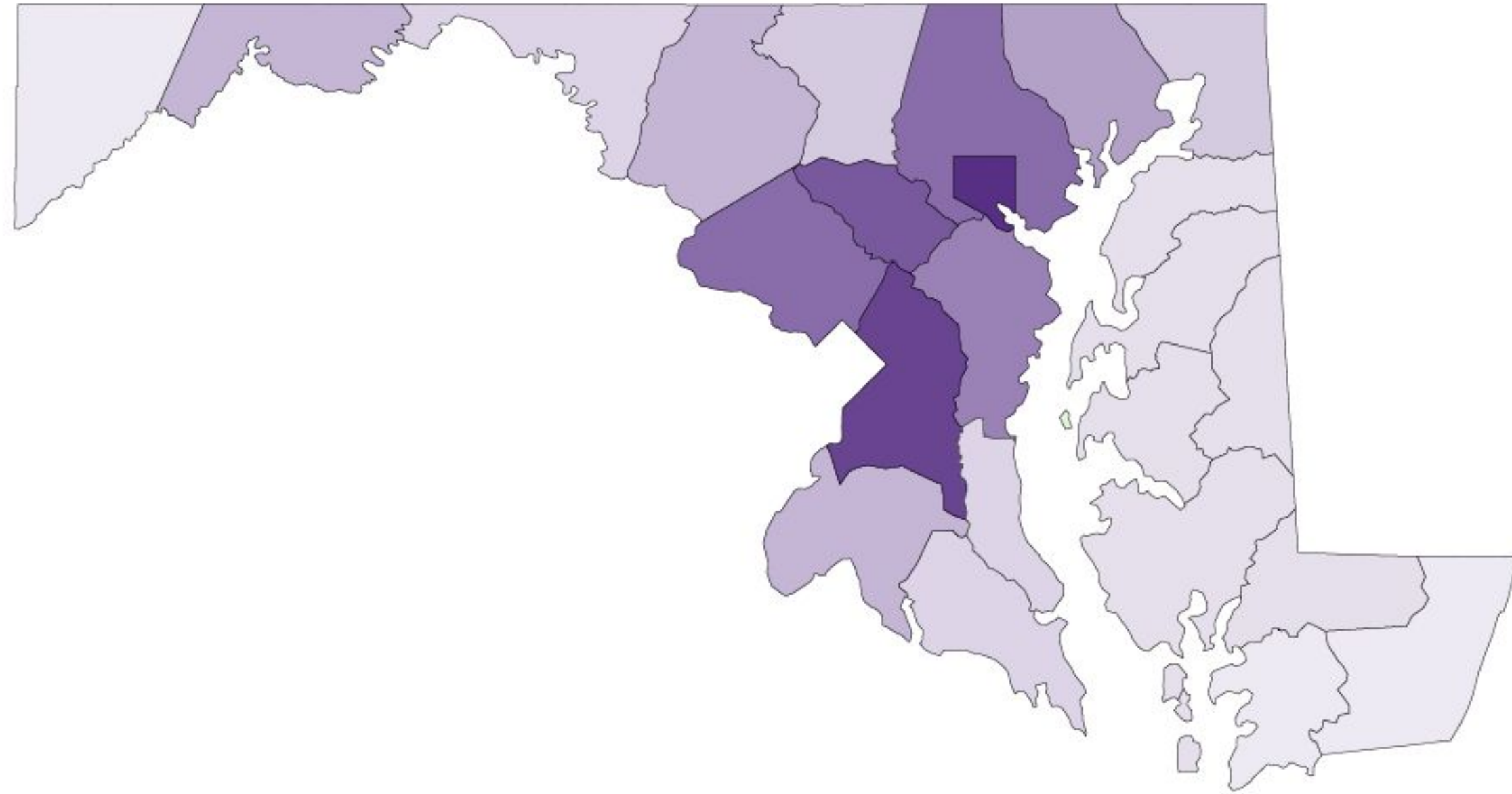




# Health Benefits

This Plan delivers between **\$142 million and \$321 million** in additional health benefits in 2031 compared to current policies

Most of the health benefits occur in historically disadvantaged communities







# Global Benefits

Maryland's new policies are modeled to reduce emissions by **646 million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>e)** between now and 2050

The global benefit is estimated to be **\$135 billion!**





# Climate Plan Next Steps

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- ❑ Maximize federal funding opportunities
- ❑ Launch & implement regulatory processes
- ❑ Coordinate with the Maryland Commission on Climate Change
- ❑ Evaluate funding mechanisms

Please read the full plan at **[mde.maryland.gov](https://mde.maryland.gov)**



## Part 2: MDE Grants & Technical Assistance





# Water Infrastructure Financing Programs

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## Bay Restoration Fund

- Provides up to 100 percent in grant funding for upgrade wastewater treatment plants or upgrades to existing onsite disposal systems

## Water Supply Program

- Helps communities meet their water supply and infrastructure needs by providing financial assistance to local governments or water supply systems

## Comprehensive Flood Management Grant Program

- Assists local jurisdictions with implementing flood mitigation projects which reduce the risk of loss of life and property from flooding

## State Revolving Loan Funds

- **Drinking Water:** provides financial assistance to local governments to finance water supply improvements and drinking water infrastructure upgrades
- **Water Quality:** provides financial assistance to local governments to finance a wide variety of projects to improve or protect Maryland's water resources



An aerial view of the Back River Wastewater Treatment Plant in Dundalk, Maryland (2016).

Photo by WILL PARSON/CHESAPEAKE BAY PROGRAM





# Land and Materials Programs

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## Brownfields and Voluntary Cleanup Programs

- Provides financial incentives and technical assistance in the clean up and redevelopment of under-utilized or contaminated commercial properties

## Waste Diversion Program

- Used Tire Cleanup and Recycling Fund
- Analysis for recycling and reuse markets to increase available markets for recyclables and identify opportunities for infrastructure that serves to reduce food from disposal as solid waste



Photo by EPA





# Air and Radiation Programs

## Diesel Emissions Reduction Grants

- Advance the Maryland Clean Vehicle Initiative, with an updated goal of replacing older diesel school buses with new electric buses, providing financial assistance of up to 45 percent, with the owner providing the remainder of the purchase price

## Volkswagen Environmental Mitigation Trust

- Provides financial assistance for vehicle replacement projects to reduce emissions from various types of older diesel-powered heavy-duty vehicles and for the installation of electric vehicle charging stations

## Zero-Emission Vehicle School Bus Transition Grant Program

- Will provide funding for purchasing electric school buses and charging infrastructure

## EPA Climate Pollution Reduction Grant (CPRG) Program

- Provides funding in grants to states, local governments, tribes, and territories to develop and implement greenhouse gas emissions reduction plans
- Detailed in next slide and online: [mde.maryland.gov/cprg](https://mde.maryland.gov/cprg)



Photo by Maryland Transportation Authority



Governor Moore takes a spin in an electric car at MDE headquarters





# EPA Climate Pollution Reduction Grants

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## CPRG Planning Grants

- State of Maryland: Statewide led by MDE
- Metropolitan Statistical Area Grants led by
  - Baltimore Metropolitan Council
  - Delaware Valley Regional Planning Commission
  - DC Department of Energy and Environment (DOEE) and supported by the Metropolitan Washington Council of Governments

Find out more online:  
[mde.maryland.gov/cprg](https://mde.maryland.gov/cprg)

## CPRG Implementation Grants

- Eligible Entities:
  - States and municipalities
  - Coalition of eligible entities (coalition members can be from across MSAs and States)
- MDE is leading state-wide applications



# Maryland CPRG Status Update

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## Priority Climate Action Plan (PCAP)

- MDE delivered the Maryland [PCAP](#) to the EPA on March 1, 2024
- A record 45 states plus D.C. and Puerto Rico submitted a PCAP to the CPRG program, covering over 96% of the U.S. population!



## Comprehensive Climate Action Plan (CCAP)

- The CCAP is due to the EPA in July 2025
- MDE will continue to provide updates on the timeline and stakeholder engagement opportunities

## Implementation Grant

- MDE intends to submit competitive grant applications to the EPA on April 1, 2024 for the following
  - Advanced Clean Trucks (PCAP Measure 6)
  - Maryland Building Energy Performance Standards (PCAP Measure 9)
  - Agricultural Resource Conservation, Afforestation and Improved Forest Management, & Coastal Wetland Restoration and Management (PCAP Measures 19,20,21)



# General PCAP Stakeholder Feedback

- Robust stakeholder input led MDE to assemble 300+ GHG emission reduction measures to inform the Priority Climate Action Plan
- Reflecting Maryland's all-of-economy approach to climate action, stakeholders submitted a diverse set of projects
- **Project Types**
  - Transportation
  - Agriculture
  - Buildings
  - Nature Based Solutions
  - Waste
  - Energy
- **Sectors**
  - Businesses and Corporations
  - Non-profits
  - Local Governments
  - Residents
  - Community Organizations



Source: 5 Million Trees for Maryland





# PCAP Stakeholder Feedback - Organics

## Climate-smart Agriculture Measures

- Anaerobic digesters and methane capture on farms
- Silicate rock application to fields
- Regenerative agricultural practices
- Reduced fertilizer usage

## Wasted Food Reduction and Composting

- Community composting facilities
- Food residual composting programs
- Organics collection systems and on-farm organics management
- Commercial food residual reduction



Howard County Compost Facility at Alpha Ridge Landfill

Source: EA Engineering, Science, and Technology, Inc.



# CPRG Maryland Local Government Climate Action Support Program

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- The Maryland CPRG Maryland Local Government Climate Action Support Program assists counties and their municipalities to identify high-priority GHG emissions reduction projects and build capacity across all of Maryland for climate action.
- Program will include county-specific outreach, technical support including consultation, facilitation services, and grant writing.
- The Environmental Finance Center at the University of Maryland is supporting the program.
- MDE's support program specifically assists counties and their municipalities that are not covered by a CPRG MSA planning grant. They are:
  - Western Maryland (Garrett, Allegany, Washington counties),
  - Southern Maryland (Calvert, St. Mary's counties), and
  - Eastern Shore (Kent, Talbot, Caroline, Dorchester, Wicomico, Somerset, and Worcester counties)

Find out more:  
[climategrants.mde@maryland.gov](mailto:climategrants.mde@maryland.gov)

Technical Assistance Partner:



ENVIRONMENTAL  
FINANCE CENTER





## **Website:**

[mde.maryland.gov/cprg](https://mde.maryland.gov/cprg)

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