Clean Air Mississippi Project (CAMP)



Funded by the Climate Pollution Reduction Grant

Clean Air Mississippi Project

CAMP

Performed in Collaboration with the Mississippi Band of Choctaw Indians



Agenda

- Zoom Housekeeping
- Welcome and Introductions
- Climate Pollution Reduction Planning Grant
- Goal of Clean Air Mississippi Project (CAMP)
- Climate Pollution Reduction Implementation Grant
- Greenhouse Gas Reduction Measures Proposed for the MS Priority Climate Action Plan (PCAP)
- How to Get Involved
- Questions and Comments

Zoom Housekeeping

- The meeting is being recorded
- *Question and Answer (Q&A)* to type in questions throughout the meeting
- *Raise Hand* to make comments at the end of the Q&A session
- *Chat* to reach team members for any technical difficulties
- Note: If you call in only (not on the internet) press *9 to raise and lower hand and *6 to mute or unmute.



The Team

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- CAMP Program Manager

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- Air Inventory & Attainment Planning
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- Office of Environmental Protection

Tetra Tech – Primary Contractor

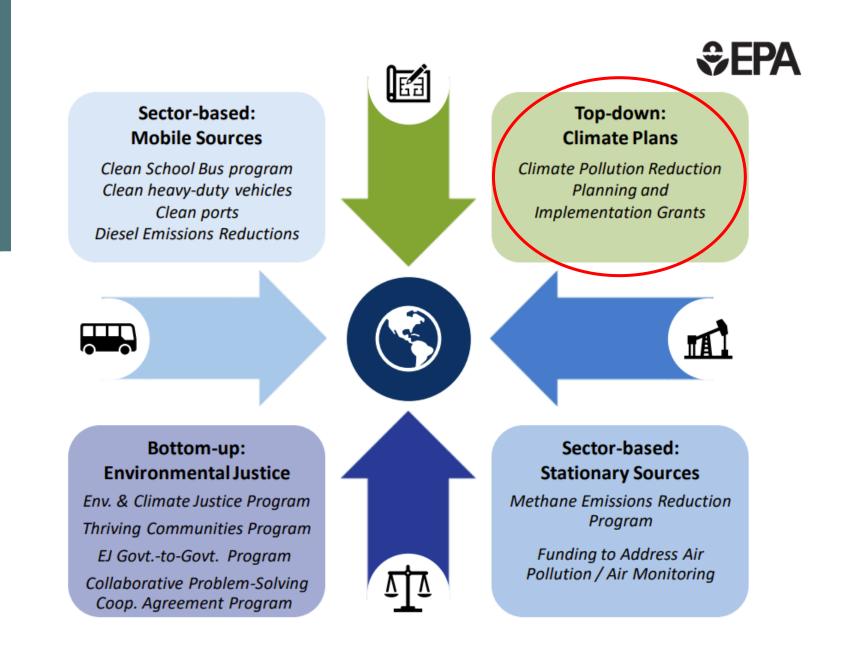
• Beyond Communication – Outreach







IRA Funding Directed to EPA to Address Climate Change



CPRG Planning Grant

- \$250 million for non-competitive grants to states, locals, and tribes
- 46 States, Puerto Rico, and D.C. applied for and received \$3 million
- About 80 metropolitan areas received \$1 million (none in MS)
- MS Band of Choctaw Indians also received a grant



The Deliverables



"Priority Climate Action Plan" – Due March 1, 2024

- Simplified GHG inventory for the state
- Near-term, implementation-ready, priority GHG-reduction measures
- Benefits analysis for low-income and disadvantaged communities (LIDAC)

"Comprehensive Climate Action Plan" – Due June 29, 2025

- Comprehensive GHG inventory, including projections and reduction targets
- Benefits analysis for state and LIDAC
- Workforce development analysis
- Near-term and long-term GHG reduction measures needed to achieve goals

Status Report – Due June 29, 2027

- Status of CCAP plan implementation
- Parties responsible for achieving measures under development
- Updates to benefits analyses and workforce development

Overarching Goal: Reduce Greenhouse Gases and Related Co-pollutants

Clean Air Mississippi Project CAMP



What are Greenhouse Gases (GHGs)?



Greenhouse gases trap heat in the Earth's atmosphere.



GHGs include carbon dioxide, methane, nitrous oxide, and fluorinated gases.



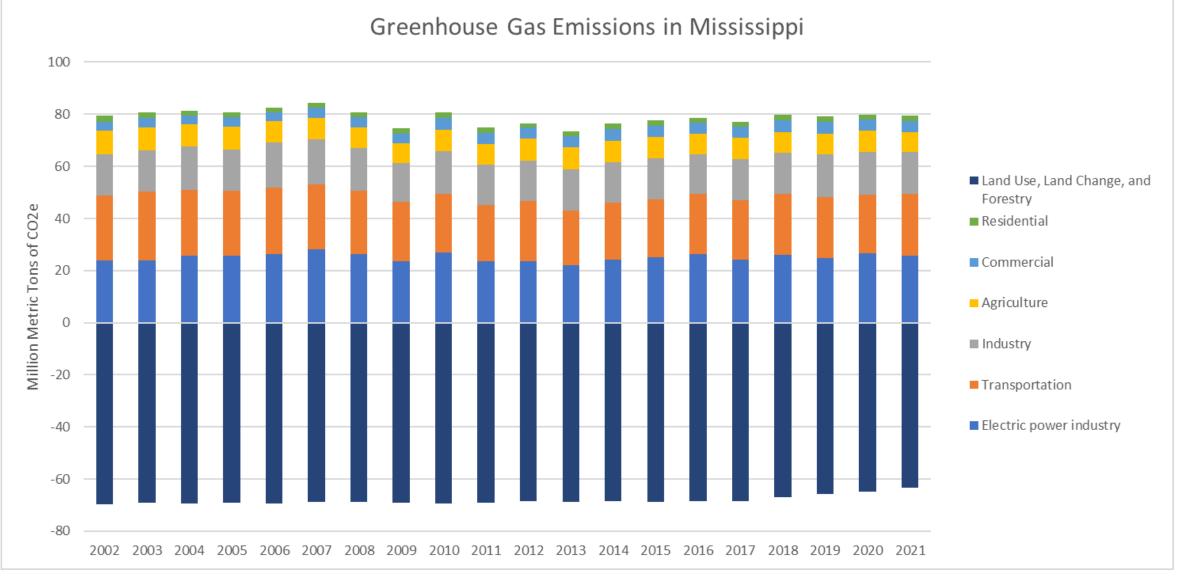
Collectively they are measured in Carbon Dioxide equivalents (CO2e).



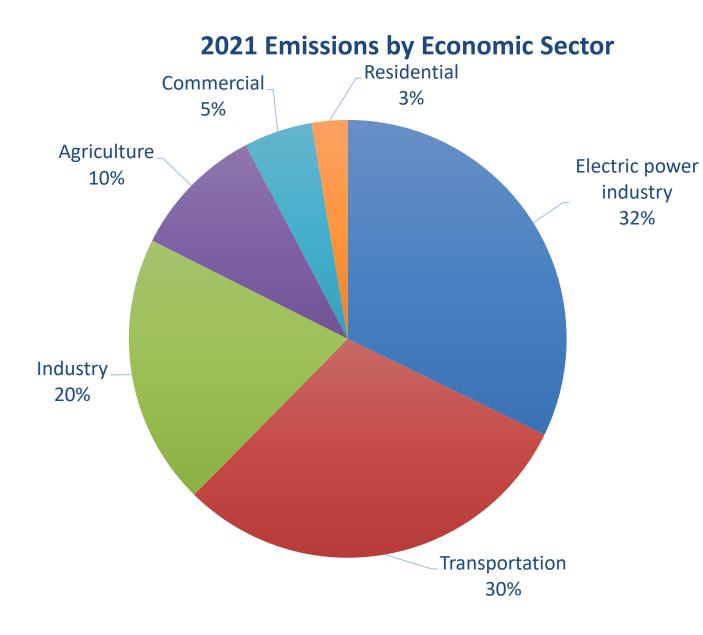
There are both sources and sinks of greenhouse gases.



Typically other air pollutants are emitted with GHGs, which are referred to as co-pollutants.



Source: U.S. EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks by State https://www.epa.gov/ghgemissions/state-ghg-emissions-and-removals



Sectors Identified for GHG Reductions

- Electric Power
- Transportation
- Industry
- Buildings
- Agriculture
- Waste, Water and Sustainable Materials
- Land Use / Forestry

CPRG Implementation Grant

CPRG Implementation Grant

- Competitive grant administered by EPA
- Must fund GHG reduction measures specified in Priority Climate Action Plan
- \$4.3 billion for general competition
- 30-115 individual grants
- \$2 million to \$500 million tiered awards
- No cost share or match required
- Separate \$300 million funding opportunity for tribes and territories

Table 1: Grants Ranges and Funding by Tier

Tier	Grant Ranges	Funds Targeted for Each Tier	Anticipated Number of Grants to be Awarded
Tier A	\$200,000,000 - \$500,000,000	\$2 billion	4-10
Tier B	\$100,000,000 - \$199,999,999	\$1.3 billion	6-13
Tier C	\$50,000,000 - \$99,999,999	\$0.6 billion	6-12
Tier D	\$10,000,000 - \$49,999,999	\$0.3 billion	<mark>6-30</mark>
Tier E	\$2,000,000 – \$9,999,999	\$0.1 billion	10-50

Entities Eligible for Implementation Funding *General Competition

Eligible Entities

- State agencies, local government, tribes, and territories
 - Coalition multiple eligible entities, with one designated lead
 - Partners universities, NGOs, private companies (can be subrecipient)
- Limit of one application per eligible entity and one application as lead of a coalition

Timeline

- September 20, 2023: Notice of Funding Opportunity released.
- April 1, 2024: Due date of the application.
- July 2024: Anticipated funding selection.
- October 2024: Anticipated awards.
- Period of Performance: 5 years

EPA CPRG Implementation Grant Website: <u>https://www.epa.gov/inflation-reduction-act/about-cprg-implementation-grants</u>

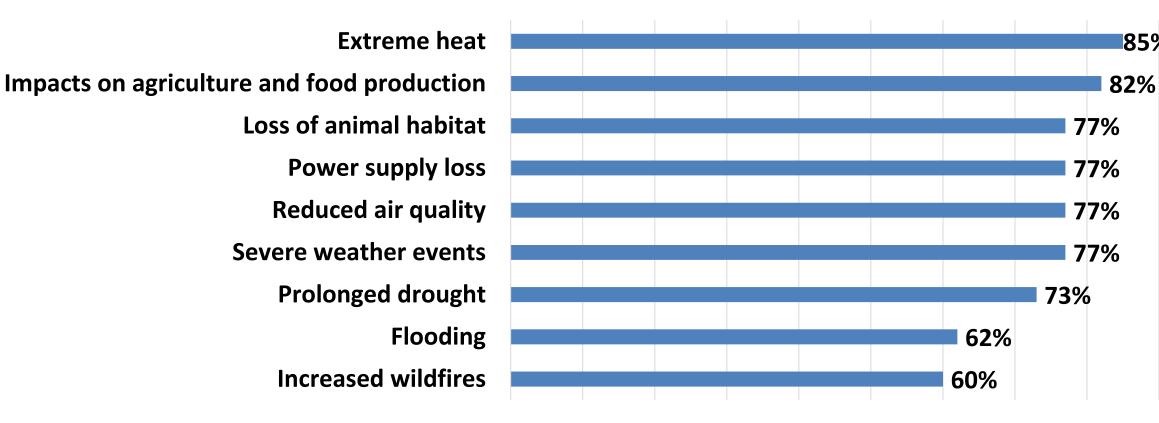
CAMP Survey Features

- A 13-question survey launched statewide in December 2023
- Survey questions range from demographic to environmental awareness inquiries
- As MDEQ is committed to receiving input on the Clean Air Mississippi Project, the survey will be open until March 1, 2024, which is the deadline of the Priority Climate Action Plan (PCAP), and will remain open, with minor tweaks, for up to two years throughout the Comprehensive Climate Action Plan (CCAP)
- The survey, located at https://cleanairmsproject.com/, was advertised to thousands via
 - MDEQ's social media platforms and website
 - Constant Contact email (650 key stakeholders including state and federal agencies; private companies and organizations; NGOs and non-profit organizations; and groups representing underserved communities and people)
 - Potential partnering organizations for dissemination to their constituencies

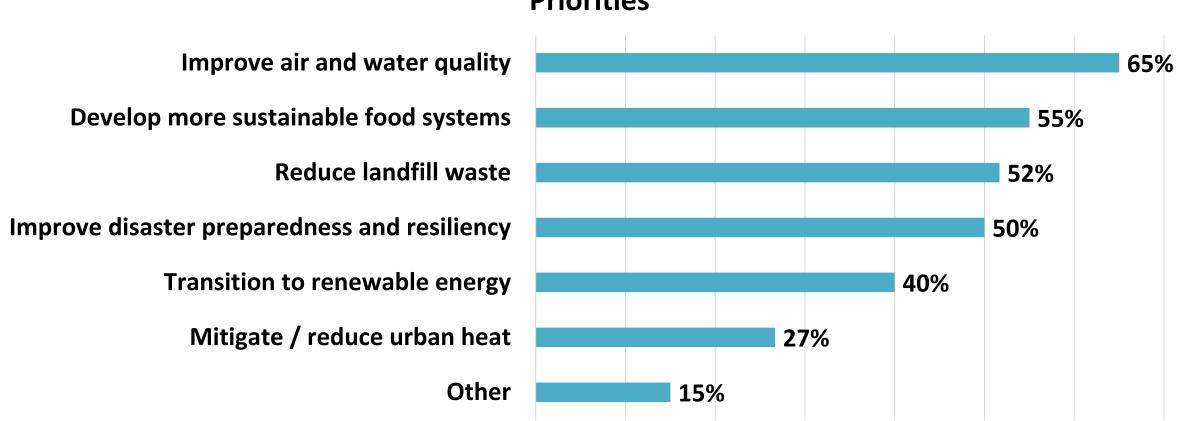
Survey results (as of 01/15/24)

Percent concerned about:

85%

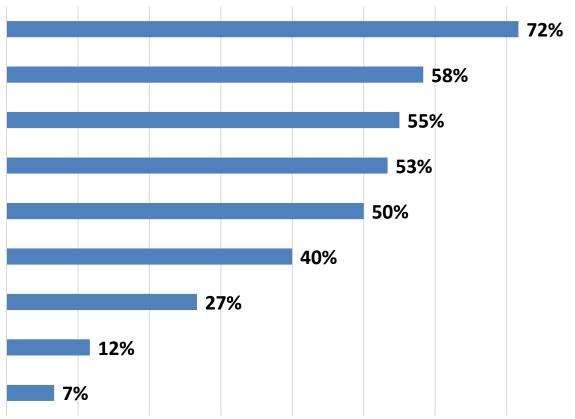


Survey results



Priorities

Survey results



Barriers to Sustainability

Financial constraints Limited options for reuse, repair, and recycling Infrastructure and service limitations Lack of access to sustainable products and services Lack of government policies and trusted programs Limited information on sustainable practices Time constraints to research and implement sustainable choices Social norms or pressures that discourage sustainable living Other

Survey results

Support for activities to lessen the potential impacts of climate change

 Planting trees and using shade structures to reduce urban heat
 Prioritizing planting of native vegetation species

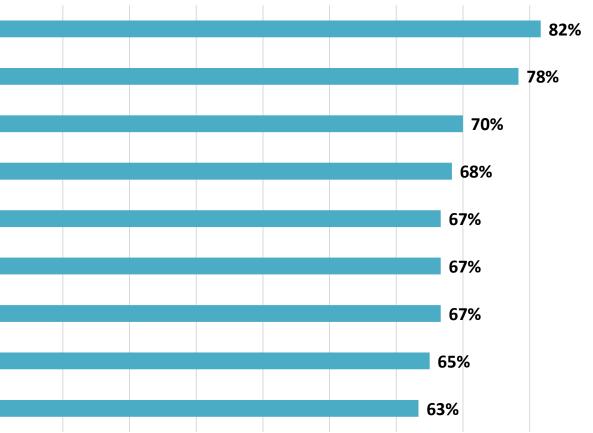
 Prioritizing planting of native vegetation species
 Promoting a Buy Local Food campaign

 Making reuse, repair, and repurposing options more accessible to reduce waste
 Building streets where I can safely bike and walk

 Offering low-cost housing upgrades to improve energy efficiency for residents
 Making recycling and composting available for my home

 Reducing upfront costs for climate mitigation and resiliency solutions
 Image: Comparison of the second s

Promoting nature-based solutions including rainwater harvesting and Green Stormwater Infrastructure



EPA's Goals for Implementation Grants



Implement ambitious measures that will achieve significant cumulative GHG reductions by 2030 and beyond.



Pursue measures that will achieve substantial <u>community benefits</u> (such as reduction of criteria air pollutants (CAPs) and hazardous air pollutants (HAPs)), particularly in low-income and disadvantaged communities.



Complement other funding sources to maximize these GHG reductions and community benefits.



Pursue innovative policies and programs that are replicable and can be "scaled up" across multiple jurisdictions.

Priority GHG Emission Reduction Measures Currently Proposed for Mississippi

- For the PCAP, reduction measures are grouped around five themes:
 - Electricity generation
 - Transportation
 - Buildings
 - Lands: Agricultural and forested lands
 - Methane capture from waste sources
- Specific proposals to EPA can be based on the above priority measures
- May change based on your feedback
- Other measures can also be added in the subsequent phase, during the CCAP

Evaluation of Measures in the PCAP

- Summary description, direct emissions or indirect via energy use
- Quantification of GHG reduction per unit of measure
- Quantification of cost ranges
- Timeline of implementation
- Co-benefits to environment, besides GHG reduction
- Workforce considerations
- Benefits for Low Income/Disadvantaged Communities

Electric Power – targeted incentives for installation of renewable energy and energy storage systems, development of distributed community-scale renewable energy generation or microgrids

Measure	Characteristics/features
Residential or commercial distributed generation	Primarily in the form of solar photovoltaic generation on rooftops or near buildings, and used to substitute for a part of local electricity use
Utility solar generation or storage	Larger solar photovoltaic installations (5 MW or greater) that substitute for a portion of the fossil- generation at the utility scale. May be coupled with on-site battery capacity to store energy when excess renewable energy is available

Transportation – programs to increase share of electric vehicles and expand EV charging infrastructure, electrification of fleets		
Measure	Characteristics/features	
Cargo transportation to rail	Substitute rail with electric energy for diesel trucks, primarily along key corridors connected with Mississippi's major ports (e.g., Gulfport)	
EV charging infrastructure	Add vehicle charging capacity along key highways and transportation corridors	
Electrification of diesel truck fleet	Provide subsidies for electric trucks for cargo movement	
School bus electrification	Provide subsidies for conversion of diesel school buses to electric. Need support for associated charging infrastructure	
Biofuel use for transportation or as an energy source	For specific applications, consider biodiesel (created from waste or non-fossil sources) as a fuel source	

Buildings – adoption of most up-to-date building energy-efficiency measures, incentive programs for purchase of energy-efficient HVAC, lighting, etc., pre-weatherization and weatherization of buildings

Measure	Characteristics/features
Efficiency improvements in buildings	Retrofits of old buildings to reduce energy use from all sources
Refrigerant replacement	Some older refrigerants have very high global warming potential, and targeted removal/replacement, especially from larger facilities, will be beneficial

Agriculture and Carbon Sinks— incentives to reduce nitrous oxide emissions from fertilizer application, urban afforestation and green infrastructure programs and projects		
Measure	Characteristics/features	
BMPs for Agricultural Lands	Consider encouraging practices to increase carbon sequestration in soil, and reduce nitrous oxide emissions	
Carbon sequestration in forested lands	Mississippi has one of the largest carbon sinks in its forests Manage forest resources to sequester and track carbon storage, including for developing credits	

Agriculture and Carbon Sinke, incentives to reduce nitrous evide emissions from fortilizer

Waste, Water, and Sustainable Materials – standards to reduce methane emissions from
landfills and wastewater treatment, installation of renewable energy and energy efficiency measures at wastewater treatment facilities

Measure	Characteristics/features
Landfill methane capture/electrification	Cover and capture methane generated in landfills and use as an energy source Methane has a much higher global warming potential than carbon dioxide, and this is a net reduction of CO2- eq emitted
Wastewater methane capture/electrification	Capture methane generated in anaerobic treatment processes, and use for producing energy

MDEQ & MBCI need your help

How can you participate?

- Do you have projects, programs, or policies you have implemented, are pursuing, or would like to pursue?
- Are you interested in working with MDEQ or another state or local government entity to help apply for implementation grant funding?



Email input and ideas for GHG reduction measures to <u>camp@mdeq.ms.gov</u> Complete the Survey on the website https://cleanairmsproject.com/ Visit the project website for more information

https://cleanairmsproject.com/

Questions and Comments