

NC Climate Pollution Reduction Planning Grant





If you have not registered, please do so here







THIS MEETING WILL BE RECORDED

Presentation Materials Will Be Sent to All Registered Participants



Overview

Agenda

- Welcome
- Registration for those who have not preregistered
- Team Introductions
- CPRG Presentation
- Breakout Session
- Questions

Goals

- Introduction to EPA's Climate Pollution Reduction Grants Program
- How NC is leveraging our planning grant to identify ways to reduce greenhouse gas emissions across the states
- How you can provide feedback on climate priorities and proposed measures





Case for Climate Pollution Reduction

North Carolina experiences frequent extreme weather events that disrupts our way of life, our economy, and the health and safety of our residents.





Hurricane Florence



North Carolina's Emissions Contributions

- 14th highest greenhouse gas (GHG) emitting state in the U.S.
- 9th most populous
- If NC were a country, our emissions would be ranked ~40th in the world.
- Higher than countries like Belgium, Chile, Austria and Denmark
- Emissions reductions in NC matters locally, nationally and globally.



Climate change impacts some more than others



According to EPA's Fourth National Climate Assessment:

- Impacts of climate change will not be equally distributed across the U.S. population.
- Vulnerable populations, based on a range of social, economic, historical and political factors, have a lower capacity to prepare for, cope with, and recover from climate change impacts.



Part I. Federal Funding Overview



Inflation Reduction Act (IRA) and Climate Pollution Reduction Grant – What is it?

- H.R. 5376 The Inflation Reduction Act of 2022 was signed into law on August 16, 2022
 - Purpose is to build a clean energy economy through investments in clean energy and climate action
 - Expected to reduce U.S. greenhouse gas emissions ~40% by 2030 while supporting disadvantaged communities and clean energy
- U.S. Environmental Protection Agency received \$5 billion under the Climate Pollution Reduction program
 - Climate Pollution Reduction: Planning Grants (Phase I)
 - Climate Pollution Reduction: Implementation Grants (Phase II, \$4.3B)





CPRG – Two Phases



- Support for climate planning and implementation processes
- Funds can be used to update existing climate, energy, or sustainability plans, or to develop new plans.







IMPLEMENTATION GRANTS

- Focus on investment-ready policies, programs, and projects to reduce greenhouse gas emissions in the near term.
- Support developing and deploying technologies and solutions that will reduce greenhouse gases and harmful air pollution and transition America to a clean energy economy





Phase I: CPRG Overarching Goal/Objectives







Well-established leadership climate initiatives

Existing Statewide Plans

Efforts grounded in science

The CPRG is NC's opportunity to continue improving the health and well-being of all North Carolinians by reducing greenhouse gas emissions and improving air quality.



State of NC CPRG Planning Award

Deliverables and Due Dates





Sectors being Evaluated







Industry



Residential & Commercial Buildings



Waste and Materials Management



Agriculture/ Natural & Working Lands



Priority Climate Action Plan Components



Emissions

- GHG Inventory
- Quantified GHG Reduction Measures (priority measures only)



Community

 Low Income-Disadvantaged
 Communities Benefits
 Analysis



Operationalizing

- Review of Authority to Implement
- Leveraging other existing programs and resources



Workforce

• Workforce Planning Analysis Approach







Phase II: CPRG Implementation Grants – what are they?

- Competitive grants aimed to support the development and deployment of technologies and solutions that will reduce greenhouse gases and harmful air pollution and transition America to a clean energy economy that benefits all Americans
- Two competitions for CPRG implementation grants:
 - 1. General competition for states and municipalities
 - 2. Competition only for tribes and territories
- State and municipal applications are accepted now through April 1, 2024

EPAanticipates awarding 30–115 individual grants between \$2 million and \$500 million



Applying for CPRG Implementation Grants

How to apply?

- Eligible applicants: state, local, and federally-recognized tribal governments
 - <u>Applicants must have either received CPRG planning grants OR be applying for</u> <u>funding to support GHG reduction measures listed in the NC state government PCAP</u>.
- Two types of applications
 - Individual: Partner with NC and be included in our larger implementation effort. Eligible applicants can submit their own applications, but coordinated approaches will likely score better.
 - Coalition: Each eligible applicant can lead a coalition application with other eligible applicants. Coalition members must submit an MOA to EPA signed by all members.

No cost sharing/matching funds are required. Funds awarded under this program cannot be used to meet the matching funds requirement under another federal grant program

Want more information - https://tinyurl.com/EPA-CPRG-Info



Part II. State CPRG Planning Approach



NC's Sources of GHGs – Where are we?



CO₂ emissions removed by forests & other lands:

26.4% of total gross emissions

CO₂ emissions from fossil fuel combustion:

81.3% of total gross emissions

Statewide Net GHG Reductions (2005-2018)

023.0%

Additional reductions are needed to be net zero by 2050

Leverage CPRG and other infrastructure funding opportunities through BIL and IRA



Projected GHG Emissions Inventory, (2019-2030) in MMT CO₂e

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
49.86	46.83	46.33	44.13	43.23	43.95	41.08	39.57	38.40	35.83	34.48	34.35
20.56	19.65	20.55	20.74	20.75	21.10	21.38	21.53	21.64	21.74	21.84	21.96
57.01	49.71	51.94	54.05	53.54	53.04	52.42	51.79	51.15	50.48	49.79	49.09
10.52	10.51	10.50	10.50	10.49	10.48	10.47	10.47	10.46	10.45	10.45	10.44
9.12	9.29	9.47	9.64	9.82	10.00	10.17	10.35	10.53	10.71	10.89	11.07
8.29	8.84	9.33	9.83	10.32	10.81	11.31	11.59	11.88	12.16	12.45	12.73
1.38	1.40	1.41	1.43	1.44	1.46	1.47	1.49	1.50	1.52	1.53	1.55
156.73	146.23	149.54	150.31	149.59	150.83	148.31	146.80	145.55	142.89	141.43	141.18
-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13
114.60	104.10	107.41	108.18	107.46	108.70	106.18	104.67	103.42	100.76	99.30	99.05
	49.86 20.56 57.01 10.52 9.12 8.29 1.38 1.38 156.73 -42.13	49.8646.8320.5619.6557.0149.7110.5210.519.129.298.298.841.381.40156.73146.23-42.13-42.13	49.8646.8346.3320.5619.6520.5557.0149.7151.9410.5210.5110.509.129.299.478.298.849.331.381.401.41156.73146.23149.54-42.13-42.13-42.13	49.8646.8346.3344.1320.5619.6520.5520.7457.0149.7151.9454.0510.5210.5110.5010.509.129.299.479.648.298.849.339.831.381.401.411.43156.73146.23149.54150.31-42.13-42.13-42.13-42.13	49.8646.8346.3344.1343.2320.5619.6520.5520.7420.7557.0149.7151.9454.0553.5410.5210.5110.5010.5010.499.129.299.479.649.828.298.849.339.8310.321.381.401.411.431.44156.73146.23149.54150.31149.59-42.13-42.13-42.13-42.13-42.13	49.8646.8346.3344.1343.2343.9520.5619.6520.5520.7420.7521.1057.0149.7151.9454.0553.5453.0410.5210.5110.5010.5010.4910.489.129.299.479.649.8210.008.298.849.339.8310.3210.811.381.401.411.431.441.46156.73146.23149.54150.31149.59150.83-42.13-42.13-42.13-42.13-42.13-42.13	49.8646.8346.3344.1343.2343.9541.0820.5619.6520.5520.7420.7521.1021.3857.0149.7151.9454.0553.5453.0452.4210.5210.5110.5010.5010.4910.4810.479.129.299.479.649.8210.0010.178.298.849.339.8310.3210.8111.311.381.401.411.431.441.461.4742.13-42.13-42.13-42.13-42.13-42.13-42.13	49.8646.8346.3344.1343.2343.9541.0839.5720.5619.6520.5520.7420.7521.1021.3821.5357.0149.7151.9454.0553.5453.0452.4251.7910.5210.5110.5010.5010.4910.4810.4710.479.129.299.479.649.8210.0010.1710.358.298.849.339.8310.3210.8111.3111.591.381.401.411.431.441.461.471.4942.13-42.13-42.13-42.13-42.13-42.13-42.13-42.13	49.8646.8346.3344.1343.2343.9541.0839.5738.4020.5619.6520.5520.7420.7521.1021.3821.5321.6457.0149.7151.9454.0553.5453.0452.4251.7951.1510.5210.5110.5010.5010.4910.4810.4710.4710.469.129.299.479.649.8210.0010.1710.3510.538.298.849.339.8310.3210.8111.3111.5911.881.381.401.411.431.441.461.471.491.5041.381.401.4142.1342.1342.1342.1342.1342.1342.13	49.8646.8346.3344.1343.2343.9541.0839.5738.4035.8320.5619.6520.5520.7420.7521.1021.3821.5321.6421.7457.0149.7151.9454.0553.5453.0452.4251.7951.1550.4810.5210.5110.5010.5010.4910.4810.4710.4710.4610.459.129.299.479.649.8210.0010.1710.3510.5310.718.298.849.339.8310.3210.8111.3111.5911.8812.161.381.401.411.431.441.461.471.491.501.5241.3342.1342.1342.1342.1342.1342.1342.1342.1342.13	49.8646.8346.3344.1343.2343.9541.0839.5738.4035.8334.4820.5619.6520.5520.7420.7521.1021.3821.5321.6421.7421.8457.0149.7151.9454.0553.5453.0452.4251.7951.1550.4849.7910.5210.5110.5010.5010.4910.4810.4710.4710.4610.4510.459.129.299.479.649.8210.0010.1710.3510.5310.7110.898.298.849.339.8310.3210.8111.3111.5911.8812.1612.451.381.401.411.431.441.461.471.491.501.521.5342.1342.1342.1342.1342.1342.1342.1342.1342.1342.1342.1342.13

GHG Additional Reductions = Net Zero

Transportation

EPA estimates that 2021 promulgated light-duty vehicle GHG standards will achieve an additional national 6% reduction in CO2, 5% reduction in CH4, and 5% reduction in N2O emissions in 2030 relative to the existing light-duty vehicle standards.

Electricity

When SL 2021-165 actions are implemented, the Electricity Generation sector will see a 70% overall decrease in gross GHG emissions compared to 2005 levels.







How we identified measures

Synthesis of existing reports

- Includes a review a total of 48 reports
- Identified and collated goals, existing actions, and proposed actions and categorized them by sector in line with the sectors within North Carolina's GHG Inventory.

Gap Analysis

- Currently underway
- Example expansion of waste management, natural working lands, and industrial sectors

Benefits

- GHG reductions
- EJ + Equity
- Resilience
- Cost Savings
- Workforce Development
- Health Benefits (Air Pollution).



High-level Breakdown of Measure Types by Sector



Determining Priority Measures and Actions



Emission Reductions

Quantified reduction to meet NC's 2050 net zero goal





Air Pollution Benefits

Reductions in air pollutants to improve surrounding communities





Can we implement?

Are there any barriers to implement: policy, readiness, financial



Communities

Benefits to underserved and underrepresented communities





Example PCAP Measures – Transportation, Buildings, and Power Programs

Vehicle Electrification	Decarbonized Buildings	Distributed Energy
Offer rebate/incentive program targeting funding gap for school and transit buses	 Provide support for adoption, training and compliance with building codes 	 Study and implement opportunities for community centers/parking lots distributed
 Conduct state fleet electrification planning and procure EVs 	 Supplement DOE's and federal tax credits incentives for heat pumps and weatherization 	 solar across the state Offer incentives for installation of renewable energy and
 consider the use of tax-exempt leases, which can further lower fleet electrification costs 	Offer workforce training/support	energy storage systems on commercial and residential buildings



Other Considerations

- Develop opportunities for scaling immediate climate solutions that also benefit underserved communities and improve air quality including a focus on workforce development
- Activities could include demonstrations and pilots, qualifying contractors for technical studies, marketing and sharing lessons, and measurement & verification
- Reduction opportunities to target through this program could include:
 - More efficient and cleaner industrial processes and operations (e.g., energy audits, strategic energy management, equipment upgrades, and waste heat utilization)
 - Managing thermal loads
 - Use of clean and low carbon fuels
 - Reductions in high global warming potential emissions
 - Landfill gas capture and reuse
 - Manufacturing and use of low embodied carbon materials



Underserved and Underrepresented Communities Focused

• Under CPRG our goal is to focus on underserved/underrepresented communities for implementation of measures. At least 40% of implementation award will apply to these communities.



https://tinyurl.com/ncdeqcommunitymap



Part III. Timelines and Next Steps



Stakeholder Engagement





Outreach and Engagement Events

Event	Dates	Time	City/Venue
In person	November 28, 2023	6:30-8 p.m.	Fayetteville
In person	December 5, 2023	6:30-8 p.m.	Morganton (SW NC)
Webinar	December 7, 2023	6:30-8 p.m.	Virtual
Webinar	January 4, 2024	6:30-8 pm	Virtual
Webinar	January 9, 2024	6:30-8 pm	Virtual



Approach to Low Income and Disadvantaged Community (LIDAC) Engagement

Low Income and Disadvantaged Communities identified using environmental justice mapping tools to include:



Climate and Economic Justice Screening Tool (CEJST)



- Partner with local organizations such as Council of Governments, community leaders, advocates and DAC partners to promote the events and encourage attendance
- Incorporate and adjust the final draft PCAP based on feedback.
- Update progress regularly using plain language.





Low Income and Disadvantaged Community Benefits

- Benefits can be qualified or quantified and include:
 - Co-pollutant emission reductions (criteria pollutants, air toxics)
 - Increased indoor and/or ambient health benefits
 - Increased climate resilience (e.g. reduced outages)
 - Improved access to services/amenities
 - Equitable access to clean energy
 - Jobs created
 - Workforce development opportunities
 - Reduced energy costs/energy burden



North Carolina Low Income and Disadvantaged Communities

NC CEJST Disadvantaged Tracts

Populations above and below 200% FPL



Energy Burdened and Low Income*

County	# of Census Tracts
Robeson County	13
Wilson County	9
Halifax County	7
Bladen County	6
Cumberland County	6
Edgecombe County	6
Lenoir County	6
Duplin County	5
Forsyth County	5
Guilford County	5

*abbreviated list for illustrative purposes

Based on environmental indicators, socioeconomic indicators, environmental justice indices, and other indices (in total 46 indicators)



Part IV. Discussion and Break Out Sessions





Breakout Sessions – 30 Minutes



Sectors being Evaluated







9 m .

Residential & Commercial Buildings



Waste and Materials Management



Agriculture/ Natural & Working Lands



Type of Feedback we are Seeking?

What programs or projects do you have ready to implement that would be eligible for CPRG funds?

Where do you see the biggest needs/gaps for funding and support, especially those without support through other funding opportunities?

What are the barriers, limitations, gaps to implement projects?



Feedback Deadline for PCAP Inclusion Jan 19, 2024

Interested in Submitting an Implementation Grant Idea

https://bit.ly/CPRG-Idea



Or, For General Questions: cprg@deq.nc.gov

Additional Information

http://bit.ly/CPRG-Info







Breakout Sessions Rapid Fire Report Out





Questions



Other Funding Opportunities in your Community

- Solar for All *EnergizeNC* Consortium Application submitted for \$250M
- Grid Resilience, 40101d \$9.2M/year for 5 years
- Weatherization Assistance Program (WAP) \$89M total for 5 Years BIL Plan was approved by DOE in August 2023
- IRA Rebates Rebates for residential energy efficiency and electrification; funding expected in 2024 to start program development for NC
- Other opportunities being announced monthly





The End







Department of Environmental Quality

EPA Targeted Funding Tiers

Tier	Grant Ranges (million)	Funds Targeted for Each Tier (billion)	Anticipated Number of Grants to be Awarded	G
Tier A	\$200 to \$500	\$2	4-10	a
Tier B	\$100 to <\$200	\$1.3	6-13	
Tier C	\$50 to <\$100	\$0.6	6-12	·
Tier D	\$10 to <\$50	\$0.3	6-30	
Tier E	\$2 to <\$10	\$0.1	10-50	a
	TOTAL	\$4.3 billion	30-115	

General Competition funds will be available across five funding tiers.

Applications will be evaluated and selected for award on a tier- bytier basis.



CPRG Funding Evaluation Criteria

EVALUATION CRITERIA SUMMARY	POINTS
1. Overall Summary and Approach	45
2. Impact of GHG Reduction Measures	<mark>6</mark> 0
3. Environmental Results - Outputs, Outcomes, and Performance Measures	30
4. Low-Income and Disadvantaged Communities	35
5. Job Quality	5
6. Programmatic Capability and Past Performance	30
7. Budget	45
TOTAL	250

