



NC Climate Pollution Reduction Grant



Overview

Agenda

- Welcome
- Team Introductions
- CPRG Presentation
- Question and Answers

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



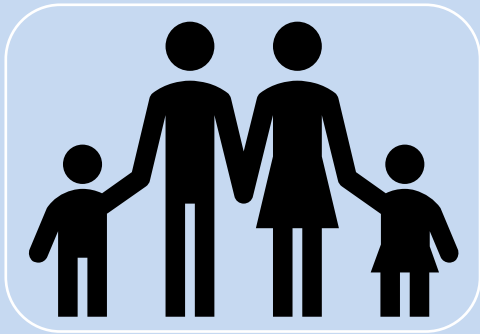
North Carolina's Emissions Contributions

- 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

Inequity in climate vulnerability and resilience



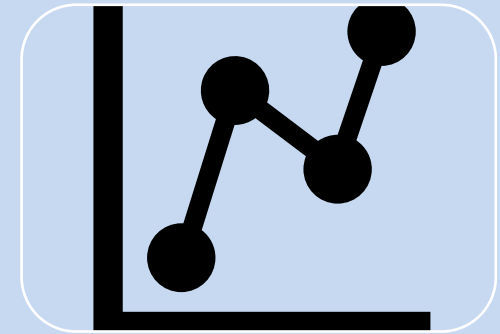
Social vulnerability



Unequal exposure to climate hazards



Infrastructure and housing disparities



Inequalities in resilience policy and programming

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
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- Climate Pollution Reduction: Planning Grants (Phase I)
 - Climate Pollution Reduction: Implementation Grants (Phase II, \$4.3B)



CPRG – Two Phases

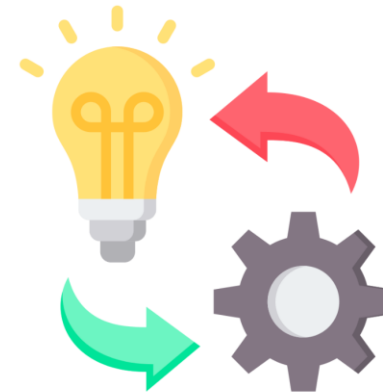
PLANNING GRANTS

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

PHASE I



PHASE II



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

*We are here
Fall 2023*

Phase I: CPRG Overarching Goal/Objectives



**Well-established leadership
climate initiatives**



**Existing Statewide
Plans**

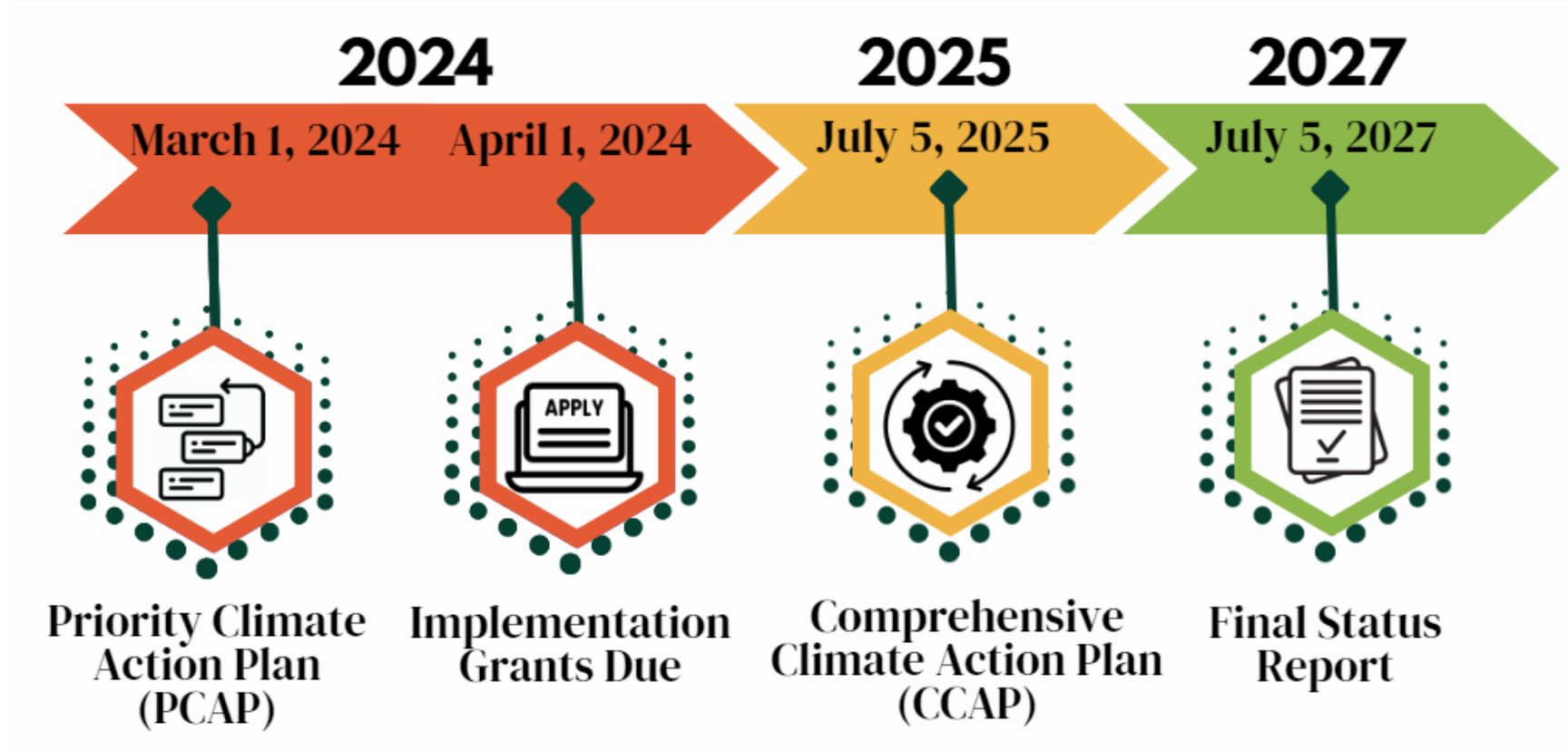


**Efforts grounded in
science**

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*



Electric Power



Transportation



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

***EPA anticipates awarding
30 – 115 individual grants
between \$2 million and
\$500 million***



Applying for CPRG Implementation Grants

How to apply?

- Statewide Application – be a partner with NC and be included in our larger implementation effort. It is estimated that the states could receive 90% of the funds.
- Targeted Application – You can apply for a targeted individual grant as long as the entity is seeking **funding to implement one or more GHG reductions measures that are included in NC's PCAP**

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

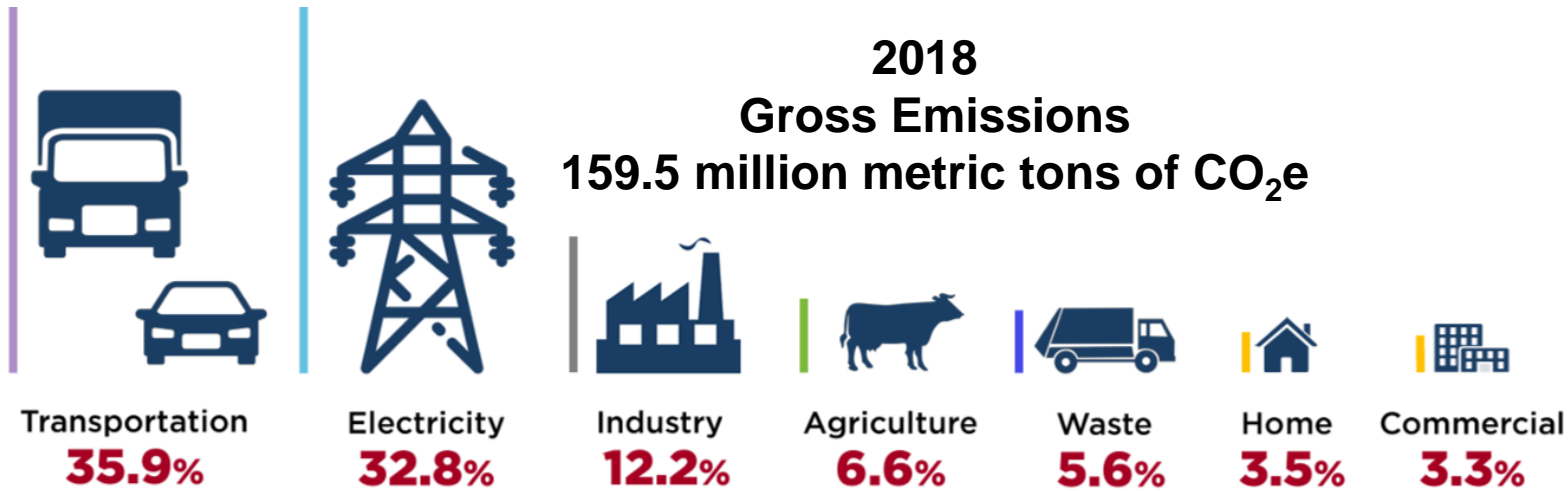
Want more information - <https://tinyurl.com/EPA-CPRG-Info>



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)**

↓ 23.0%

**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

Source Sector	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Electricity Generation and Use ^a	49.86	46.83	46.33	44.13	43.23	43.95	41.08	39.57	38.40	35.83	34.48	34.35
Residential/Commercial/Industrial ^b	20.56	19.65	20.55	20.74	20.75	21.10	21.38	21.53	21.64	21.74	21.84	21.96
Transportation	57.01	49.71	51.94	54.05	53.54	53.04	52.42	51.79	51.15	50.48	49.79	49.09
Agriculture	10.52	10.51	10.50	10.50	10.49	10.48	10.47	10.47	10.46	10.45	10.45	10.44
Waste Management	9.12	9.29	9.47	9.64	9.82	10.00	10.17	10.35	10.53	10.71	10.89	11.07
Industrial Processes	8.29	8.84	9.33	9.83	10.32	10.81	11.31	11.59	11.88	12.16	12.45	12.73
Natural Gas and Oil Systems	1.38	1.40	1.41	1.43	1.44	1.46	1.47	1.49	1.50	1.52	1.53	1.55
Gross Emissions	156.73	146.23	149.54	150.31	149.59	150.83	148.31	146.80	145.55	142.89	141.43	141.18
Net Carbon Sinks – LULUCF ^c	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13
Net Emissions	114.60	104.10	107.41	108.18	107.46	108.70	106.18	104.67	103.42	100.76	99.30	99.05

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 67% overall decrease in gross GHG emissions compared to 2005 levels.



PCAP Development Road Map

Step 7
March 2024

Goal

Identification of greenhouse gas emissions reduction programs, policies, projects, and measures to meet NC's Climate Goals

Step 1

SYNTHESIS

Existing mitigation plans/activities to create a list of sector specific GHG measures already identified by NC

Fall 2023

Step 2

GAPS

Identify gaps in GHG measures and additional options for reductions

Step 4

PRIORITIZATION

Apply evaluation criteria to prioritize GHG measures to pursue through CPRG Implementation Grants

Step 3

BENEFITS

Quantify and qualify benefits

Step 6

FINALIZE

Address Stakeholder comments and submit final PCAP to EPA

Step 5

FEEDBACK

Obtain Stakeholder Feedback per Stakeholder Engagement/LIDAG Analysis Plan

GRANTS

Apply for CPRG grants to fund priority action measures

START



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**

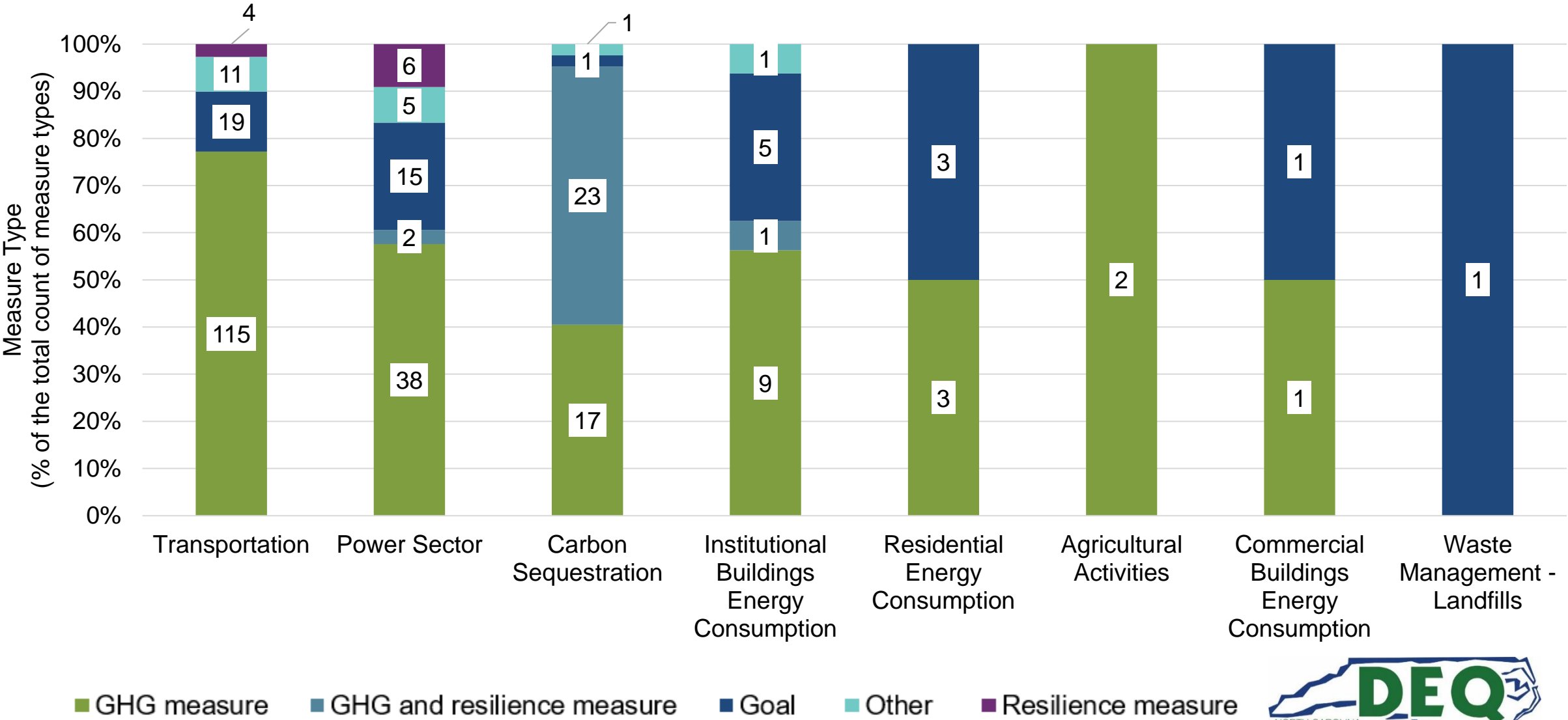
- Currently underway
- Example expansion of waste management, natural working lands, and industrial sectors

- **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
<ul style="list-style-type: none">• Offer rebate/incentive program targeting funding gap for school and transit buses• Conduct state fleet electrification planning and procure EVs• consider the use of tax-exempt leases, which can further lower fleet electrification costs	<ul style="list-style-type: none">• Provide support for adoption, training and compliance with building codes• Supplement DOE's and federal tax credits incentives for heat pumps and weatherization• Offer workforce training/support	<ul style="list-style-type: none">• Study and implement opportunities for community centers/parking lots distributed solar across the state• Offer incentives for installation of renewable energy and energy storage systems on commercial and residential buildings



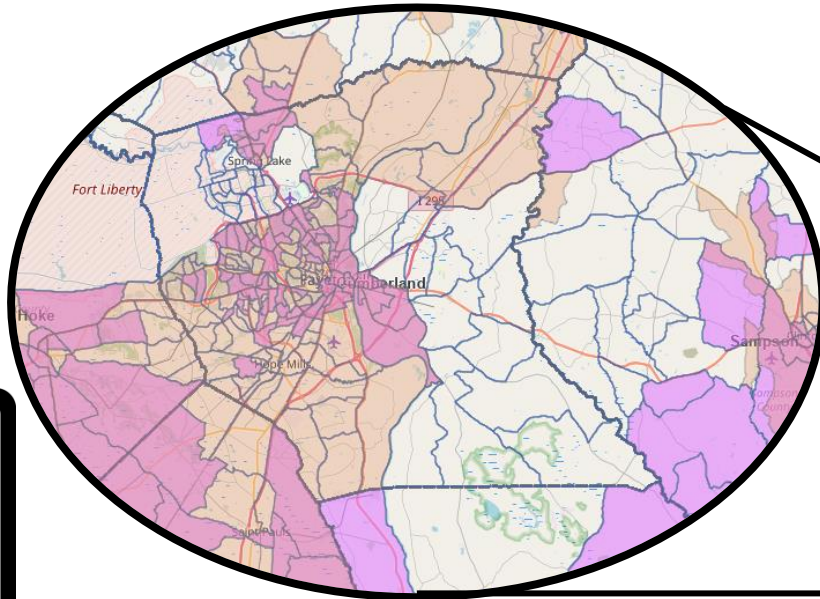
Other Considerations

- 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

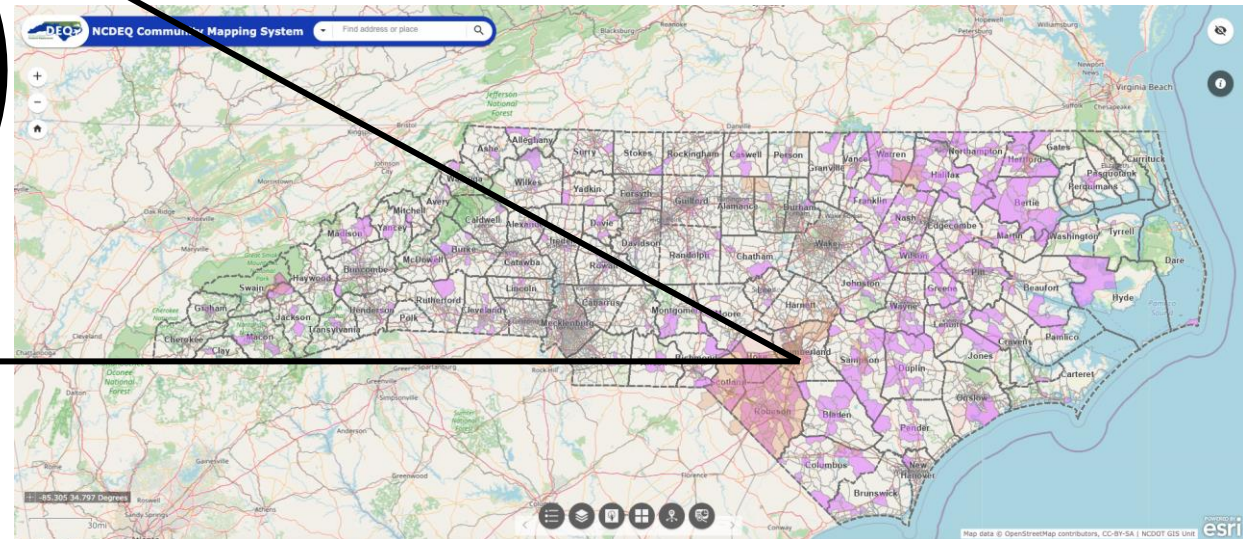


Underserved and Underrepresented Communities Focused

- 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.



Climate and Economic Justice
Screening Tool (CEJST)



<https://tinyurl.com/ncdeqcommunitymap>



Part III. Timelines and Next Steps



Stakeholder Engagement

WEBINARS



WORKSHOPS



ONLINE INPUT



Outreach and Engagement Events

Event	Dates	Time	City/Venue
In person	28-Nov	6:30-8 p.m.	Fayetteville
In person	5-Dec	6:30-8 p.m.	Morganton (SW NC)
Webinar	7-Dec	6:30-8 p.m.	Virtual
Tentative Webinar	January 18, 2024	TBD	Virtual



Part IV. Discussion



Approach to Low Income and Disadvantaged Community (LIDAC) Engagement

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



- 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.





Questions



Feedback Deadline for PCAP Inclusion Dec 12, 2023

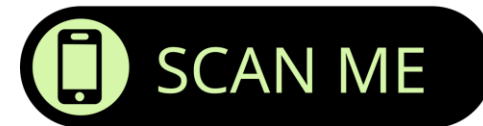
Interested in Submitting an Implementation Grant Idea

<https://qrco.de/beaSAi>



Additional Information

<https://tinyurl.com/CPRG-Info>



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



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?



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) - 5 Year 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

For more information – Email Helen.Hossley@deq.nc.gov





Department of Environmental Quality

