



# *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

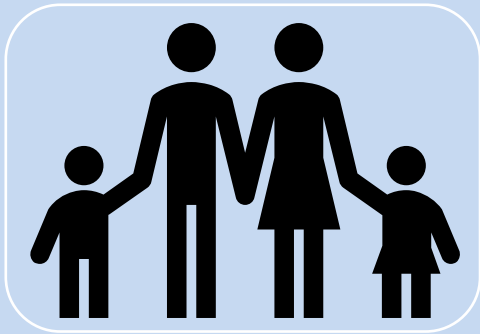
# *North Carolina's Emissions Contributions*

- 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*

## Inequity in climate vulnerability and resilience



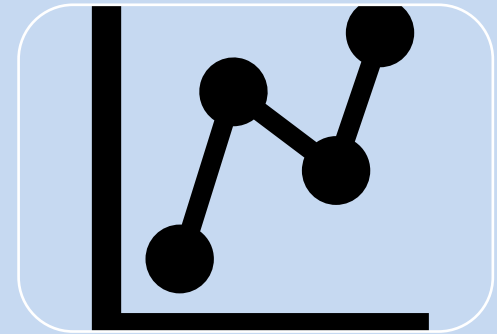
Social vulnerability



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



# CPRG – Two Phases

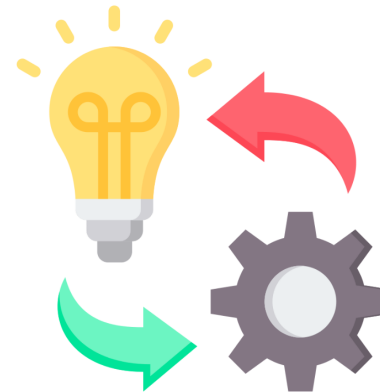
## PLANNING GRANTS

- 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**

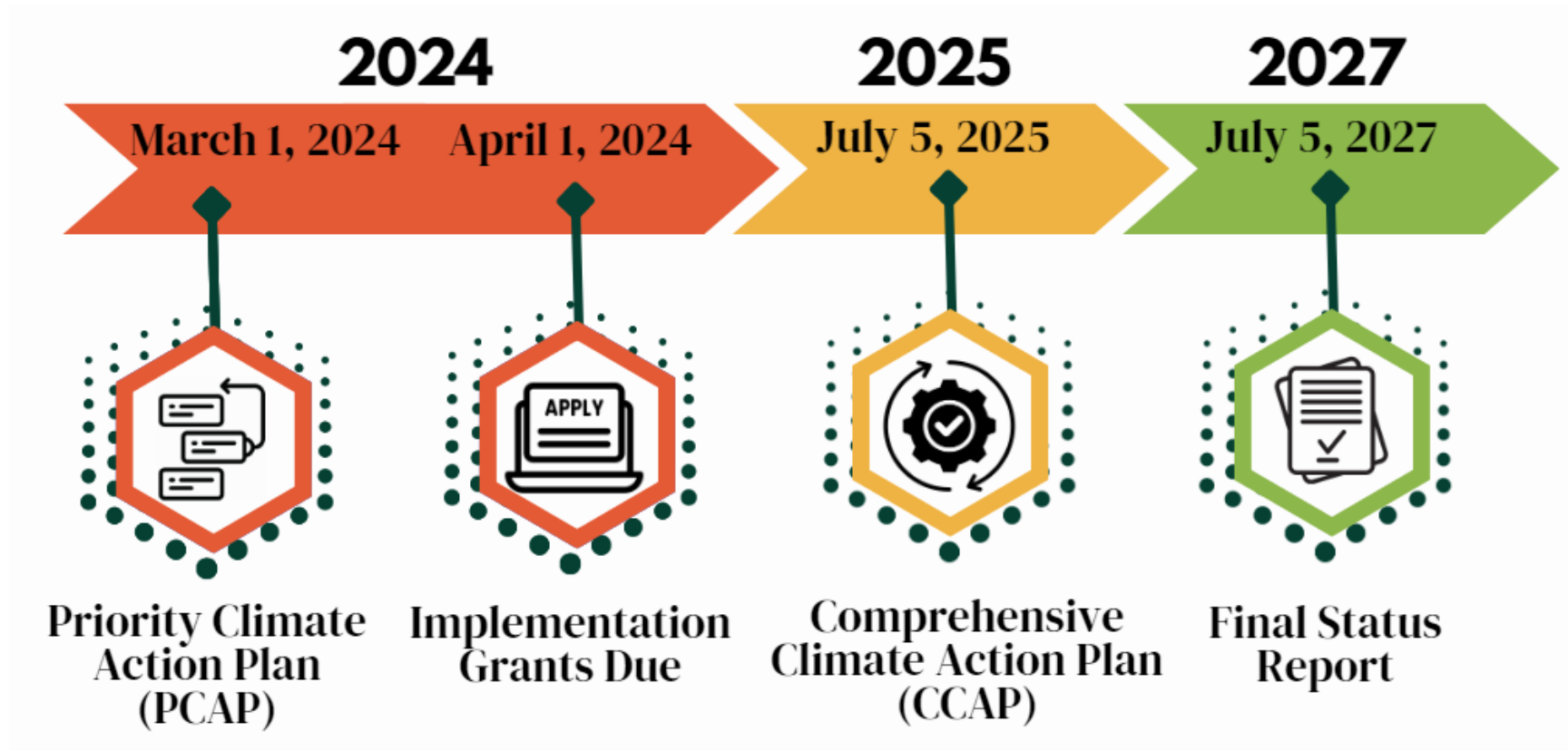


**Efforts grounded in  
science**

**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>

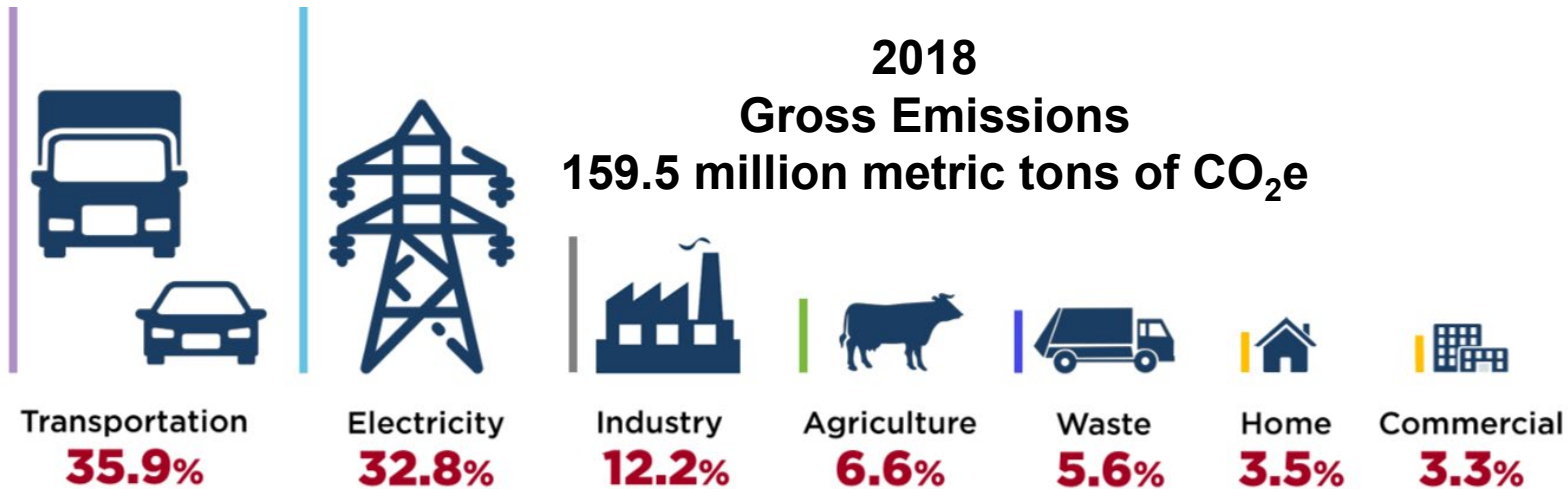




## *Part II. State CPRG Planning Approach*



# NC's Sources of GHGs – Where are we?



CO<sub>2</sub> emissions removed  
by forests & other lands:

**26.4%**

of total gross emissions

CO<sub>2</sub> 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 CO<sub>2</sub>e*

<b>Source Sector</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>
Electricity Generation and Use <sup>a</sup>	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 <sup>b</sup>	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
<b>Gross Emissions</b>	<b>156.73</b>	<b>146.23</b>	<b>149.54</b>	<b>150.31</b>	<b>149.59</b>	<b>150.83</b>	<b>148.31</b>	<b>146.80</b>	<b>145.55</b>	<b>142.89</b>	<b>141.43</b>	<b>141.18</b>
Net Carbon Sinks – LULUCF <sup>c</sup>	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13	-42.13
<b><i>Net Emissions</i></b>	<b><i>114.60</i></b>	<b><i>104.10</i></b>	<b><i>107.41</i></b>	<b><i>108.18</i></b>	<b><i>107.46</i></b>	<b><i>108.70</i></b>	<b><i>106.18</i></b>	<b><i>104.67</i></b>	<b><i>103.42</i></b>	<b><i>100.76</i></b>	<b><i>99.30</i></b>	<b><i>99.05</i></b>

# *GHG Additional Reductions = Net Zero*

## **Transportation**

EPA estimates that 2021 promulgated light-duty vehicle GHG standards will achieve an additional national 6% reduction in CO<sub>2</sub>, 5% reduction in CH<sub>4</sub>, and 5% reduction in N<sub>2</sub>O 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.

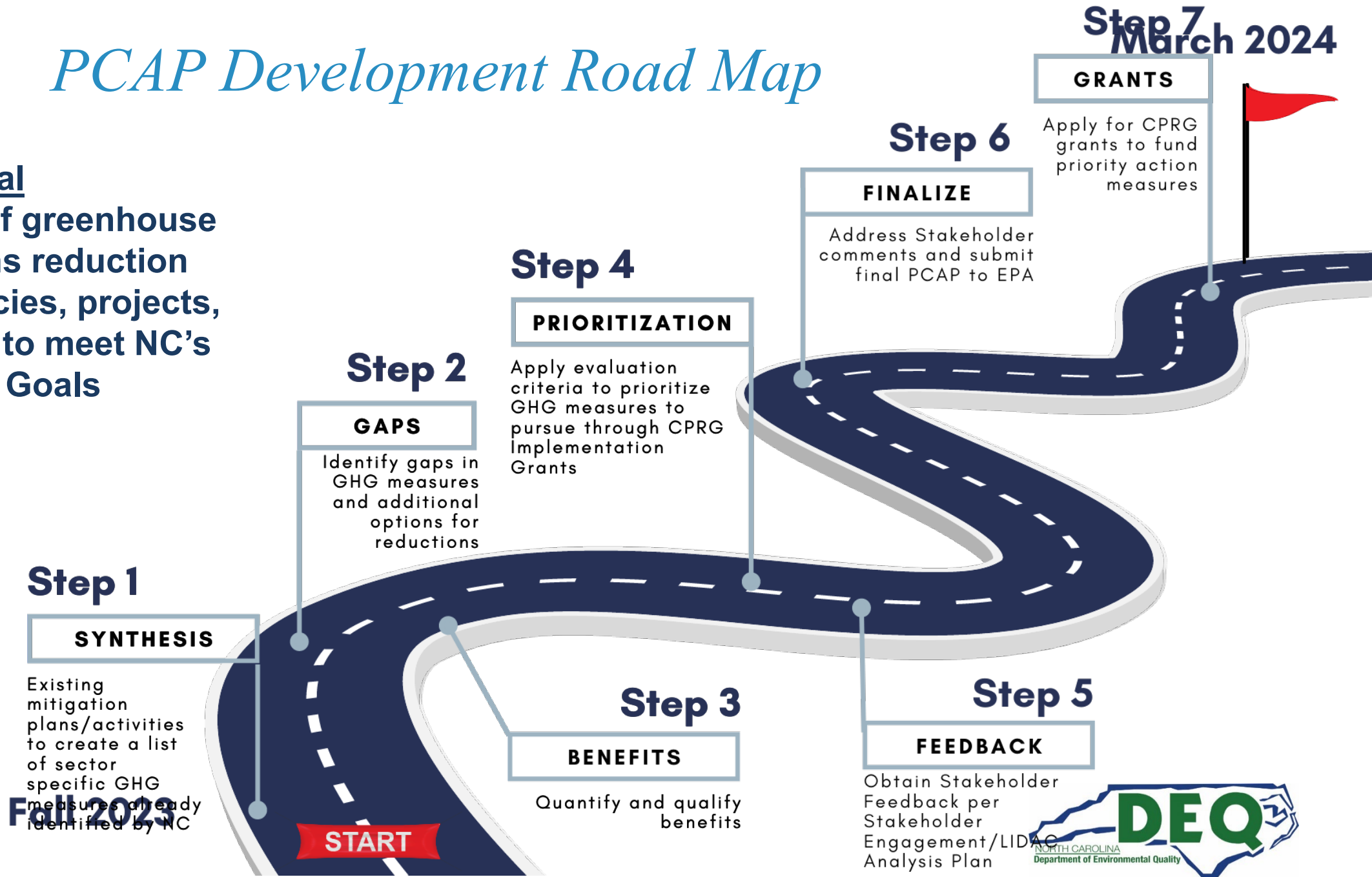


# PCAP Development Road Map

Step 7  
March 2024

## Goal

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

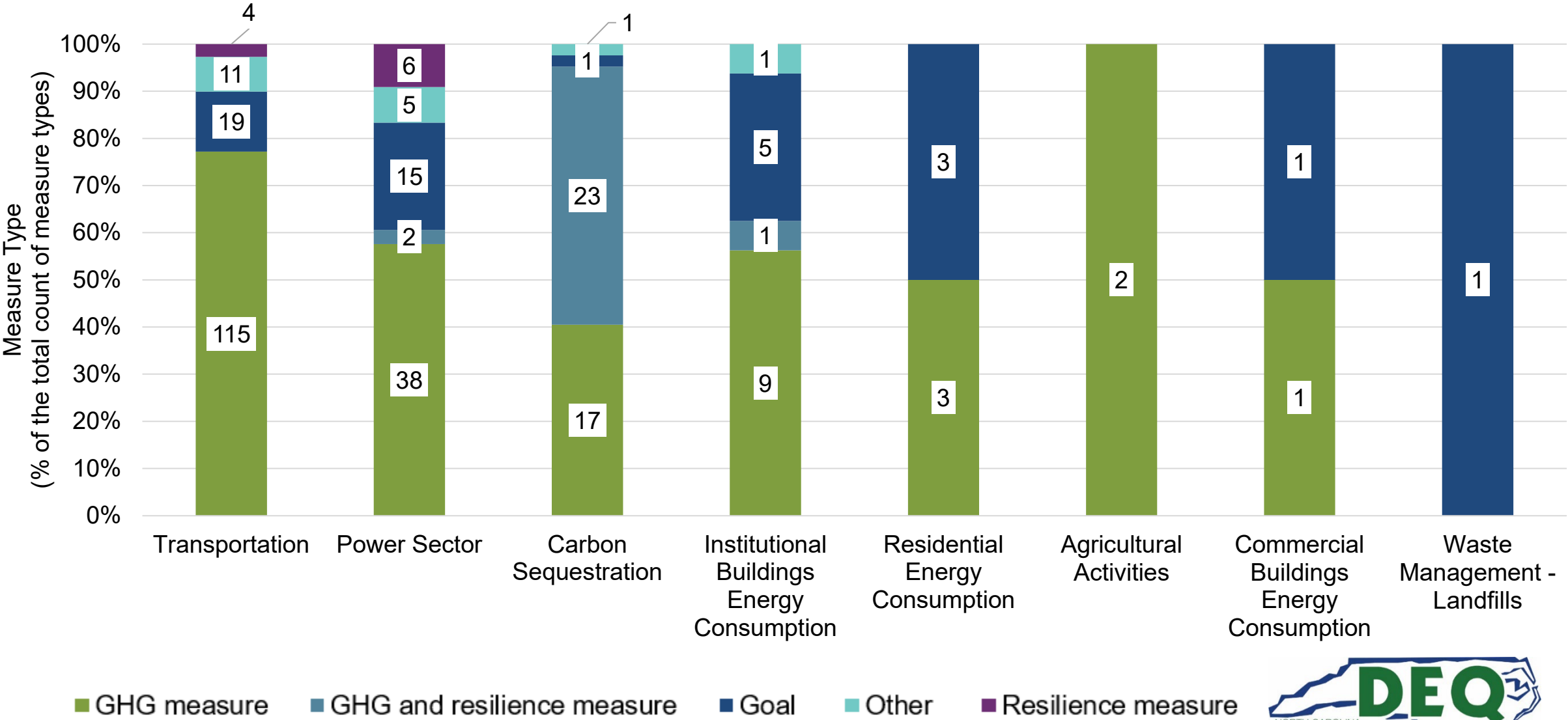


# *How we identified measures*

- **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*

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



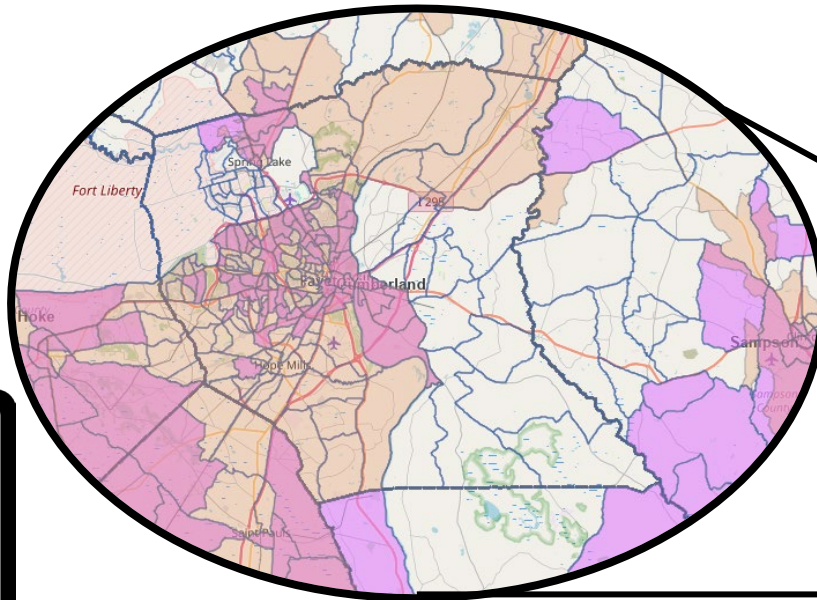
# *Other Considerations*

- 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

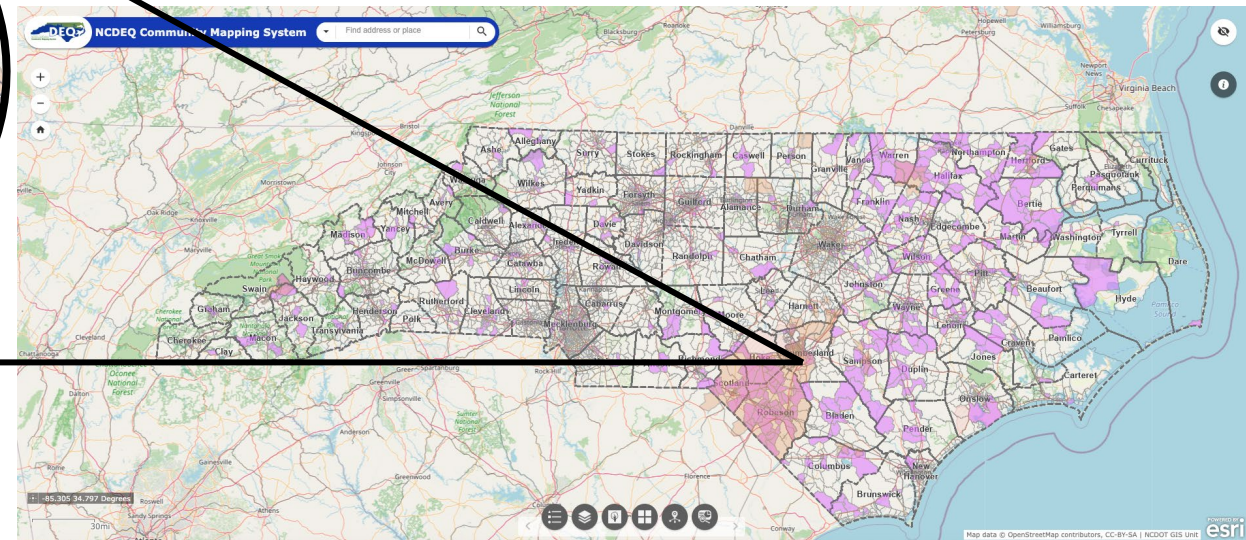


# Underserved and Underrepresented Communities Focused

- 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



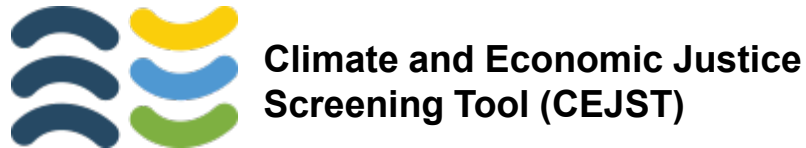
# *Outreach and Engagement Events*

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



# *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.



# *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



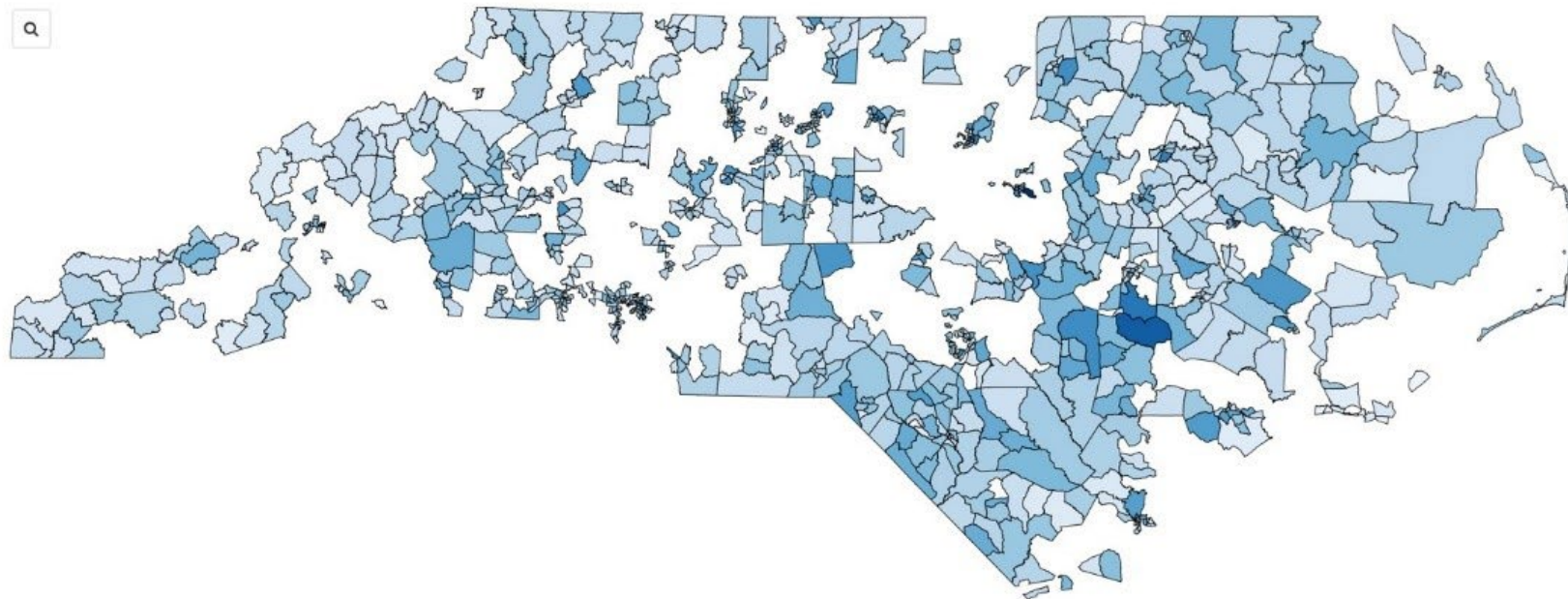
# North Carolina Low Income and Disadvantaged Communities

## NC CEJST Disadvantaged Tracts

Populations above and below 200% FPL

Census tract population below 200% FPL

55 5968



## 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*



**Electric Power**



**Transportation**



**Industry**



**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 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](mailto:cprg@deq.nc.gov)



# *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

For more information – Email [Helen.Hossley@deq.nc.gov](mailto:Helen.Hossley@deq.nc.gov)





*Department of Environmental Quality*

