

The Digital Divide in North Carolina¹



Approximately 1.1 million North Carolina households lack access to high-speed internet in their homes² and cannot afford it. Many residents also lack the skills to effectively use it. We can **achieve digital equity in North Carolina** by addressing the following factors:



Infrastructure

At least **266,000 North Carolina households**, likely much higher, currently do not have access to high-speed internet of 100/10+ due to lack of infrastructure.³



Affordability

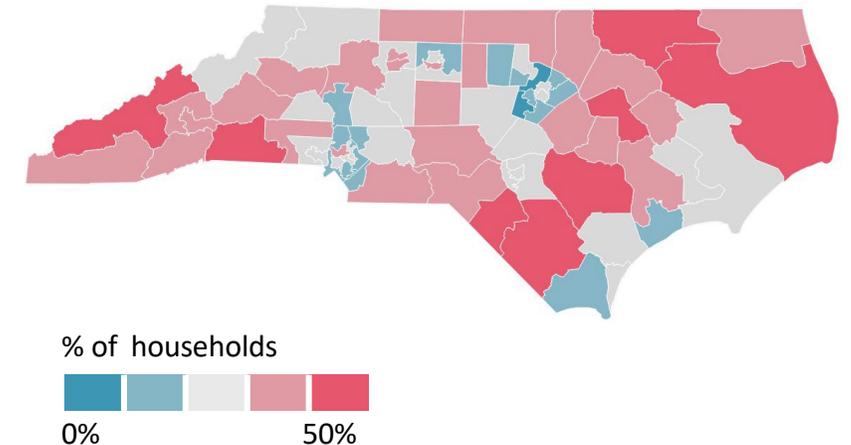
Approximately **1.3 million households** would have to pay more than 2% of their annual income to afford a broadband cost of \$60/month.⁴



Digital Literacy and Enablement

An estimated **430,000 households** are without a home laptop or desktop computer. Of those, **approximately 180,000** do not have a smartphone.⁵ As many as **1.2 million adults** may lack the digital literacy required to begin taking advantage of digital services.⁶

Percent of Households Without a High-Speed Internet Subscription (2019)⁷



1. Data on this slide is based on a 2021 study by McKinsey & Company. | 2. U.S. Census Bureau, 2019 American Community Survey (ACS) Microdata | 3. FCC Form 477, FCC 2019 block demographic estimates | 4. U.S. Census Bureau, 2019 American Community Survey (ACS) Microdata | 5. U.S. Census Bureau, 2019 American Community Survey (ACS) Microdata; 2021 Census Pulse Survey | 6. National Center for Education Statistics | 7. U.S. Census Bureau, 2019 American Community Survey (ASC) Microdata, for respondents who don't have an internet subscription or that only have cellular data or only have dial-up, satellite or other.



By 2025, North Carolina will become a top-5 state for high-speed internet adoption rates while equitably eliminating North Carolina's digital divide by:

- Making home internet subscriptions affordable to all households, especially those with children
- Making targeted investments to close gaps in adoption that impact Native American, Black and Latinx households
- Catalyzing access to devices, digital training and tools that will connect residents to the digital economy

Measuring Success



Key Success Metrics	N.C. Today	N.C. 2025
 Households with broadband internet access	95.5%	98%
 Households with broadband internet subscriptions	73%	80%
 Households with children with broadband internet subscriptions	81%	100%
 Adoption rates across racial subgroups		
• Native American	57%	80%
• Black	64%	80%
• Latinx	68%	80%
• White	76%	80%

Approach & Initiative Investment



Governor Cooper proposes closing the digital divide with a \$1.2 billion state investment, using funds from the American Rescue Plan, in the following areas to **achieve digital equity in North Carolina**. We will also leverage significant private sector investment.

 Infrastructure	\$600M	Ensure availability of internet service at speeds of at least 100/20 Mbps for more than 98% of North Carolina households.
	\$350M	<ul style="list-style-type: none">• GREAT Grant 2.0
	\$150M	<ul style="list-style-type: none">• Competitive Bidding
	\$100M	<ul style="list-style-type: none">• Stop Gap Solutions
 Affordability	\$420M	Lower cost barriers for North Carolinians.
 Digital Literacy and Enablement	\$165M	Improve awareness and enable North Carolinians to realize the benefits of high-speed internet through digital literacy and upskilling aimed at accessing the digital economy.
	\$70M	<ul style="list-style-type: none">• Device Support and Break-Fix Services
	\$95M	<ul style="list-style-type: none">• Awareness and Digital Literacy
 Administrative	\$15M	Supplement existing state administrative capacity to support high-speed internet efforts.



Petition for Rulemaking – Regional Greenhouse Gas Initiative Overview
North Carolina Division of Air Quality
Department of Environmental Quality



Presentation Overview

- Petition for Rulemaking
- RGGI Overview
 - Program Elements
 - Revenue and Investments
- North Carolina Petition RGGI Rule
 - Applicability
 - Consignment Auction Approach
 - Utilities Commission Role
 - Next Steps

Petition for Rulemaking

- January 11, 2021 - DAQ received a petition to develop rules necessary to join RGGI.
- June 15, 2021 Special Meeting – AQC voted to recommend that the EMC grant the petition.
- July 13, 2021 Special Meeting - EMC voted to grant the petition.

RGGI Overview

“The Regional Greenhouse Gas Initiative (RGGI) is a cooperative, market-based effort among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont, and Virginia to cap and reduce CO₂ emissions from the power sector. It represents the first cap-and-invest regional initiative implemented in the United States.”

rggi.org

RGGI Overview

- 2009: start of program with ten states (CT, DE, MA, MD, ME, NH, NJ, NY, RI, and VT)
- 2012: NJ withdrew from program
- 2020: NJ resumed participation
- 2021: VA joined program
- PA is in the process of joining (2019 – present)

RGGI Overview

Program Elements

Cap-and-trade System

- Each participating state develops rules that establish declining annual CO₂ emission budgets, in the form of “allowances”, from affected facilities.
- States allocate allowances to one combined Regional Market for auction.
- Affected EGUs bid on allowances in the Regional Market.
- Applies to fossil fuel-fired EGUs \geq 25 MW.
- Goal of 3% reduction in CO₂ budgets per year through 2030.
- Currently, budgets are constant after 2030; however, RGGI states intend to conduct a comprehensive program review in 2021 to consider, among other items, additional reductions to the cap post-2030.

RGGI Overview

Program Elements

Compliance

- At the end of each control period, affected EGUs must hold enough allowances to cover their CO₂ emissions during the control period.
- 1 CO₂ allowance = 1 short ton of CO₂
- Allowances can be banked for future use.
- Allowances can also be purchased and sold on the secondary market.

RGGI Overview

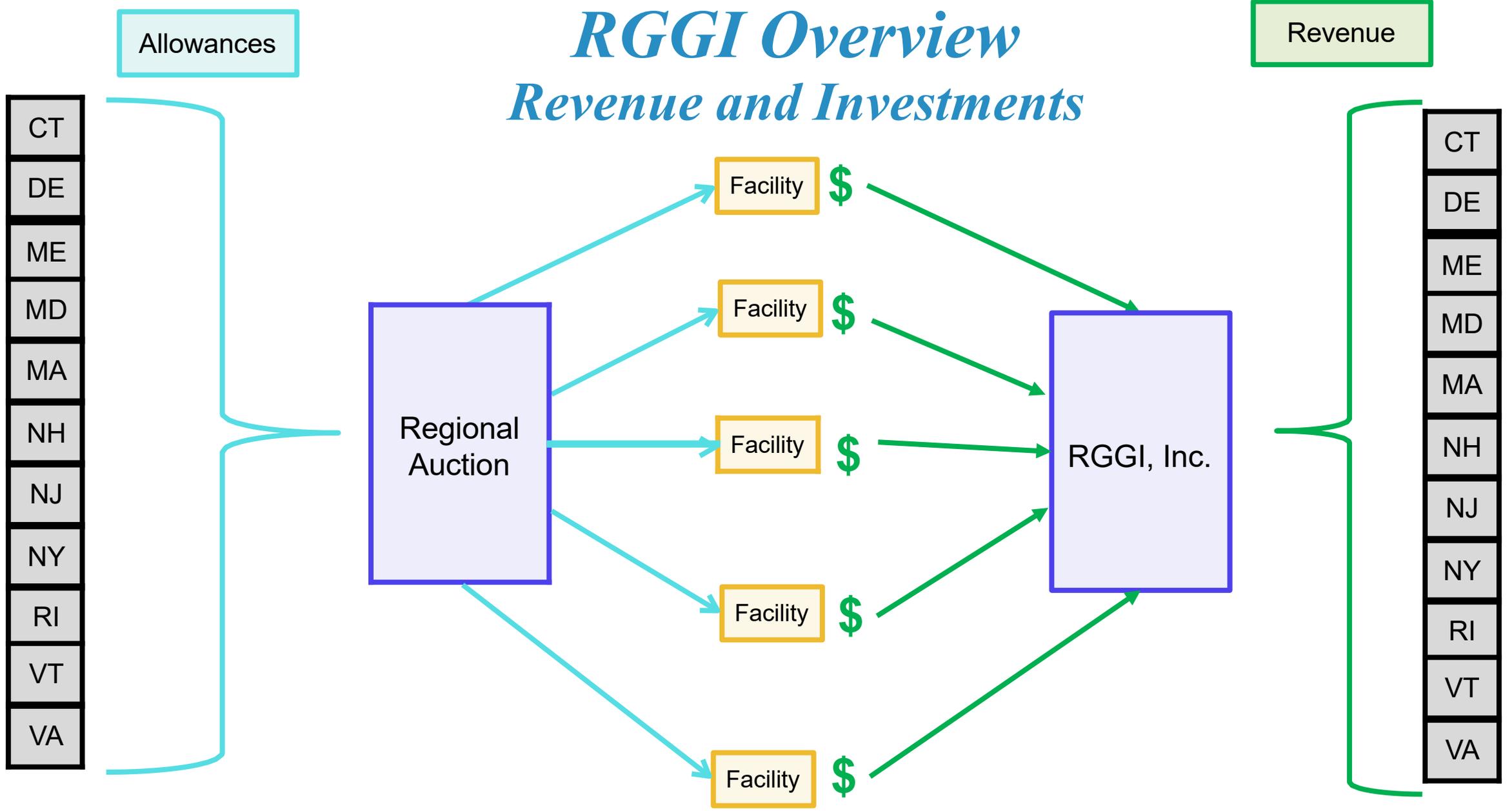
Revenue and Investments

- Minus a small administrative fee, auction revenues are returned to the States for their allocation of allowances.*
- Each RGGI State uses revenues differently, many investing energy efficiency, direct bill assistance, or other environmental programs.*

* As set forth in the petition rule, the North Carolina program deviates from this format.

RGGI Overview

Revenue and Investments



North Carolina RGGI Rule

The NC petition rule deviates from the existing RGGI format:

- Expanded applicability;
- Consignment auction approach;
- All emissions treated equally (fossil-fuel vs. biomass);
- NC will not accept offset project applications.
- Steeper decline in the CO₂ budget (~4.7% per year) to meet EO80 goal of 70% reduction (below 2005 levels) by 2030.

North Carolina RGGI Rule

North Carolina Proposed CO₂ Budgets:

Year	Base Budget
2022	38,654,000
2023	36,851,000
2024	35,048,000
2025	33,245,000
2026	31,442,000
2027	29,639,000
2028	27,836,000
2029	26,033,000
2030 and each year thereafter	24,230,000

**Budgets proposed in petition are similar, but not identical to those evaluated in CEP
Recommendation A-1R report**

North Carolina RGGI Rule

Applicability

- Applicability is expanded to also include:
 - Biomass/biofuel units
 - Industrial units, regardless of grid connectivity
- Biomass emissions cannot be subtracted from compliance obligation

* Exhibit C of the petition lists the affected facilities. However, the rule applies at the unit level. Several of the facilities listed on Exhibit C do not have any individual units that serve a generator with a nameplate capacity ≥ 25 MW and therefore, will not be subject to RGGI.

North Carolina RGGI Rule

Affected Facilities

Duke Energy

Power Plant	Operator
Asheville	Duke Energy Progress
Belews Creek	Duke Energy Carolinas
Blewett CT*	Duke Energy Progress
Buck CC	Duke Energy Carolinas
Dan River CC	Duke Energy Carolinas
GG Allen	Duke Energy Carolinas
HF Lee Energy Complex (Wayne County CC Plant)	Duke Energy Progress
James E. Rogers Energy Complex (Cliffside)	Duke Energy Carolinas
L V Sutton	Duke Energy Progress
Lincoln Combustion	Duke Energy Carolinas
Marshall	Duke Energy Carolinas
Mayo	Duke Energy Progress
Rockingham Power Project	Duke Energy Carolinas
Roxboro	Duke Energy Progress
Sherwood H. Smith Jr. Energy Complex	Duke Energy Progress
W.H. Weatherspoon CT	Duke Energy Progress
Wayne County	Duke Energy Progress

North Carolina RGGI Rule

Affected Facilities

Other Utilities

Power Plant	Operator
Anson County Project	North Carolina Electric Membership Corporation
Butler Warner	Fayetteville Public Works Commission
Cleveland CT	Southern Power Company
Craven County Wood Energy	CMS Generation Operating Co II
Hamlet	North Carolina Electric Membership Corporation
Kings Mountain Energy Center	NAES Corporation
Lumberton ST	Veolia Energy Operating Services LLC
Monroe CT*	NC Municipal Power Agency Number 1
Rosemary	NAES Corporation
Rowan	Southern Power Company

North Carolina RGGI Rule

Affected Facilities

Other/Industrial Facilities

Power Plant	Operator
Canton*	Blue Ridge Paper Products, Inc.
Carolina Food Processors 1*	Smithfield Packing Co
Plymouth	Domtar Paper Company, LLC
Riegelwood Mill	International Paper Co-Riegel
Roanoke Rapids, North Carolina	Kapstone Kraft Paper Corporation
Southport*	Archer-Daniels-Midland Company
UNC - Chapel Hill Cogen Facility	University of North Carolina
Weyerhaeuser New Bern Cellulose Fiber Cogen	International Paper Company

North Carolina RGGI Rule

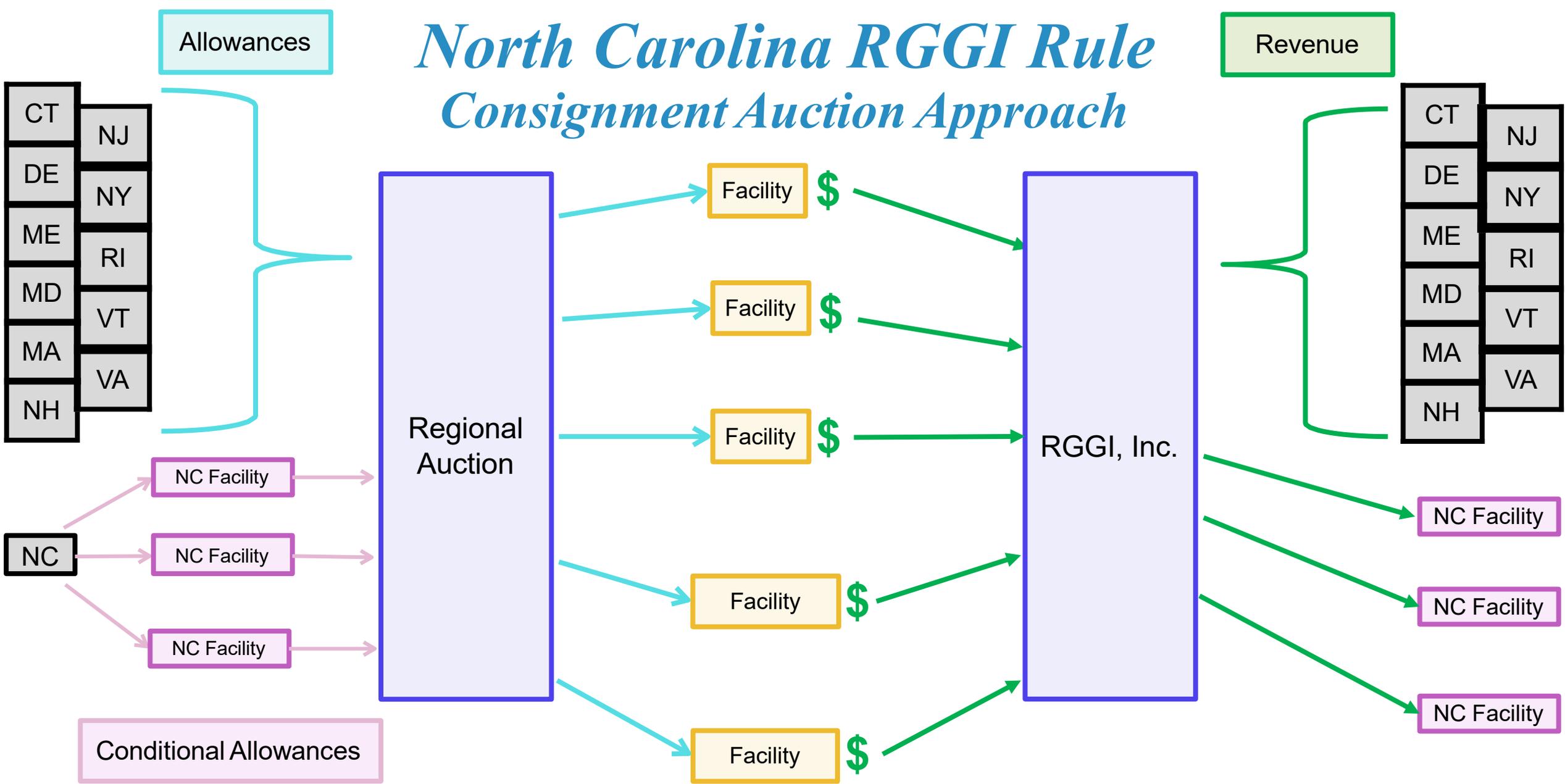
Consignment Auction Approach

- Instead of allocating the statewide CO₂ budget to the Regional Market directly, North Carolina's budget will be allocated to the affected sources as "conditional" CO₂ allowances.
- Conditional allowances cannot be used directly for compliance; they must be consigned to the Regional Market first.
- Once a "conditional" allowance passes through the Regional Market, it is no longer "conditional" (i.e., it can be used for compliance).

North Carolina RGGI Rule Consignment Auction Approach

- Affected sources must still purchase allowances to use for compliance, either through the Regional Market auctions or on the secondary market.
- Auction revenues are returned to the affected sources that consign allowances to the auction, rather than the State.
- North Carolina would be the first RGGI state to implement this consignment approach.

North Carolina RGGI Rule Consignment Auction Approach



North Carolina RGGI Rule

Next steps

- The rule-making process has commenced
- Development of a fiscal note/analysis
- Environmental Justice report

- Request to proceed to public hearing
- Public comment process (including a public hearing)
- Final action by EMC

Additional Resources

- Petition and Proposed Rule:

<https://files.nc.gov/ncdeq/Environmental%20Management%20Commission/air-quality-committee/2021/june/Attachment-A-2021-01-11---SELC-Petition-for-Rulemaking.pdf>

- AQC Special Meeting Summary:

<https://files.nc.gov/ncdeq/Environmental%20Management%20Commission/air-quality-committee/2021/july/Approved-June-2021-AQC-Special-Meeting-Minutes.pdf>

- RGGI, Inc. website:

<https://www.rggi.org/>

- Auction FAQs:

https://www.rggi.org/sites/default/files/Uploads/Auction-Materials/53/FAQS_Apr_6_2021.pdf



Historically Under-Resourced County Outreach Program
Brian Phillips, Mobile Sources Branch Supervisor
August 23, 2021

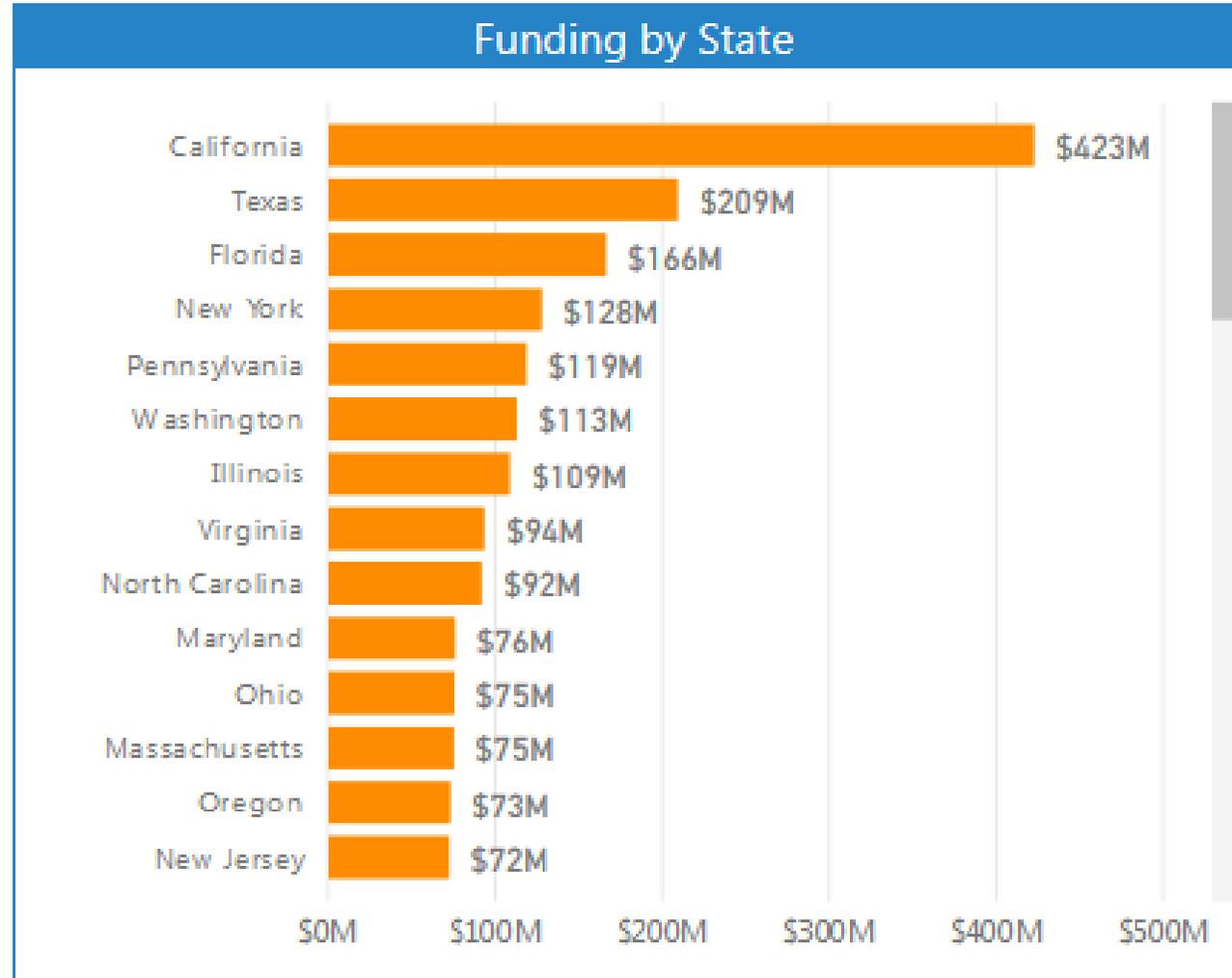
Department of Environmental Quality



What Did Volkswagen Do?

- **Volkswagen Group of America, Inc. (VW) violated the Clean Air Act**
 - **Manufactured and installed defeat devices on light-duty diesel vehicles**
 - **Approximately 580,000 vehicles impacted nationally**
 - **18,471 of these vehicles were registered in North Carolina**

Appendix D – Mitigation Trust



Cars and trucks are the leading cause of pollution in NC.

For more information visit:

https://files.nc.gov/ncdeq/Air%20Quality/Air_Quality_Trends_in_North_Carolina_122118.pdf

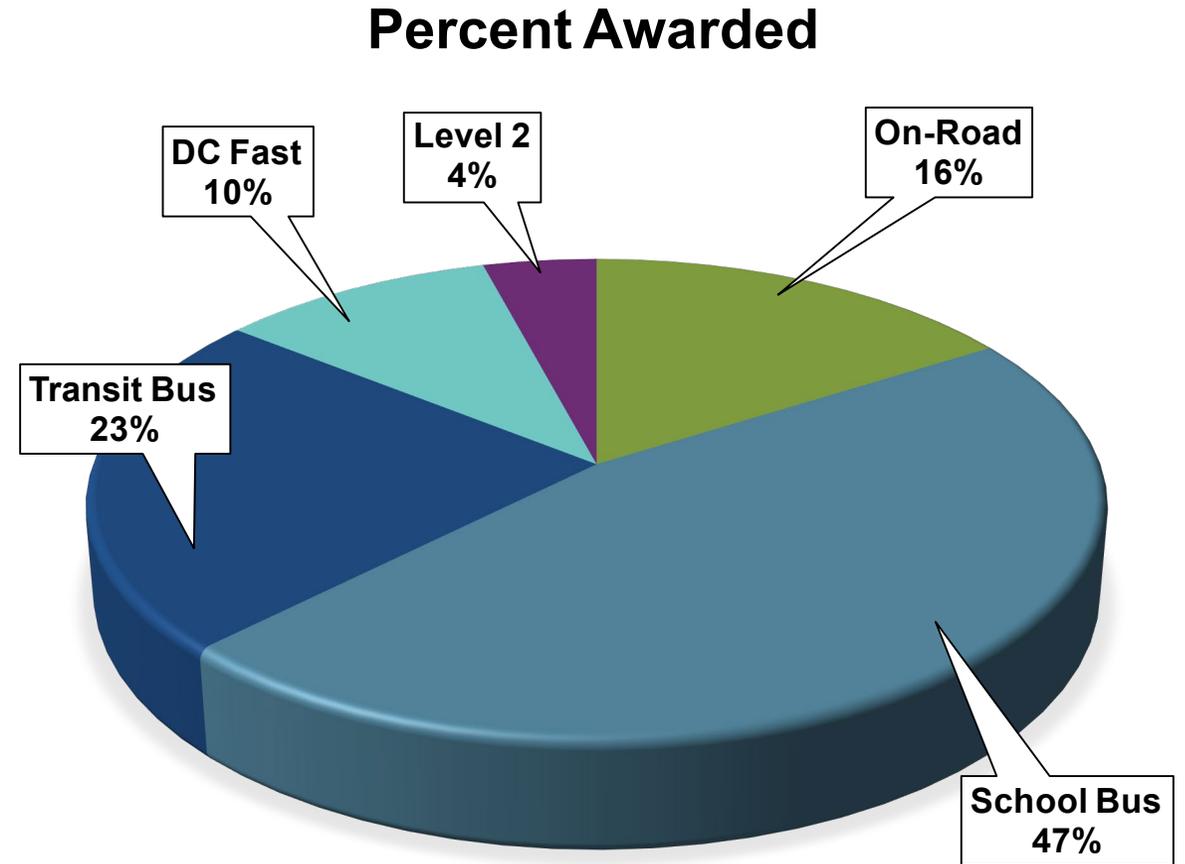


What Vehicles are We Talking About?



NC VW Phase 1 Awards

Program	Number of Vehicles/Stations Funded	Program Total Awarded
School Bus	111	\$12,289,900
Transit Bus	16	\$6,136,377
On-Road	45	\$4,240,409
DC Fast Infrastructure	27 sites	\$2,682,360
Level 2 Infrastructure	78 sites	\$1,098,534
Total	172 vehicles, 27 DC Fast and 78 Level 2 stations	\$26,447,580



Completed Phase 1 Projects



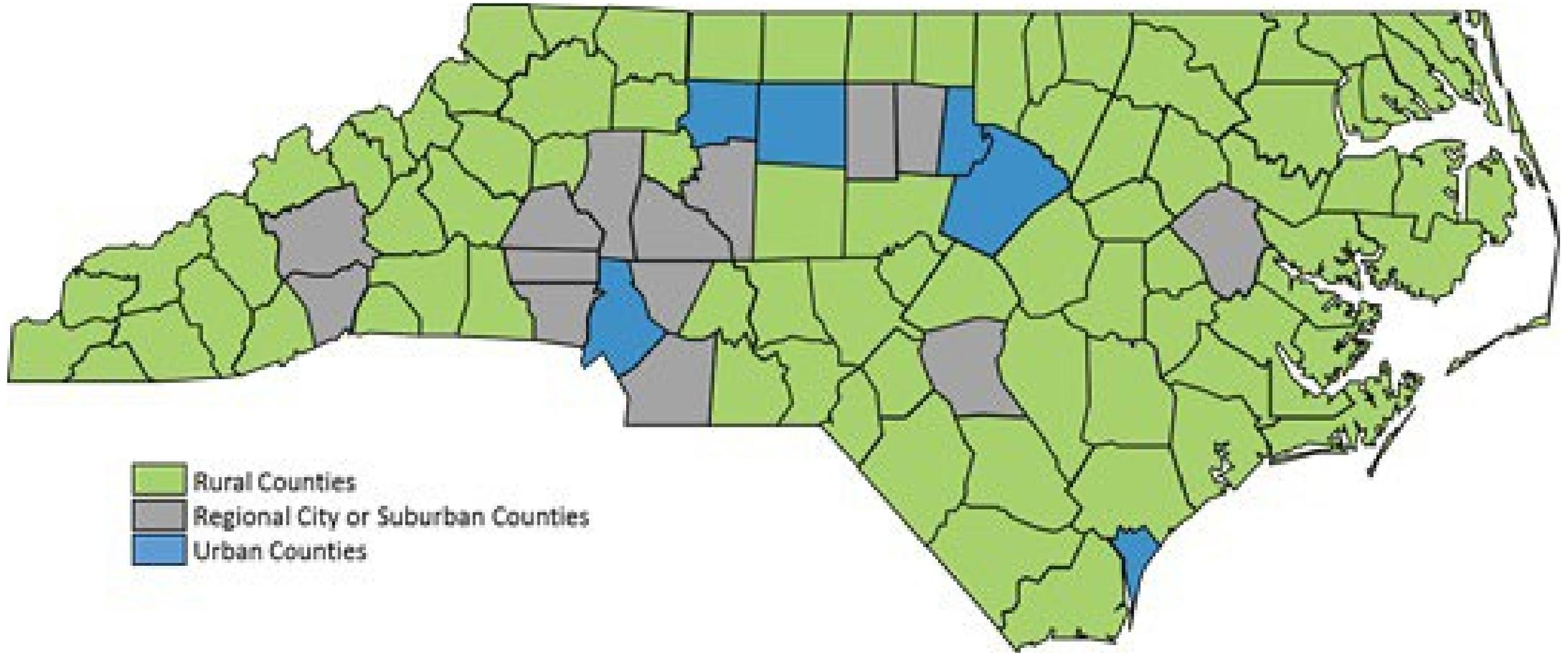
VW Phase 1 Success Stories



Draft VW Settlement Phase 2 Program Allocations

NC Grant Programs (2021-2024)	Subprogram	Eligible Action Category	Eligible Fuels	2021-2024 Funding (Phase 2)		
				Targeted Percent*	Targeted Funding Amount	
Diesel Bus & Vehicle Replacement Program	School Bus Replacement Program	School buses	All (electric, diesel, propane, natural gas) <i>Priority will be given to electric replacements</i>	40%	\$27,182,831	
	Transit Bus Replacement Program	Transit buses		20%	\$13,591,415	
	Clean Heavy-Duty Equipment & Vehicle Program	Class 4-8 equipment and vehicles such as local freight trucks, ferries, forklifts, and switcher locomotives		DERA Program	20%	\$12,911,845
						\$357,163
ZEV infrastructure	DC Fast Program	Public Access	Not Applicable	15%	\$7,135,493	
	Level 2 Program	Public Access			\$1,070,324	
		Workplace			\$489,291	
		Multi-Unit Dwellings			\$489,291	
		State Government			\$1,009,068	
Administrative Costs			5%	\$3,397,661		
		Total:			\$67,634,382	

North Carolina County Classifications



-  Rural Counties
-  Regional City or Suburban Counties
-  Urban Counties

Historically Under - Resourced County Outreach Program

Historically Under-Resourced Counties are those identified as economically distressed with the highest percentages of underserved populations.

Underserved populations are those that meet certain racial and poverty criteria, as determined by the DEQ Environmental Justice Program. Using economic criteria, a county's economic distress is defined and ranked by the NC Department of Commerce (commonly referred to as "County Tiers").



Historically Under - Resourced County Outreach Program

Combining these two data sets, 31 Historically Under-Resourced Counties were selected as follows:

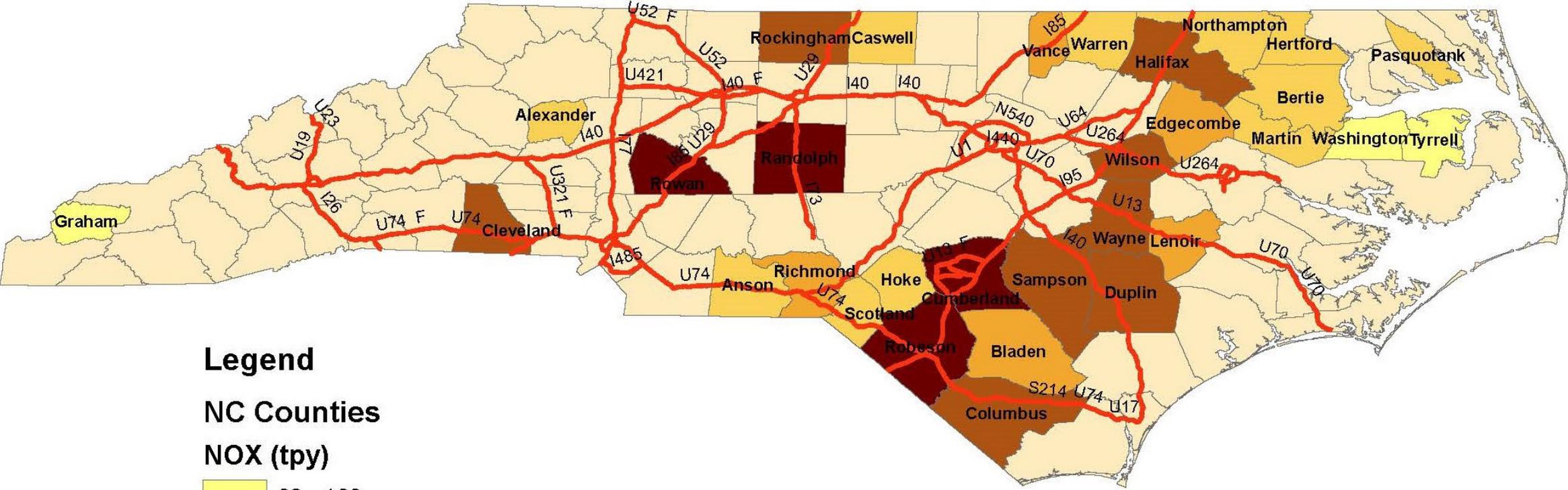
- **List all counties with an underserved population greater than 15%.**
- **Remove from the list, any Tier 2 or Tier 3 counties (next and least distressed counties).**



Historically Under - Resourced County Outreach Program Map



NOx Emissions for Outreach Program Counties



Legend

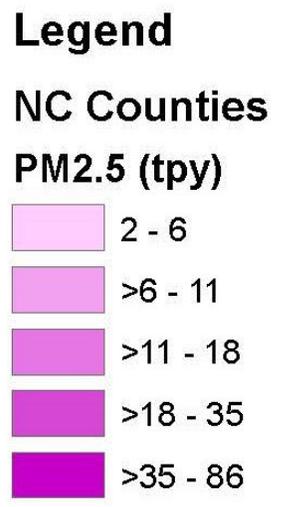
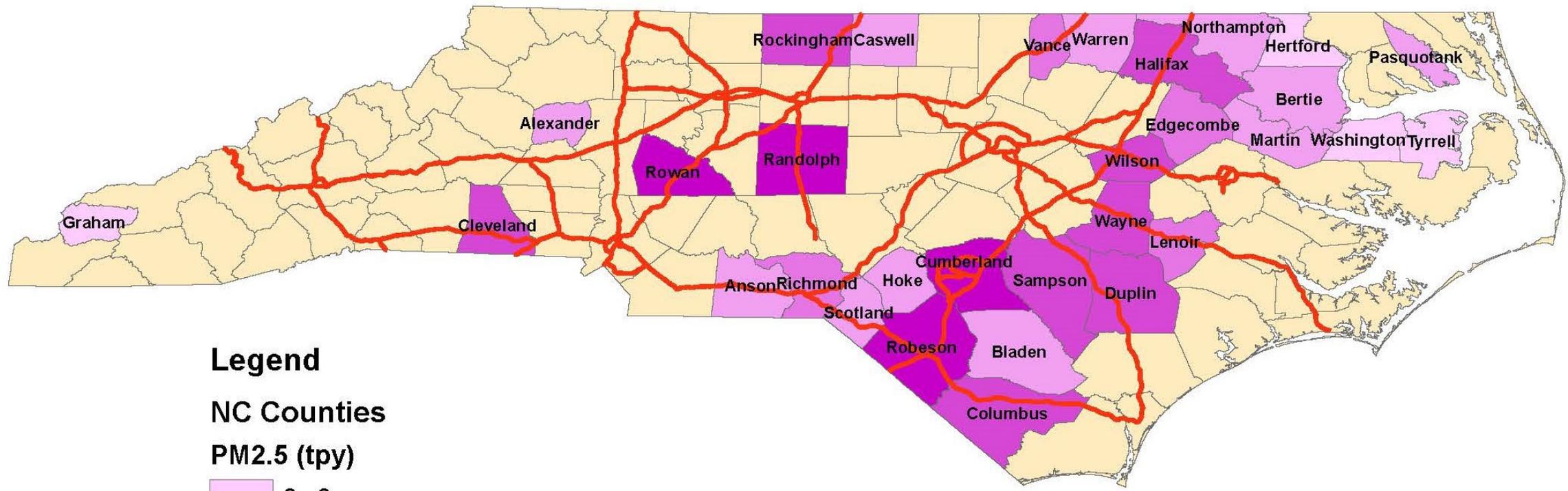
NC Counties

NOX (tpy)

- 92 - 199
- >199 - 498
- >498 - 776
- >776 - 1514
- >1514 - 2781

Onroad mobile sources emissions only

PM2.5 Emissions for Outreach Program Counties



Onroad mobile sources emissions only

Call for Action

- **Let your voice be heard!**
- **If you are interested in assistance with identifying eligible projects, contact us!**
- **Do you know fleet managers or others with eligible vehicles or interested in EV charging infrastructure?**
- **Submit comments for the Phase 2 Mitigation Plan.**



Next Steps

- **Phase 2 Mitigation Plan comment period ends September 7, 2021**
- **Plan submission to trustee (Fall 2021)**
- **Release request for proposals (Winter 2021)**
- **Proposal evaluations (Winter/Spring 2021-2022)**
- **Phase 2 project awards (Spring 2022)**



Subscribe to our VW Email List!

If you are not currently on our mailing list and would like to receive email updates about the Volkswagen Settlement Program, please send an email with the word “Subscribe” in the subject line to daq.NC_VWGrants@ncdenr.gov.



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Thank you!



The NC VW Team

<https://deq.nc.gov/VWsettlement>

or

ncair.org ...and click on “Volkswagen Settlement”



Questions





New Farm Digester General Permits

Secretary's Environmental Justice and Equity Advisory Board

August 23, 2021

Department of Environmental Quality



Background – General Permit

What is a General Permit?

- Examples: Air, Coastal, Stormwater

Swine Animal Feeding Operation General Permit:

- System serving 250 or more swine
- Utilizes non-discharge methods of waste disposal
- General Permit Requires:
 - Develop and maintain a Certified Animal Waste Management Plan
 - Siting requirements and buffer requirements
 - Testing, inspections and reporting requirements

G.S. 143-215.10C “intent of the General Assembly that most animal waste management systems be permitted under a general permit.”





What is an Animal Digester System?

- System, including equipment and lagoon covers that collects and processes gases
- Utilized for the digestion of animal biomass “for use as a renewable energy resource.”

Of the 2083 total permitted swine facilities, 24 facilities currently have permitted animal digester systems.

2021 NC Farm Act Overview



SB 605 Session Law 2021-78, Section 11

- “The Commission shall develop a general permit for animal operations that includes authorization for the permittee to construct and operate a farm digester system.”
- Will include current State General Permit conditions — *Section 11.(d)*
- General Permit will be effective 12 months after effective day of the act
- Renewals will align with current State General Permit — *Section 11.(d)*
- General Permit will expire Sept 30, 2024



NC Farm Act Overview

- This act applies to pre-existing permitted facilities – not new farms
- All of the following conditions required:
 - Does not result in increase in permitted capacity of the swine farm
 - Does not result in increase in the total permitted capacity of the animal waste system
 - Complies with the siting requirements
 - Not allowed in the 100-year floodplain



2021 NC Farm Act Overview

- Preserved the ability of NCDEQ to hold public hearings
- Maintained the determination authority to require an individual permit when necessary
- Extended timeline for general permit completion – 6 months to 1 year
- Required shot-clock for final permitting action of 90 days started with completed notice of intent



General Permit Development Process

General Permit development will have significant public input

Stakeholder Process

- Technical Workgroup Sessions
- Public Meeting/Forum
- Will post drafts for public

Public Comment Period

- Three public meetings
- Accept oral, written, and electronic comments

General Permit completed by July 1, 2022

