2022 North Carolina Diesel Emissions Reduction Grant
Request for Proposal Guidance

The NC Department of Environmental Quality, Division of Air Quality (DAQ) will provide funding for projects that reduce mobile source diesel emissions. Awarded projects are expected to begin in early 2023 and must be completed by ***September 30, 2023***.

The Division of Air Quality reserves the right to award less than the total amount of funding requested.

ELIGIBILITY

Any private or public sector entity stationed in North Carolina is eligible. Use our DERA eligibility tool to verify project eligibility for funding and the cost share requirements.

Vehicle/Engine/ Equipment Type	Description
School buses	Includes diesel powered school buses of Type A, B, C and D. To be eligible as a school bus, a vehicle should meet the definition of a school bus as defined by the National Highway Transportation Safety Administration. This definition includes but is not limited to: 1) A bus that is used for purposes that included carrying students to and from school or related events on a regular basis; 2) Be identified with the words "School Bus"; and 3) Be painted National School Bus Glossy Yellow.
Transit buses	Includes Class 5+ diesel-powered medium-duty and heavy-duty transit buses.
Medium-duty or heavy-duty trucks	Includes diesel-powered medium-duty and heavy-duty highway vehicles with gross vehicle weight rating (GVWR) as defined below: Class 5 (16,001 -19,500 lbs. GVWR); Class 6 (19,501 -26,000 lbs. GVWR); Class 7 (26,001 -33,000 lbs. GVWR); Class 8 (33,001 lbs. GVWR and over)
Marine engines	Includes diesel-powered Category 1, 2, and 3 marine engines and vessels.
Locomotives	Includes diesel-powered line-haul, passenger, and switch engines and locomotives.
Nonroad engines, equipment or vehicles	Includes diesel-powered engines, equipment and vehicles used in construction, handling of cargo (including at ports and airports), agriculture, mining, or energy production (including stationary generators and pumps).

AVAILABLE FUNDING

Approximately $1 million is available for all projects funded statewide. DAQ expects to fund several projects.

APPLICATION DEADLINE

Applications must be submitted electronically via DAQ's Grant Management System at https://ebs.nc.gov/ by ***11:59 pm Eastern Time, Monday, November 14, 2022,*** to be considered.

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PROJECT TYPE FUNDING LEVELS

Eligible Technologies	DERA Funding Limits	Minimum Mandatory Cost-Share (Fleet Owner Contribution)
Drayage Truck Replacement	50%	50%
Vehicle or Equipment Replacement with EPA-Certified Engine	25%	75%
Vehicle or Equipment Replacement with CARB-Certified Low-NOx Engine	35%	65%
Vehicle or Equipment Replacement with Zero-tailpipe-Emission Power Source	45%	55%
Engine Replacement with EPA-Certified Engine	40%	60%
Engine Replacement with CARB-Certified Low-NOx Engine	50%	50%
Engine Replacement with Zero-tailpipe-Emission Power Source	60%	40%
EPA-Certified Remanufacture Systems	100%	0%
EPA-Verified Highway Idle Reduction Technologies when combined with new or previously installed exhaust after-treatment retrofit	100%	0%
EPA-Verified Highway Idle Reduction Technologies without new exhaust after-treatment retrofit	25%	75%
EPA-Verified Locomotive Idle Reduction Technologies	40%	60%
EPA-Verified Marine Shore Connection Systems	25%	75%
EPA-Verified Electrified Parking Space Technologies	30%	70%
EPA-Verified Exhaust After-treatment Retrofits	100%	0%
EPA-Verified Engine Upgrade Retrofits	100%	0%
EPA-Verified Hybrid Retrofit Systems	60%	40%
EPA-Verified Fuel and Additive Retrofits when combined with new retrofit, upgrade, or replacement	Cost differential between conventional diesel fuel	Cost of conventional diesel fuel
EPA-Verified Aerodynamics and Low Rolling Resistance Tires when combined with new exhaust after-treatment retrofit	100%	0%
Alternative Fuel Conversion	40%	60%

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PROJECT REQUIREMENTS

General

All applicants must comply with all appropriate North Carolina State Laws. NCDEQ may share your application with other local and state agencies with applicable funding if your project is not selected for funding.

All applicants must apply electronically through DAQ's Grant Management System at https://ebs.nc.gov/. If you currently do not have access to this system, you must request access prior to applying. Please see our webpage for instructions on how to request access to the Grants Management System: DAQ's Grants Management System information webpage. To guarantee enough time to apply, new users to the Grants Management System should request online access before Oct. 31, 2022. The Program ID in the DAQ Grants Management System for the 2022 NC Diesel Emissions Reduction Grant will be **NCDEQDAQ0015**.

All equipment funded must be EPA verified.

For alternative fuel conversions, systems for engine model years 2006 and earlier must achieve at least a 30% nitrogen oxides (NOx) emissions reduction and a 10% particulate matter (PM) emission reduction from the applicable certified emission standards of the original engine. Conversion systems for engine model years 2007 and newer must achieve at least a 20% NOx reduction with no increase in PM from the applicable certified emission standards of the original engine. **All original equipment or vehicles must be operational in the previous two years and the replacement equipment or vehicle must be operated at least 70% in North Carolina for the next 5 years.**

Awarded funds cannot be used for:

- Fueling infrastructure projects.
- Standalone cleaner fuel projects unless combined with another clean diesel project on the same vehicle (e.g., repower).
- Meeting compliance for emissions reductions that are mandated under federal law.
- The purchase of vehicles, engines or equipment to expand a fleet.
- Matching funds for other federal grants.
- Emissions testing and/or air monitoring.
- The purchase of engine retrofits, idle-reduction technologies, low-rolling resistance tires or advanced aerodynamic technologies if similar technologies have previously been installed on the truck or trailer.

All vehicles, equipment, and/or engines being replaced must be scrapped or rendered permanently disabled within ninety (90) days of being replaced:

- Cutting a three-inch-by-three-inch hole in the engine block (the part of the engine containing the cylinders) is the preferred scrapping method.
- You can disable the chassis by cutting through the frame/frame rails on each side at a point located between the front and rear axles.

On-road

- Funds cannot be used for light-duty highway vehicles.
- Funds can be used for Type A, B, C or D school buses.
- Funds can only be used for Class 5 (16,001-plus pounds GVWR) and above heavy-duty vehicles.
- Vehicles have a minimum mileage requirement of 7,000 annual miles.

Summary of Medium, and Heavy-Duty Trucks, School and Transit Buses Funding Eligibility

Current Engine Model Year (EMY)	DOC +/- CCV	DPF	SCR	Verified Idle Reduction[4], Tires, or Aerodynamics	Vehicle or Engine Replacement		Clean Alternative Fuel Conversion
					EMY 2019+ (2015+ for Drayage)	EMY 2019+ Zero Emission[2] or Low-NOx[3]	
Older – 2006	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2007 – 2009	No	No	Yes	Yes[1]	Yes	Yes	Yes
2010 - newer	No	No	No	Yes[1]	No	Yes	Yes

[1] Auxiliary Power Unit (APUs) and generators are not eligible on vehicles with EMY 2007 or newer.

[2] Eligible fuel cell projects are limited to hydrogen fuel cell engine replacements for eligible urban transit buses, shuttle buses and drayage trucks, and hydrogen fuel cell engine replacements for eligible urban transit buses, shuttle buses, and drayage trucks.

[3] Please see the Low-NOx Engine Factsheet found at www.epa.gov/dera/state for guidance on identifying engines certified to meet CARB's Optional Low-NOx Standards.

[4] EPA verified idle reduction technologies currently only apply to long-haul class 8 trucks with sleeper cabs and school buses.

Nonroad

- Funds cannot be used to replace agricultural pumps that operate fewer than 250 hours per year during the two years prior to upgrade.
- Funds cannot be used to replace all other nonroad engines and equipment that operate fewer than 500 hours per year during the two years prior to upgrade.
- Engine hours may be combined to reach the above thresholds where multiple units will be scrapped and replaced with a single unit.

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Summary of Nonroad Engine Funding Eligibility

Current Engine Tier	Vehicle Equipment Replacement: EMY 2019+					Verified Retrofit
	Compression Ignition			Spark Ignition	Zero Emission[3]	
	Tier 0-2	Tier 3-4i	Tier 4	Tier 2		
Unregulated – Tier 2	No	Yes[1]	Yes	Yes	Yes	Yes
Tier 3	No	No	Yes	Yes	Yes	Yes
Tier 4	No	No	No	No	Yes	No
Current Engine Tier	**Engine Replacement**					**Verified Engine Upgrade**
	Compression Ignition			Spark Ignition	Zero Emission[4]	
	Tier 0-2	Tier 3-4i	Tier 4	Tier 2		
Unregulated – Tier 2	No	Yes[2]	Yes	Yes	Yes	Yes
Tier 3	No	No	Yes	Yes	Yes	Yes
Tier 4	No	No	No	No	Yes	No

[1] Tier 3 and Tier 4 interim (4i) allowed for vehicle/equipment replacement only when Tier 4 final is not yet available from original equipment manufacturer (OEM) for 2021 model year equipment under the Transition Program for Equipment Manufacturers (TPEM).

[2] Tier 3 and Tier 4i engines may be used for engine replacement only if Tier 4 is demonstrated to not be available or feasible through a best achievable technology analysis as defined the EPA 2021 DERA State Program Guide (EPA-420-B-21-009).

[3] Eligible fuel cell projects are limited to hydrogen fuel cell equipment replacements for eligible terminal tractors/yard hostlers, stationary generators, and forklifts.

[4] Fuel cell engine replacement is not eligible.

Marine Engines

- No funds awarded under this program shall be used to retrofit, replace, upgrade or install idle reduction technologies on marine engines that operate less than 1,000 hours per year during the two previous years prior to upgrade.
- Engine hours may be combined to reach the 1000-hour threshold where multiple units will be scrapped and replaced with a single engine.

Marine Engine Project Eligibility

Engine Category	Engine Horse-power	Current Engine Tier	Engine & Vessel Replacement					Certified Remanufacture System[3]	Verified Engine Upgrade
			Compression Ignition			Spark Ignition (EMY 2019+)	Zero-Emission[2]		
			Tier 1-2	Tier 3	Tier 4				
C1, C2	<803	Un-regulated-Tier 2	No	Yes	No	Yes	Yes	Yes	Yes
C1, C2	≥804	Un-regulated-Tier 2	No	Yes[1]	Yes	Yes	Yes	Yes	Yes
C1, C2	<803	Tier 3	No	No	No	Yes	Yes	No	No
C1, C2	≥804	Tier 3	No	No	Yes	Yes	Yes	No	No
C1, C2	≥804	Tier 4	No	No	No	No	No	No	No
C3	All	Un-regulated-Tier 2	No	Yes	No	No	No	No	No
C3	All	Tier 3	No	No	No	No	No	No	No

[1] Tier 3 engines may be used for engine replacement only if Tier 4 is demonstrated to not be available or feasible through a best achievable technology analysis as defined in the EPA 2021 DERA State Program Guide (EPA-420-B-21-009). Over-800 horsepower, Tier 3 engines are not eligible for full vessel replacement.
[2] Fuel cell engine and vessel replacements are not eligible.
[3] Some marine engine projects may be subject to the restriction on mandated measures.

Locomotive Engines

- No funds awarded under this program shall be used to retrofit, replace, upgrade or install idle reduction technologies on locomotive engines that operate less than 1,000 hours per year during the two years prior to upgrade.
- Engine hours may be combined to reach the 1000-hour threshold where multiple units will be scrapped and replaced with a single engine.

Locomotive Engine Project Eligibility

Current Locomotive Tier	Engine & Locomotive Replacement				Verified Retrofit	Idle-Reduction Technology[2]	Certified Remanufacture System[4]
	Tier 0-2+	Tier 3	Tier 4	Zero Emission[1]			
Unregulated - Tier 2+	No	Yes[3]	Yes	Yes	Yes	Yes	Yes
Tier 3	No	No	Yes	Yes	Yes	Yes	Yes
Tier 4	No	No	No	No	No	Yes	No

[1]Fuel cell engine and locomotive replacements are not eligible.
[2]Automatic engine start-stop technologies are only eligible to be installed on locomotives currently certified to Tier 0 or unregulated, subject to the restriction on mandated measures.
[3]Tier 3 engines may be used for engine replacement only if Tier 4 is demonstrated to not be available or feasible through a best achievable technology analysis as the EPA 2021 DERA State Program Guide (EPA-420-B-21-009). Tier 3 is not eligible for locomotive replacement.
[4]Some locomotive engine projects may be subject to the restriction on mandated measures.

Note: Tier 0+, Tier 1+, Tier 2+, Tier 3, and Tier 4 represent locomotives manufactured or remanufactured under the more stringent Tier standards promulgated under the 2008 (current) locomotive and marine rule. Tier 0, Tier 1, and Tier 2 represent locomotives originally manufactured or remanufactured under the less stringent Tier standards promulgated in 1997.

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How To Submit Your Proposal

All applications must be submitted through the NC Division of Air Quality's Grant Management System at https://ebs.nc.gov/. In order to be allowed access to the Grant Management System you must complete an access authorization form which can be found in the Associated Files Section of our website DAQ Grants Management System information webpage. Until you have received a "Welcome to the DAQ ENTERPRISE BUSINESS SYSTEM" email indicating that your authorization has been approved, you will not be able to log into the system to complete the application process. You can download the user's manual to assist you in navigating the DAQ Grant Management System.

An example application is included to allow you to draft responses prior to completing the application online (Attachment A).

Applications must be submitted by ***11:59 pm Eastern Time, Monday, November 14, 2022,*** to be considered.

Project Selection Criteria

The below table outlines the project selection criteria. The total points possible is 115. Applicants should address each of the selection criteria in the Grant Management System application.

Criteria	Point Value
Emissions Reductions or Quantitative Benefits: emission reduction calculation based on applicant provided information	35
Cost Effectiveness ($ funded per tons reduced)**:** cost effectiveness is based on applicant provided information using the US Environmental Protection Agency (EPA) software tool, the Diesel Emissions Quantifier (EPA's Diesel Emissions Quantifier)	30
Co-Benefits: e.g., emission reductions in other criteria pollutants or greenhouse gases	20
Environmental Justice: how projects affect areas that bear a disproportionate share of ambient air pollution	10
Bonus Points (5 points for each eligible category) • Project takes place in one of the following EPA Priority Counties: Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, or Union • Project involves replacement of diesel vehicle/equipment with an all-electric option • Project is owned by a minority- or women-owned business • Project takes place in one of the 37 identified historically under-resourced counties (Attachment B)	5

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SCHEDULE FOR 2022/2023 DIESEL EMISSIONS REDUCTION GRANTS

Task	Date Completed
Request for Proposals period opens	September 12, 2022
Question and answer webinar on Grant Management System	September 28, 2022
Request for Proposals period closes	November 14, 2022
Proposals processed and awardees selected	December 2022
All applicants notified of their application status	January 2023
Awardee contracts are processed	February-March 2023
Awarded projects' work begins	Within 1 month of contract execution
All diesel emissions reductions grant projects completed	September 30, 2023
Invoices, Certificate of Engine/Chassis Destruction and final reports submitted to DAQ	September 30, 2023

Required Application Attachments

After you have digitally signed the application, you must click on the submit button. Note your Application ID. If you are not automatically redirected to your home page, please click "View Application" under Search. You will see your application under your recent list. Please click on your application and you will find an attachments section. This is where you will upload the required documents per the RFP for which you are applying.

DERA Program Application Checklist:

	Download and complete **DAQ Vehicle Equipment Spreadsheet**
	Quote for the vehicle/equipment/engine being purchased
	Pictures of all equipment to be replaced, engine tags and VINs
	Optional supporting documentation
	For projects requesting funding for charging infrastructure with an all-electric replacement or repower, please include an itemized budget. (One charger allowed for each vehicle replacement or repower requested.)

If you have questions about the information above or completing the application, please e-mail daq.mscb.ncdaqgrants@ncdenr.gov.

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Attachment A

2022 North Carolina DERA Program Application

This is a representation of the application information submitted by the applicant in the DAQ Grants Management System. Required application attachments and the original application are available to view in the DAQ Grants Management System. All submittals are to be completed in the DAQ Grants Management System.

Applicant Contact Information

Project Title	
Organization Name	
Organization Mailing Address	
City, State Zip	
Authorized Representative Name	
Authorized Representative E-mail Address	**Authorized Representative Phone Number**
Project Manager Name (primary contact)	
Project Manager E-mail Address	**Project Manager Phone Number**
Financial Contact Name	
Financial Contact E-mail Address	**Financial Contact Phone Number**

Project Details

Program Type	**Eligible Applicant Type**
Vehicle/Equipment Type	**Project Type**

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Project Location (where equipment will be installed and/or used)

Street Address		
City	**County**	**Zip**

Project Details (Questions 1-5 are required.)

1. Please provide a detailed description of the proposed project.

2. Explain how this request will benefit North Carolina's goal of reducing diesel emissions in areas of poor air quality or areas that are currently in maintenance for either the ozone or PM2.5 national ambient air quality standards. Priority will be given to projects that are located at or service goods movement facilities (e.g. ports, airports, rail yards, terminals, or distribution centers); please provide how the project addresses these types of areas.

3. What is the likelihood that the project will incentivize future indirect NOx and other emission reductions? That is, will this be the beginning or continuation of a transition of the fleet to an alternative fuel or electricity? If so, please provide details.

4. Are there any societal co-benefits of the project? Are there any "sensitive" populations including, but not limited to asthmatics, children, or the elderly that are likely to be directly benefited by the project?

5. Project Feasibility: Provide a description of how you as the applicant have the necessary technical, managerial, procurement, and financial capability and experience to execute on your proposed project.

6. Use this space for any additional information that you believe will be helpful in evaluating the project. (Optional)

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Certification

The undersigned is an official authorized to represent the applicant. The person that submitted this document in the DAQ Grants Management System has the authority to legally bind the applicant or be the designated fiscal agent. The application was electronically signed in the DAQ Grants Management System when submitted by the applicant.

I certify that all proposed activities will be carried out; that all money received will be utilized solely for the purposes for which it is intended; that records documenting the planning process and implementation will be maintained and submitted when requested, and DEQ is hereby granted access to inspect project sites and/or records. It is understood that if this project is selected a contract with DEQ will be executed. I further attest that at least 70% of the equipment's operation will occur in North Carolina for the next 5 years.

Print Name of Authorized Representative	**Title**
Date	

Required and Optional Attachments

Required application attachments and the original application are available to view in the DAQ Grants Management System.

1. A completed DAQ application vehicle spreadsheet.
2. Pictures of all equipment to be replaced, engine tags and VINs.
3. An itemized budget for the project.
4. Any optional attachments such as any supporting documentation or letters of support, etc.

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Attachment B

Historically Under-Resourced Counties

Alexander	Greene	Rockingham
Anson	Halifax	Rowan
Bertie	Hertford	Rutherford
Bladen	Hoke	Sampson
Burke	Hyde	Scotland
Caldwell	Lenoir	Tyrrell
Caswell	Martin	Vance
Cleveland	Nash	Warren
Columbus	Northampton	Washington
Cumberland	Pasquotank	Wayne
Duplin	Randolph	Wilson
Edgecombe	Richmond	
Graham	Robeson	