



Applicant Guide

GoRED@ADEO.state.ar.us

Division of Environmental Quality
Office of Air Quality

This applicant guide is effective as of 11/1/2023 and supersedes all previous versions of the Go RED! Applicant Guide.

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I. PROGRAM SUMMARY

The Reduce Emissions from Diesels (Go RED!) Program is a competitive funding assistance opportunity administered by the Department of Energy and Environment (E&E), Division of Environmental Quality (DEQ). The program is funded by the U.S. Environmental Protection Agency (EPA) under the Diesel Emissions Reduction Act (DERA). The Go RED! Program provides funding assistance for projects that reduce diesel emissions from heavy-duty highway trucks (Gross Vehicle Weight Rating [GVWR] Classes 5–8), buses, marine engines, locomotives, and nonroad engines.

DEQ's Go RED! program is accepting applications for eligible diesel emissions reduction projects from Arkansas-based public and private entities including nonprofit organizations. Generally, awards under the Go RED! Program will be capped at \$200,000 per applicant with certain exceptions for project that involve vehicle and equipment replacements with zero-tailpipe emission power sources; certain locomotives projects, and certain marine projects as described in Section VI of this Applicant Guide.

The amount of funding assistance for selected projects is dependent upon the type of project. Funding assistance is provided as a reimbursement of a percentage of eligible expenses up to a maximum per applicant award value after demonstrating to DEQ the successful completion of the approved project. A mandatory cost-share is required for most projects funded under the Go RED! Program. Section IV of this Applicant Guide outlines eligibility for each project type. Section VI details maximum funding assistance, percentages cost-share requirements, and per applicant award caps. DEQ retains the right to partially fund projects.

DEQ will not award funds for projects completed prior to signature of a Memorandum of Agreement (MOA) between DEQ and the applicant. The MOA specifies the conditions required for reimbursement of the applicable percentage of eligible costs. Generally, projects selected for funding assistance must be completed and final reports and documentation received by DEQ within nine months of the effective date of the MOA. DEQ may grant extensions to this timeline upon request from the project

The Go RED! Program has a monthly rolling deadline for application submissions until all funds are awarded. The first deadline is November 30, 2023, at 11:59 p.m. Central Standard Time (CST). Subsequent deadlines occur on 11:59 p.m. CST, on the last day of each month until available funds are awarded, or until October 31, 2024. Applicants are encouraged to submit their application as early as possible to improve the chances that their project is funded.

Applicants must submit their application online at <https://eportal.adeq.state.ar.us/app/#/formversion/2ec83c1b-3940-4c4f-8d3d-ad4eb969681c>.

II. DEFINITIONS

CARB means the California Air Resources Board.

Drayage Truck means any Class 8 highway vehicle operating on or transgressing through a port or intermodal rail yard property for the purpose of loading, unloading, or transporting cargo, such as containerized, bulk, or break-bulk goods.

Electrified Parking Spaces System means a system that operates independent of a truck's engine and allows the truck engine to be turned off while the system supplies heating, cooling, and/or electrical power. This type of system is also referred to as "truck stop electrification."

Engine upgrade means removal of parts on an engine during a rebuild and replacement with parts that cause the engine to represent an engine configuration which is cleaner than the original engine.

Gross Vehicle Weight Rating (GVWR) means the maximum weight of the vehicle, as specified by the manufacturer. GVWR includes total vehicle weight plus fluids, passengers, and cargo.

Class 1: < 6000 lbs.

Class 2: 6001–10,000 lbs.

Class 3: 10,001–14,000 lbs.

Class 4: 14,001–16,000 lbs.

Class 5: 16,001–19,500 lbs.

Class 6: 19,501–26,000 lbs.

Class 7: 26,001–33,000 lbs.

Class 8: > 33,001 lbs.

National Ambient Air Quality Standards (NAAQS) means ambient air quality standards promulgated by EPA under 40 C.F.R. Part 50 to provide public health protection and protect the public welfare from risks associated with elevated concentrations of carbon monoxide, lead, particulate matter, nitrogen dioxide, ozone, and sulfur dioxide.

Hybrid means a vehicle that combines an internal combustion engine with a battery and electric motor.

Memorandum of Agreement (MOA) means the formal contract between DEQ and the applicant that outlines the eligible expenses, allowable reimbursement amounts, reporting requirements, photographic evidence obligations, records retention requirements, and additional documentation required for reimbursement of project costs.

Nonprofit organization means an organization that is registered as a 501(c)(3), (4) or (6) under the Internal Revenue Service tax code and aptly described therein.

Public Entity means the state and units of state government, a political subdivision of the state, including a municipality and its subdivisions; a school district; or an organization composed of political subdivisions of the state.

Private Entity means any entity that is not a unit of government, including without limitation a corporation, partnership, company, or other legal entity.

Remaining life is the fleet owner's estimate of the number of years until the unit would have been retired from service if the unit were not being upgraded or scrapped because of funding under the Go RED! program. The remaining life estimate is the number of years of operation remaining even if the unit were to be rebuilt or sold to another fleet. The remaining life estimate depends on the current age and condition of the vehicle at the time of upgrade, as well as things like usage, maintenance, and climate.

Repower means to replace a vehicle's or equipment's engine(s) with a freshly manufactured engine or power source.

School Bus means a Class 4–8 bus sold or introduced into interstate commerce for purposes that include carrying students to and from school or school-related events. School buses may be Type A–D.

Scrap value means income from selling salvaged vehicle components.

Small Business means those businesses with 100 or fewer employees companywide.

Zero tailpipe emissions power source means an onboard power source for a vehicle or equipment that does not produce emissions (e.g., fuel cells, electric grid-powered battery).

III. BACKGROUND

Diesel vehicles and equipment are used in a variety of sectors to serve the needs of Arkansans. However, all diesels, particularly older diesels, emit harmful substances into Arkansas's air, including air toxics, nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), and hydrocarbons (HC). Additionally, constituents of diesel emissions may react to form other pollutants, including ground-level ozone and fine particulate matter.

These pollutants can cause serious health concerns, especially for children, the elderly, and people with respiratory problems. Nationally, these pollutants are linked to thousands of premature deaths, hundreds of thousands of asthma attacks, millions of lost work days, and numerous other health impacts every year. Diesel exhaust is also a likely human carcinogen.

In addition to health impacts, air pollutants emitted by diesels can cause or contribute to smog and haze. Reduced visibility from these air pollutants is not just a problem where emissions occur. Because ozone and fine particulate matter can travel long distances, emissions of precursors for these pollutants can cause or contribute to haze even in remote locations.

Arkansas has excellent air quality that meets all national ambient air quality standards (NAAQS). However, areas that are heavily-trafficked by older medium- and heavy-duty diesel vehicles and places where these vehicles idle, such as truck stops or schools, may have short-term localized impacts from diesel emissions. Localized impacts can also occur near ports and rail yards. In addition, Arkansas has two types of areas requiring special attention under the Clean Air Act (CAA): counties where ozone and fine particulate matter concentrations are close to the NAAQS and two wilderness areas that are designated for visibility protection under the federal Regional Haze Rule.

There are two counties in the state where recent monitor data indicates ambient concentrations of pollutants near to the level of the NAAQS. Both Crittenden County and Pulaski County have ambient concentrations of ozone that are close to the level of the current ozone NAAQS. In addition, Pulaski County has concentrations of fine particulate matter close to the level of the current annual fine particulate matter NAAQS. Crittenden County is also designated as a maintenance area due to past exceedances of a previous ozone NAAQS. Therefore, special attention is needed to ensure that these areas continue to experience emission reductions to reduce the risk of NAAQS exceedances.

Arkansas has two designated wilderness areas where DEQ must address haze caused by man-made pollutants pursuant to EPA's Regional Haze Rule. These areas are referred to as Class I areas. Arkansas's designated Class I areas are the Upper Buffalo Wilderness in Northwest Arkansas and the Caney Creek Wilderness in Southwest Arkansas. Reducing emissions that contribute to haze, both near the Class I areas and throughout the state, helps make progress toward the ultimate goal of restoring natural visibility conditions in these areas.

Emissions from diesel-powered vehicles and equipment can be reduced by installing exhaust controls, reducing the amount of time spent idling, upgrading or replacing the engine, or replacing an older diesel vehicle with a new vehicle with inherently lower emissions. These emissions reductions result in improvements in air quality and reduced health risks related to the exposure to diesel exhaust and other air pollutants emitted by diesel vehicles. Therefore, DEQ seeks to incentivize these diesel emissions

reduction projects by providing funding assistance under the Go RED! Program. Applicants are encouraged to describe, in their proposals, any special air quality concerns in their areas of operation and how their proposed projects would benefit air quality.

IV. ELIGIBILITY

A. Eligible Applicants

Any public, private, or nonprofit entity that meets the following criteria is eligible to apply for funding assistance under the Go RED! Program:

- The applicant is registered with the Secretary of the State of Arkansas;
- The applicant proposes an eligible project (see the “Eligible Diesel Vehicles, Engines, and Equipment” and “Eligible Project Types” sections);
- The applicant owns the equipment involved in the proposed project;
- The equipment to be upgraded or replaced is currently operational and has operated in the state of Arkansas for two years prior, and

The upgraded or new equipment will continue to be operated in Arkansas for five (5) years after completion of the project. Additional documentation demonstrating proof of operation, business registration, and other related eligibility requirements may be requested prior to approval of any project. DEQ reserves the right to withdraw from any agreement pending conflicting evidence. Individuals are not eligible to receive funds unless they are applying on behalf of a public, private or nonprofit entity, which includes a nonprofit organization, as described above.

B. Ownership, Usage, and Remaining Life Requirements

1. The existing vehicle, engine, or equipment must be fully operational. Operational equipment must be able to start, move, and have all necessary parts to be operational.
2. The participating fleet owner must currently own and operate the existing vehicle or equipment and have owned and operated the vehicle or equipment in Arkansas during the two years prior to upgrade.
3. The existing vehicle, engine, or equipment must have at least three years of remaining life at the time of upgrade. Remaining life is the fleet owner’s estimate of the number of years until the unit would have been retired from service if the unit were not being upgraded or scrapped because of the grant funding. The remaining life estimate is the number of years of operation remaining even if the unit were to be rebuilt or sold to another fleet. The remaining life estimate depends on the current age and condition of the vehicle at the time of upgrade, as well as things like usage, maintenance, and climate.
4. **Highway Usage:** The mileage of two or more units may be combined to reach the thresholds below where two or more units will be scrapped and replaced with a single unit.
 - a. To be eligible for funding, the existing certified highway engine/vehicle must have

accumulated at least 7,000 miles/year during the two years prior to upgrade.

- b. **Exception:** If a recipient can demonstrate that a certified highway engine/vehicle is being used in a predominately nonroad application (e.g. firetrucks or utility trucks that idle for long periods to power auxiliary apparatus), engine operating hours as defined below in “nonroad usage” may be used for application eligibility purposes. If selected for award, DEQ will review and approve eligibility on a case-by-case basis.
5. **Nonroad Usage:** The engine operating hours of two or more units may be combined to reach the thresholds below where the two or more units will be scrapped and replaced with a single unit.
 - a. **Agricultural Pumps:** To be eligible for funding, certified nonroad agricultural pumps must operate at least 250 hours/year during the two years prior to upgrade.
 - b. **All Other Nonroad Engines:** To be eligible for funding, nonroad engines must operate at least 500 hours/year during the two years prior to upgrade.
 - c. **Exception:** If a recipient can demonstrate that a certified nonroad engine/vehicle is being used in a predominately highway application, vehicle mileage as defined above in “highway usage” may be used for application eligibility purposes. If selected for award, EPA will review and approve eligibility on a case-by-case basis.
 6. **Locomotive and Marine Usage:** The engine operating hours of two or more units may be combined to reach the thresholds where two or more units will be scrapped and replaced with a single unit. To be eligible for funding the existing locomotive and marine engines must operate at least 1,000 hours/year during the two years prior to upgrade.
 7. **Documentation Requirements:** Participating fleet owners must attest to each applicable criterion in 1–6 above in a signed eligibility statement that includes each vehicle make, model, year, vehicle identification number, odometer/usage meter reading, engine make, model, year, horsepower, engine ID or serial number, and vehicle/equipment registration/licensing number and state.

C. Eligible Diesel Vehicles, Engines, and Equipment

Projects eligible for funding under the Go RED! Program may include diesel emissions reduction solutions from the heavy-duty diesel emission source types listed in Table 1.

Table 1: Eligible Diesel Vehicles, Engines, and Equipment

Vehicle or Equipment Type	Description
School Buses	Includes diesel powered school buses of Type A, B, C and D. A “school bus” is defined as a passenger motor vehicle designed to carry a driver and more than 10 passengers, that the Secretary of Transportation decides is likely to be used significantly to transport preprimary, primary, and secondary school students to or from school or an event related to school.
Transit Buses	Includes diesel powered medium-duty and heavy-duty transit buses (see definition of eligible Class 5-8 vehicles below).

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	Diesel powered nonroad engines, equipment and vehicles including without limitation those used in construction, handling of cargo ¹ (including at ports and equipment, or airports), agriculture, mining, or energy production (including stationary vehicles generators and pumps)

¹ Eligible nonroad equipment includes transport refrigeration units (TRUs). Please see the TRU Factsheet found at www.epa.gov/dera/state for information on TRUs and eligible TRU projects.

Diesel vehicles and equipment involved in the project must be registered in the State of Arkansas if registration is required for the type of vehicle and/or equipment under Arkansas state law.

D. Eligible Project Types

Project types eligible for funding under the Go RED! Program are described below. Project eligibility criteria for each eligible diesel vehicle, engine, and equipment type are described in Section IV.D. Funding restrictions are described in Section V. Funding assistance percentages, cost-share requirements, and maximum per applicant awards are described in Section VI.

Table 2:

Certified Vehicle and Equipment Replacements	Nonroad and highway diesel vehicles and equipment, locomotives, and marine vessels can be replaced with newer, cleaner vehicles and equipment. Eligible replacement highway vehicles include those certified by EPA and/or CARB to run on diesel or clean alternative fuel engines (including gasoline), electric generators (gensets), hybrid engines, and zero tailpipe emissions power sources (grid, battery, or fuel cell). Eligible replacement nonroad equipment, locomotives, and marine vessels include those powered by EPA and/or CARB certified diesel or clean alternative fuel engines (including gasoline), electric generators (gensets), hybrid engines; nonroad equipment, locomotives, and marine vessels powered by zero tailpipe emissions power sources (grid, battery, or fuel cell) do not require EPA or CARB certification.
Certified Engine Replacement	Nonroad and highway diesel vehicles and equipment, locomotives, and marine vessels can have their engines replaced with newer, cleaner engines. Eligible replacement highway engines include those certified by EPA and/or CARB for use with diesel or clean alternative fuel (including gasoline), electric

	generators (gensets), and hybrid engines, and zero tailpipe emissions power sources (grid, battery, or fuel cell). Eligible replacement nonroad, locomotive, and marine engines include those powered by EPA and/or CARB certified diesel or clean alternative fuel engines (including gasoline), electric generators (gensets), and hybrid engines; Nonroad equipment, locomotives, and marine vessel engine replacement with zero tailpipe emissions power sources (grid, battery, or fuel cell) do not require EPA or CARB certification.
Certified Remanufacture Systems	Generally, a certified remanufacture system is applied during an engine rebuild and involves the removal of parts on an engine and replacement with parts that cause the engine to represent an engine configuration which is cleaner than the original engine. Some locomotives and marine engines can be upgraded through the application of a certified remanufacture system (i.e., kit). Engine remanufacture systems may not be available for all engines, and not all remanufacture systems may achieve an emissions benefit. Applications for EPA certified remanufacture systems should include a discussion of the availability of engine remanufacture systems and indicate the pre- and post-project emission standard levels of the engines to demonstrate that the upgrade will result in a PM and/or NOx emissions benefit.
Verified Idle Reduction Technologies	An idle reduction project is generally defined as the installation of a technology or device that reduces unnecessary idling of diesel engines and/or is designed to provide services (such as heat, air conditioning, and/or electricity) to vehicles and equipment that would otherwise require the operation of the main drive or auxiliary engine(s) while the vehicle is temporarily parked or remains stationary. EPA SmartWay verified technologies currently include options to reduce idling for long haul Class 8 trucks equipped with sleeper cabs, school buses, transport refrigeration units, locomotives, and marine vessels.
Verified Retrofit Technologies	Diesel engine retrofits are one of the most cost-effective solutions for reducing diesel engine emissions. Retrofits include engine exhaust after-treatment technologies, such as diesel oxidation catalysts (DOCs), diesel particulate filters (DPFs), closed crankcase ventilation (CCV) filtration systems, and selective catalytic reduction systems (SCRs). Manufacturer engine upgrades which achieve specific levels of emissions reductions by applying a package of components have been verified as retrofits for some nonroad and marine engines. Several systems which convert a conventional diesel engine configuration to a hybrid-electric system have been verified as retrofits for some nonroad and marine engines. Some cleaner fuels and additives have been verified as retrofits by EPA and/or CARB to achieve emissions reductions when applied to an existing diesel engine. Older, heavy-duty diesel vehicles that will not be retired for several years are good candidates for verified retrofit technologies. EPA suggests that applicants proposing to install verified retrofit technologies consult with suppliers to confirm that the proposed vehicles/engines and their duty-cycles are good candidates for the technology.
Clean Alternative	Existing highway diesel engines can be altered to operate on alternative fuels such as propane and natural gas by applying a certified alternative fuel

Fuel Conversions	conversion kit.
Verified Aerodynamic Technologies and Low Rolling Resistance Tires	To improve fuel efficiency, long haul Class 8 trucks can be equipped with EPA verified aerodynamic devices and/or low rolling resistance tires.

1. Vehicle and Equipment Replacement Projects

Nonroad and highway diesel vehicles and equipment, locomotives, and marine vessels can be replaced with newer, cleaner vehicles and equipment. Eligible replacement vehicles and equipment include those powered by diesel or clean alternative fuel engines (including gasoline), electric generators (gensets), hybrid engines, and zero tailpipe emissions power sources (grid, battery, or fuel cell).

To be eligible for funding, replacement vehicles and equipment must be powered by engines certified by EPA and, if applicable, CARB emission standards. Zero tailpipe emissions vehicles and equipment do not require EPA or CARB certification. EPA’s annual certification data for vehicles, engines, and equipment may be found at: www.epa.gov/compliance-and-fuel-economy-data/annual-certification-data-vehicles-engines-and-equipment. EPA’s engine emission standards may be found at: www.epa.gov/emission-standards-reference-guide/all-epa-emission-standards. There are currently no diesel fueled engines certified to meet the low NOx standard; all low NOx certified engines are natural gas or liquified petroleum gas (propane) fueled engines. However, not all new natural gas or propane engines are certified to the low NOx standard. Engines certified by CARB may be found by searching CARB’s Executive Orders for Heavy-duty Engines and Vehicles, found at: <https://ww2.arb.ca.gov/new-vehicle-and-engine-certification-executive-orders-compression-ignition-and-heavy-duty-engines>. Additional engine types that are CARB certified can be found here under their respective EO category: <https://ww2.arb.ca.gov/new-vehicle-and-engine-certification-executive-orders>. Please also see the Low-NOx Engine Fact Sheet found at <https://nepis.epa.gov/Exe/ZyPDF.cgi/P10119PZ.PDF?Dockey=P10119PZ.pdf> for guidance on identifying engines certified to meet CARB’s Optional Low NOx Standards.

2. Engine Replacement

Nonroad and highway diesel vehicles and equipment, locomotives, and marine vessels can have their engines replaced with newer, cleaner engines. Eligible replacement engines include those certified for use with diesel or clean alternative fuel (including gasoline), electric generators (gensets), hybrid engines, and zero tailpipe emissions power sources (grid, battery or fuel cell).

To be eligible for funding, replacement engines must be certified to EPA or, if applicable, CARB emission standards. However, zero tailpipe emissions engine replacements do not require EPA or CARB certification. EPA’s annual certification data for vehicles, engines, and equipment may be found at: www.epa.gov/compliance-and-fuel-economy-data/annual-certification-data-vehicles-engines-and-equipment. EPA’s engine emission standards may be found at: www.epa.gov/emission-standards-

[reference-guide/all-epa-emission-standards](#). Engines certified by CARB may be found by searching CARB’s Executive Orders for Heavy-duty Engines and Vehicles, found at: <https://ww2.arb.ca.gov/new-vehicle-and-engine-certification-executive-orders-compression-ignition-and-heavy-duty-engines>.

Additional engine types that are CARB certified can be found here under their respective EO category: <https://ww2.arb.ca.gov/new-vehicle-and-engine-certification-executive-orders>. Please also see the Low-NOx Engine Fact Sheet found at <https://nepis.epa.gov/Exe/ZyPDF.cgi/P10119PZ.PDF?Dockey=P10119PZ.pdf> for guidance on identifying engines certified to meet CARB’s Optional Low NOx Standards. Certified Remanufacture Systems

3. Certified Engine Remanufacture Systems

Generally, a certified remanufacture system is applied during an engine rebuild and involves the removal of parts on an engine and replacement with parts that cause the engine to represent an engine configuration that is cleaner than the original engine. Some locomotives and marine engines can be upgraded through the application of a certified remanufacture system (i.e., kit). Engine remanufacture systems may not be available for all engines, and not all remanufacture systems may achieve an emissions benefit. Applications for certified remanufacture systems should include a discussion of the availability of engine remanufacture systems and indicate the pre- and post-project emission standard levels of the engines to demonstrate that the upgrade will result in a PM and/or NOx emissions benefit. If a certified remanufacture system is applied at the time of an engine rebuild, funds under this award cannot be used for the entire cost of the engine rebuild, but only for the cost of the certified remanufacture system and associated labor costs for installation of the kit.

To be eligible for funding, remanufacture systems for locomotives and marine engines must be certified by EPA at the time of acquisition. List of certified remanufacture systems are available at: www.epa.gov/compliance-and-fuel-economy-data/engine-certification-data, and additional information on remanufacture systems is available at: www.epa.gov/vehicle-and-engine-certification/remanufacture-systems-category-1-and-2-marine-diesel-engines.

4. Verified Idle Reduction Technologies

An idle reduction project is generally defined as the installation of a technology or device that reduces unnecessary idling of diesel engines and/or is designed to provide services (such as heat, air conditioning, and/or electricity) to vehicles and equipment that would otherwise require the operation of the main drive or auxiliary engine(s) while the vehicle is temporarily parked or remains stationary.

The eligible idle reduction technologies by associated vehicle and equipment type are listed in Table 3. To be eligible for funding, these technologies must be on EPA’s SmartWay Verified Technologies list (www.epa.gov/verified-diesel-tech/smartway-technology) at the time of acquisition.

Table 3: Eligible Idle Reduction Technology Types

Vehicle/Equipment Type	Eligible Idle Reduction Technologies
Long-haul Class 8 trucks equipped with sleeper cabs	Auxiliary Power Units and Generator Sets
	Battery Air Conditioning Systems
	Thermal Storage Systems
	Fuel Operated Heaters (direct-fired heaters)
	Electrified Parking Spaces (Truck-Stop Electrification)
School Buses	Fuel Operated Heaters (direct-fired heaters)
Transportation Refrigeration Units ¹	Electrified Parking Spaces
Locomotives	Automatic Engine Shut-Down/Start-Up Systems
	Shore Power Connection Systems (Must be expected to be used at least 1000 hours/year)
	Auxiliary Power Units and Generator Sets
	Fuel-Operated Heaters (direct-fired heaters)
Marine	Shore Power Connection Systems

To be eligible for funding, marine shore power connection systems projects must meet the following criteria:

1. Applicants must attest to compliance with international shore power design standards (ISO/IEC/IEEE 80005-1: 2019/ AMD 1:2022 High Voltage Shore Connection Systems or the IEC/ISO/IEEE 80005-1:2019/AMD 1:2022 Low Voltage Shore Connection Systems).
2. Shore power connection systems must be supplied with electricity from the local utility grid.
3. Demonstration that the proposed system has the capacity, demand, and commitment to be used for more than 1,000 megawatt-hours per year. Smaller projects will be considered if the applicant can demonstrate cost effectiveness.
4. Due to the unique nature and custom design of marine shore power connection systems, DEQ, in consultation with EPA, will review and approve marine shore power connection systems on a case-by-case basis. If the project application is selected for funding, the final design of the marine shore power connection system will require specific DEQ and EPA approval prior to purchase and installation.
5. Applicants must commit to reporting usage information to DEQ for five years after the system is operational.
6. Shore power capable vessels docked at a berth where shore power is available must be required to turn off the vessel’s engines and use the shore power system, with limited exceptions for extreme circumstances.
7. Applicants proposing marine shore power connection systems will need to include the following information:

- a. The annual number of ship visits to berth where the shore power system is to be installed;
- b. Average hoteling (or idling) time per visit; and
- c. Information about the fleet of vessels that has, or will have, the ability to use the shore-side connection system, including:
 - i. The estimated annual number of ship visits to the shore power enabled berth that will use the shore power system;
 - ii. Estimated annual hoteling hours using shore power system;
 - iii. Fuel type and average sulfur content of fuel used in the auxiliary engines for each vessel;
 - iv. Auxiliary engine and boiler information for each vessel;
 - v. Estimated annual hoteling load requirements (megawatt-hours);
- d. Any documented commitment of visits and hours by the fleet of vessels that has, or will have, the ability to use the shore-side connection system; and
- e. Estimated emissions reductions. Applicants can use the calculator tool found here: calculator tool can be found here: <https://www.epa.gov/ports-initiative/shore-power-technology-assessment-us-ports>.

5. Verified Retrofit Technologies

Diesel engine retrofits are one of the most cost-effective solutions for reducing diesel engine emissions. Retrofits include engine exhaust after-treatment technologies, such as diesel oxidation catalysts (DOCs), diesel particulate filters (DPFs), closed crankcase filtration systems (CCVs), and selective catalytic reduction systems (SCRs). Manufacturer engine upgrades that achieve specific levels of emission reductions by applying a package of components have been verified as retrofits for some nonroad and marine engines. Several systems that convert a conventional diesel engine configuration to a hybrid-electric system have been verified as retrofits for some nonroad and marine engines. Some cleaner fuels and additives have been verified as retrofits by EPA and/or CARB to achieve emissions reductions when applied to an existing diesel engine. Older, heavy-duty diesel vehicles that will not be retired for several years are good candidates for verified retrofit technologies. Fleets proposing to install verified retrofit technologies should consult with suppliers to confirm that the proposed vehicles/engines and their duty-cycles are good candidates for the technology.

To be eligible for funding, verified retrofit technologies must be on EPA's (www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel) or CARB's (<https://ww2.arb.ca.gov/verification-procedure-currently-verified>) Verified Technologies lists at the time of acquisition, must be used only for the vehicle/engine application specified on the lists, and must meet any applicable verification criteria. Stand-alone verified fuel/additive use is not eligible for funding.

6. Clean Alternative Fuel Conversions

Existing highway diesel engines can be altered to operate on alternative fuels such as propane and natural gas by applying an alternative fuel conversion kit.

To be eligible for funding, alternative fuel conversion systems must be certified by EPA and/or CARB or must be approved by EPA for Intermediate-Age engines. EPA's lists of "Certified Conversion Systems for New Vehicles and Engines" and "Conversion Systems for Intermediate-Age Vehicles and Engines" are

available at www.epa.gov/vehicle-and-engine-certification/lists-epa-compliant-alternative-fuel-conversion-systems; CARB’s list of “Approved Alternate Fuel Retrofit Systems” are available at: www.arb.ca.gov/msprog/aftermkt/altfuel/altfuel.htm.

To be eligible for funding, conversion systems for engine model years 2006 and earlier must achieve at least a 30% NOx reduction and a 10% PM reduction from the applicable certified emission standards of the original engine. To be eligible for funding, 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. Applications for clean alternative fuel conversions should include a discussion of the availability of conversion systems and indicate the pre- and post-project emission standard levels of the engines to demonstrate that the conversions result in the required emissions benefit.

7. Verified Aerodynamic Technologies and Verified Low Rolling Resistance Tires

To improve fuel efficiency, long haul Class 8 trucks can be equipped with aerodynamic trailer fairings and/or low rolling resistance tires.

To be eligible for funding, technologies must be on EPA’s verified aerodynamic technologies list (www.epa.gov/verified-diesel-tech/smartway-verified-list-aerodynamic-devices) and verified list for low rolling resistance new and retread tire technologies list (www.epa.gov/verified-diesel-tech/smartway-verified-list-low-rolling-resistance-lrr-new-and-retread-tire) at the time of acquisition, must be used only for the application specified on the lists, and must meet any applicable verification criteria. Verified aerodynamic technologies or low rolling resistance tires are only eligible for funding when combined on the same vehicle with an exhaust after-treatment retrofit project.

E. Project Eligibility Criteria

Existing engines and new vehicles, engines, and technologies must meet the eligibility criteria specified below to be eligible for funding. Table 4 lists eligibility criteria for medium and heavy-duty trucks, transit buses, and school buses based on engine model year of the existing vehicle. Table 5 list eligibility criteria for nonroad equipment based on engine tier of the existing nonroad engine. Tables 6 lists eligibility criteria for marine engines based on engine category, horsepower, and engine tier of the existing engine. Table 7 lists eligibility criteria for locomotives based on locomotive tier of the existing locomotive engine. In each of these tables, “Yes” means the project type is eligible and “No” means the project type is not eligible.

Table 4: Medium and Heavy-Duty Truck, Transit Bus, and School Bus Project Eligibility

Current Engine Model Year (EMY)	Diesel Oxidation Catalyst (DOC) +/- Closed Crankcase Ventilation (CCV)	Diesel Particulate Filter (DPF)	Selective Catalytic Reduction Systems (SCR)	Verified Idle Reduction, Tires, or Aerodynamics	Vehicle or Engine Replacement		Clean Alternative Fuel Conversion
					EPA-Certified Engine ¹	Zero Emission ² or CARB-Certified Low NOx Engine ³	
Older–2006	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2007–	No	No	Yes	Yes ⁴	Yes	Yes	Yes

2009							
2010– newer	No	No	No	Yes ⁴	No	Yes	Yes

¹ The replacement vehicle or engine must have an EMY of 2021 or later, with the exception of drayage truck. For drayage trucks, the replacement vehicle or engine must have an EMY of 2017 or later.

² The replacement zero-tailpipe emissions engine or vehicle must have an EMY of 2021 or later. 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 The replacement Low NOx engine or vehicle must have an EMY of 2021 or later. 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 Auxiliary power units and generators are not eligible on vehicles with EMY 2007 or newer.

Table 5: Nonroad Engine Project Eligibility

Current Engine Tier	Vehicle/Equipment Replacement					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 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 in Section X.B., below.

³ Eligible fuel cell projects are limited to hydrogen fuel cell equipment replacements for eligible terminal tractors/yard hostlers, stationary generators, and forklifts. ⁴Fuel cell engine replacement is not eligible.

Table 6: Project Eligibility for Category 1, 2 and 3 Marine Engines

Engine Category	Engine Horsepower	Current Engine Tier	Engine & Vessel Replacement					Certified Re-manufacture System ³	Verified Engine Upgrade
			Compression Ignition			Spark Ignition	Zero Emission ²		
			Tier 1-2	Tier 3	Tier 4				
C1, C2	<803	Unregulated – Tier 2	No	Yes	No	Yes	Yes	Yes	Yes
C1, C2	≥804	Unregulated – 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	A1	Unregulated – Tier 2	No	Yes	No	No	No	No	No
C3	A1	Tier 3	No	No	No	No	No	No	No

¹Tier 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 Section X.B., below. Over 800 HP, Tier 3 engines are not eligible for full vessel replacement.

²Fuel cell engine and vessel replacements are not eligible.

³Some marine engine projects may be subject to the restriction on mandated measures.

Table 7: Locomotive Engine Project Eligibility

Current Locomotive Tier	Vehicle or Engine Replacement				Verified Retrofit	Idle Reduction ² Technology	Certified Remanufacture System ³
	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

¹Fuel cell engine and locomotive replacements are not eligible.

²Automatic 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.

³Tier 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 Section X.B., below. Tier 3 is not eligible for locomotive replacement.

⁴Some 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.

F. Best Achievable Technology Analysis

All new nonroad and locomotive engines are now manufactured to meet the EPA Tier 4 standards. All new Category 1 or 2, 804 horsepower or above marine engines are now manufactured to meet EPA Tier 4 standards. Applicants replacing these nonroad, marine, and locomotive engines must use Tier 4 engines if Tier 4 engines with the appropriate physical and performance characteristics are available. Applicants will be required to submit a best achievable technology analysis to DEQ and EPA for approval and receive approval from both DEQ and EPA before Tier 3 or Tier 4i engines can be purchased. The analysis is not required at the time of application submittal. However, cost for engineering analysis may be included in the project budget in the application. The analysis must meet the following requirements:

1. The analysis must be prepared by the engine manufacturer or installer.
2. Using good engineering judgment, the engine manufacturer or installer must determine that no engine certified to Tier 4 is produced by any manufacturer with the appropriate physical or performance characteristics to repower the equipment.
3. If the engine manufacturer or installer determines that no engine certified to Tier 4 is available with the appropriate performance characteristics, explain why certified Tier 4 engines produced by them and other manufacturers cannot be used as a replacement because they are not similar to the engine being replaced in terms of power or speed.
4. If there are available engines with the appropriate performance characteristics but the engine manufacturer or installer determines that no engine certified to Tier 4 is available with the appropriate physical characteristics, explain why certified engines produced by them and other manufacturers cannot be used as a replacement because their weight or dimensions are substantially different than those of the engine being replaced, or because they will not fit within the equipment's engine compartment.
5. In evaluating appropriate physical or performance characteristics, the engine manufacturer or installer may account for compatibility with equipment components that would not otherwise be replaced when installing a new engine, including but not limited to transmissions or reduction gears, drive shafts, cooling systems, operator controls, or electrical systems. If the engine manufacturer or installer makes their determination on this basis, they must identify the equipment components that are incompatible with engines certified to Tier 4 and explain how they are incompatible and why it would be unreasonable to replace them.
6. Identify the proposed Tier 3 or Tier 4i engines to be used and discuss the physical and performance characteristics of the engines that will ensure compatibility with the existing equipment. Quantify proposed emission reductions, PM cost effectiveness and NOx cost effectiveness for the proposed options.
7. Project eligibility or approval does not supersede any regulatory requirements for equipment owners, operators, manufacturers, installers and others, including but not limited to 40 CFR

§1068.240, §1042.615, and §1033.601.

G. Eligible and Ineligible Project Costs

Eligible project costs are those directly related to implementation of the project. The following list is not exhaustive. See Section V for additional funding restrictions.

1. Eligible project costs include the purchase price of eligible vehicles, engines, and equipment as defined in Section IV. These costs are subject to mandatory cost share requirements defined in Section VI.
2. **Training:** Eligible project costs include mechanic/driver training related to the maintenance and operation of new technologies.
3. **Battery Electric Powered Vehicles and Equipment:** Eligible costs for battery electric powered vehicle, equipment, and engine replacement projects can include the purchase and installation of one charging unit per vehicle, including the unit and charging cable, mount, and/or pedestal. These costs are subject to the mandatory cost share requirements defined in Section VI. Ineligible costs include power distribution to the pedestal, electrical panels and their installation, upgrades to existing electrical panels or electrical service, transformers and their installation, wiring/conduit and its installation, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g., batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.
4. **Grid Electric Powered Equipment:** Eligible costs for grid electric powered engine and equipment replacement projects can include the purchase and installation of certain equipment required for power delivery directly related to the new equipment. Eligible costs include design and engineering, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation. These costs are subject to the mandatory cost share requirements defined in Section VI. Ineligible costs include power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g., batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.
5. **Engine Replacement:** Eligible costs for engine replacement projects can include equipment and parts included in the certified engine configuration and/or are required to ensure the effective installation and functioning of the new technology. Eligible costs also include design and engineering, parts and materials, and installation. For engine replacement with battery, fuel cell, and grid electric, eligible costs include electric motors, electric inverters, battery assembly, direct drive transmission/gearbox, regenerative braking system, vehicle control/central processing unit, vehicle instrument cluster, hydrogen storage tank, hydrogen management system and fuel cell stack assemblies. These costs are subject to the mandatory cost share requirements defined in Section VI. Ineligible costs include cabs, tires, wheels, axles, paint, brakes, and mufflers.
6. **Certified Remanufacture Systems:** Eligible costs for engine remanufacture system projects can include the associated labor costs for installation of the system. These costs are subject to the mandatory cost share requirements defined in Section VI. Ineligible costs include the entire cost of an engine rebuild if a certified remanufacture system is applied at the time of rebuild.

7. **Verified Idle Reduction Technologies:** Eligible costs for idle reduction technologies that are installed on the vehicle can include the associated labor costs for installation of the system. These costs are subject to the mandatory cost share requirements defined in Section VI.
8. **Electrified Parking Spaces:** Eligible costs for electrified parking space projects can include the purchase and installation of certain equipment required for power delivery directly related to the new equipment. These costs are subject to the mandatory cost share requirements defined in Section VI. Ineligible costs include power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g., batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.
9. **Locomotive Shore Power:** Eligible costs for locomotive shore power connection projects can include the purchase and installation of certain equipment required for power delivery directly related to the new equipment. Eligible costs also include design and engineering, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation. These costs are subject to the mandatory cost share requirements defined in Section VI. Ineligible costs include power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g., batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.
10. **Marine Shore Power:** Eligible costs for marine shore power connection projects can include the purchase and installation of the shore side equipment and certain equipment required for power delivery directly related to the new equipment. Eligible costs include design and engineering, cables, cable management systems, shore power coupler systems, distribution control systems, grounding switches, service breakers, capacitor banks, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation. These costs are subject to the mandatory cost share requirements defined in Section VI. Ineligible costs include shipside modifications to accept shore-based electrical power, power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g., batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.
11. **Verified Retrofit Technologies:** Eligible costs for retrofit technologies that are installed on the vehicle can include the associated labor costs for installation of the system. These costs are subject to the mandatory cost share requirements defined in Section VI. Eligible costs include design and engineering, DPF cleaning machines, extra DPFs for maintenance rotation, replacement CCV filters, and filter cleaning contracts during the project period (5 years).
12. **Truck DPF Maintenance:** Eligible costs for truck replacement projects include the required/scheduled vehicle maintenance, as specified in the owner's manual, which is necessary to meet the warranty requirements for diesel particulate filters installed on drayage trucks. Funding for required maintenance is available for the duration of the project period (5 years) if the costs were included in the application and a copy of the contract for such maintenance is submitted as part of the reimbursement request at project completion.

13. **Clean Alternative Fuel Conversions:** Eligible costs for alternative fuel conversions can include the associated labor costs for installation of the system. These costs are subject to the mandatory cost share requirements defined in Section VI.
14. **Verified Aerodynamic Technologies and Verified Low Rolling Resistance Tires:** Eligible costs for aerodynamics and low rolling resistance tires can include the associated labor costs for installation. Eligible costs can include single-wide wheels only when a fleet is retrofitting from standard dual tires to SmartWay-verified single-wide low rolling resistance tires. These costs are subject to the mandatory cost share requirements defined in Section VI. Ineligible costs include aluminum wheels.
15. Go RED! funds and the minimum mandatory cost share cannot be used for stationary energy storage systems that power the equipment (e.g., batteries) and their installation, and Go RED! funds and the minimum mandatory cost share cannot be used for on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation. Applicants and their partners may add these components at their own expense outside the scope of the Go RED! funding assistance program.

V. FUNDING RESTRICTIONS

1. **Prohibition on the Use of Funds for Matching:** No funds awarded under the Go RED! program shall be used to meet matching or cost-share requirements for federal grants or other DEQ-administered funding assistance programs. Likewise, a recipient may not use federal funds or funds from other DEQ-administered funding assistance programs as matching or cost-share funds for the Go RED! Program.
2. **Prohibition on the Use of Funds for Fueling Infrastructure, Production, or Distribution:** No funds awarded under the Go RED! program shall be used for fueling infrastructure, such as that used for the production and/or distribution of biodiesel, compressed natural gas, liquefied natural gas, and/ or other fuels.
3. **Prohibition on the Use of Funds for Required Emissions Reductions:** No funds awarded under the Go RED! program shall be used to fund the costs of emission reductions that are mandated under federal law pursuant to 42 U.S.C. 16132(d)(2). See EPA's 2023 DERA State Grants Program Guidance <https://www.epa.gov/system/files/documents/2023-07/420b23031.pdf> for more information on mandated measures.
4. **Prohibition on Leasing:** No funds awarded under the Go RED! program shall be used for leasing vehicles, engines, or equipment. If financing is necessary, the purchase must be financed with a conventional purchase loan.
5. **Prohibition on the Use of Funds for Fleet Expansion:** Go RED! program funds cannot be used for the purchase of vehicles, engines, or equipment to expand a fleet. Engine, vehicle, and equipment replacement projects are eligible for funding on the condition that the following criteria are satisfied:

- a. The replacement vehicle, engine, or equipment will continue to perform similar function and operation as the vehicle, engine, or equipment that is being replaced.
- b. The cost of optional components or “add-ons” that significantly increase the cost of the vehicle may not be eligible for funding under the grant; the replacement vehicle should resemble the replaced vehicle in form and function.
- c. The replacement vehicle, engine, or equipment will be of similar type and gross vehicle weight rating or horsepower as the vehicle, engine, or equipment being replaced.
 - i. Nonroad: Horsepower increases of more than 40 percent will require specific approval by DEQ and EPA prior to purchase, and the recipient may be required to pay the additional costs associated with the higher horsepower equipment.
 - ii. Highway: The replacement vehicle must not be in a larger weight class than the existing vehicle (Class 5, 6, 7, or 8). Exceptions may be granted for vocational purposes and will require specific DEQ and EPA approval prior to purchase.
- d. The vehicle, equipment, and/or engine being replaced must be scrapped or rendered permanently disabled within ninety (90) days of being replaced.
 - i. If a 2010 engine model year (EMY) or newer highway vehicle is replaced, the 2010 EMY or newer vehicle may be retained or sold if the 2010 EMY or newer vehicle will replace a pre-2009 EMY vehicle, and the pre-2009 EMY vehicle will be scrapped. It is preferred that the scrapped unit currently operates within the same project location(s) as the 2010 EMY or newer vehicle currently operates, however alternative scenarios will be considered. All existing and replacement vehicles are subject to the funding restrictions in this section of the program guide. All equipment must operate within the United States. Under this scenario, a detailed scrappage plan must be submitted and will require prior DEQ and EPA approval.
 - ii. If a Tier 2, Tier 3 or Tier 4 locomotive, marine, or nonroad vehicle, equipment and/or engine is replaced, the units may be retained or sold if they will replace a similar, lower Tiered unit, and the lower Tiered unit will be scrapped. It is preferred that the scrapped unit currently operates within the same project location(s) as the original Tier 2, 3 or 4 unit currently operates, however alternative scenarios will be considered. All existing and replacement equipment are subject to the funding restrictions in this section of the program guide. All equipment must operate within the United States. Under this scenario, a detailed scrappage plan must be submitted and will require prior DEQ and EPA approval.
 - iii. 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. Other acceptable scrappage methods may be considered but will require prior DEQ and EPA approval.

- iv. Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrappage methods may be considered but will require prior written approval from the EPA project officer.
- v. Evidence of appropriate disposal is required for reimbursement of eligible expenses. Participating fleet owners must attest to the appropriate disposal in a signed scrappage statement. The scrappage statement must include:
 - 1. Vehicle owner's name and address;
 - 2. Vehicle make, vehicle model, vehicle model year, VIN, odometer reading or usage meter reading, engine make, engine model, engine model year, engine horsepower, engine ID or serial number, as applicable;
 - 3. Name, address, and signature of dismantler;
 - 4. Date engine and/or vehicle/equipment was scrapped;
 - 5. Statement attesting to scrappage of vehicle/engine as defined above;
 - 6. Signature of participating fleet owner.
 - 7. Digital photos as follows:
 - a. Side profile of the vehicle, prior to disabling;
 - b. VIN tag or equipment serial number;
 - c. Engine label (showing serial number, engine family number, and engine model year);
 - d. Engine block, prior to hole;
 - e. Engine block, after hole;
 - f. Cut frame rails or other cut structural components, as applicable;
 - g. Others, as needed.
- vi. Equipment and vehicle components that are not part of the engine or chassis may be salvaged from the unit being replaced (e.g., plow blades, shovels, seats, tires, etc.). If disabled engines, disabled vehicles, disabled equipment, or parts are to be sold, program income requirements apply.
- vii. For tire replacement projects, the original tires should be scrapped according to local or state requirements, or the tires can be salvaged for reuse or retreading. If salvaged tires are sold, program income requirements apply.

6. **Prohibition on the Replacement of Existing Technologies:** No funds awarded under this program shall be used for 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.
7. **Buy America Requirements:** Certain projects under this competition are subject to the Buy America Sourcing requirements under the Build America, Buy America (BABA) provisions of the Infrastructure Investment and Jobs Act (IIJA) (P.L. 117-58, §§70911-70917) when using Federal funds for the purchase of goods, products, and materials on any form of construction, alteration, maintenance, or repair of infrastructure in the United States. The Buy America preference applies to all of the iron and steel, manufactured products, and construction materials used for the infrastructure project under an award for identified EPA financial assistance funding programs. Please consider this information when preparing project and budget information.

Under BABA, a Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. On-highway vehicles/engines and non-road engines/equipment funded by this program are not considered “infrastructure.” The following potentially eligible projects under this competition meet the definition of “infrastructure” and are subject to Buy America preference requirements under BABA:

- a. Structures, facilities, and equipment that generate, transport, and distribute energy - including electric vehicle (EV) charging equipment, and
- b. Any other permanent public structure that meets the infrastructure definition in M-22-11. Questions regarding BABA applicability to specific projects should be submitted to DERA@epa.gov.

VI. FUNDING ASSISTANCE PERCENTAGES, COST-SHARE REQUIREMENTS, AND AWARD CAPS

Projects involving engine upgrades, certain idle reduction technologies, shore connection systems, electrified parking space technologies, certified engine replacements, or certified vehicle/equipment replacements, as defined in Section IV, are subject to mandatory cost-share requirements. Federal funds cannot be used to meet applicant cost-share requirements. In addition, applicant may propose to commit to cover a portion of the costs above and beyond the minimum mandatory cost-share. If the applicant proposes to provide additional funding beyond the minimum mandatory cost-share requirements, the application will receive additional points during the scoring process.

Table 8 lists the maximum funding assistance as a percentage of eligible costs that DEQ will reimburse and the minimum mandatory cost-share based on the type of project. DEQ retains the right to partially fund proposed projects. If full funding is not available for a selected project, the funding terms will be specified in the MOA between both DEQ and the applicant that must be signed before the project begins.

Table 8: Maximum Funding Assistance Percentages and Minimum Mandatory Cost-Share

Requirements

Eligible Technologies	Maximum Funding Assistance (percent of eligible costs)	Minimum Mandatory Cost-Share (applicant 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 Aerodynamics and Low Rolling Resistance Tires when Combined with New Exhaust After-Treatment Retrofit	100%	0%
Alternative Fuel Conversion	40%	60%

Awards are subject to a per-applicant maximum based on project types included in the application. Generally, the maximum award per applicant is \$200,000. Projects that include replacement of one or more eligible diesel vehicle or equipment with a zero-tailpipe emission powered vehicle or zero-tailpipe emission powered equipment are subject to a \$500,000 per applicant award cap instead of a \$200,000 per applicant award cap. Projects that include replacement of diesel-powered marine vessels, diesel-powered locomotives, diesel-powered marine engines, and diesel-powered locomotive engines are subject to a \$500,000 per applicant award cap instead of a \$200,000 per applicant award cap.

VII. PROJECT SELECTION PROCESS

A. Application Submittal

You must submit your application online. The online application form can be found at https://eportal.adeg.state.ar.us/?FormTag=GoRED_App.

Applications are due to DEQ by 11:59 p.m. CST on the last day of each month starting November 30, 2023, until all available funds have been awarded or October 31, 2024, whichever comes first.

You must provide all of the required information and documentation specified in the online application form. DEQ will not evaluate incomplete applications. DEQ may contact you for clarification and/or supplemental information. Applicants have ten (10) calendar days to respond to any such request.

Applications are subject to the Arkansas Freedom of Information Act.

Please direct all questions regarding the Go RED! program to Katrina Jones by email at katrina.jones@adeq.state.ar.us, or by phone at (501) 683-6267.

B. Application Evaluation Criteria

Following each deadline, DEQ will evaluate and score applications received during the preceding month. The application scoring criteria is described below.

1. Air Quality

DEQ will evaluate this criterion based on project location. The applicant should describe in their proposal any special air quality concerns in the area where the vehicle, engine, or equipment involved in the proposed diesel emission reduction project is primarily used. DEQ will prioritize funding of projects in the following areas:

- a. Areas with historic ozone and fine particulate concentrations near to or exceeding the level of national ambient air quality standards ;
- b. Federal Class I areas (Upper Buffalo Wilderness and Caney Creek Wilderness);
- c. Areas with toxic air pollutant concerns.

2. Cost-Effectiveness

DEQ will calculate the cost-effectiveness of the proposed project in terms of dollars requested per pound of pollutant reduced using the applicant-provided parameters required in the proposal. The more cost-effective (lower \$/pound) a project is, the more points it will receive under this criterion.

3. Project Benefits

DEQ will evaluate this criterion based on the project benefits described in the application. The applicant should describe how the proposed project will:

- a. Reduce environmental risks to the public and sensitive populations;
- b. Reduce environmental risks for economically disadvantaged populations and other populations with disproportionately high exposure to adverse environmental impacts;
- c. Demonstrate measures that avoid damages to fleet and equipment from severe weather events;
- d. Conserve diesel fuel and/or reduce diesel emissions.

4. Time spent in Arkansas

DEQ will evaluate applications based on the percentage of time that the vehicle, engine, or equipment involved in the proposed diesel emission reduction project operates in Arkansas. DEQ will prioritize funding of projects involving vehicles, engines, or equipment that spend a higher percentage of time operating in Arkansas and that will continue to operate in Arkansas beyond the minimum five-year period required by the Go RED! program.

5. Programmatic Capability

DEQ evaluation of each application will take into account the applicant's ability to complete and manage the proposed project. DEQ will consider the applicant's proposed work plan, budget, timeline, technology applicability, and equipment information. DEQ will also consider how the cumulative experience, knowledge, qualifications, and organizational resources of the applicant will assist in completion of the project.

6. Additional Funding Contribution

Additional points are available if the applicant proposes to provide additional funding towards completion of the project beyond the minimum mandatory cost-share requirements.

7. Small Business

Additional points will be awarded if an applicant demonstrates that they are a small business.²

8. Goods Movement Facilities

Priority for funding is given to projects based on whether the vehicles/engines/equipment targeted for diesel emissions reductions are located at, or service, goods movement facilities as defined below. Applicants should include the name of the specific port, airport, rail yard, terminal, or distribution center where the affected vehicles operate. Points under this criterion will be based upon the percentage of time targeted vehicles operate at goods movement facilities.

- a. Ports – places alongside navigable water with facilities for the loading and unloading of passengers and/or cargo from ships, ferries, and other vessels;
- b. Airports – places where aircraft operate that have paved runways and terminals which include cargo, baggage and/or passenger-movement operations;
- c. Rail Yards – a system of tracks, other than main tracks and sidings, used for making up trains,

² “Small businesses” means those businesses with 100 or fewer employees companywide.

for storing cars, and for other purposes;

- d. Terminals – freight and passenger stations at the end of carrier lines, or that serve as junctions at any point with other lines, that have facilities for the handling of freight and/or passengers;
- e. Distribution Centers – facilities that perform consolidation, warehousing, packaging, decomposition, and other functions linked with handling freight, often in proximity to major transport routes or terminals, and/or which generate large amounts of truck traffic.

9. Community Engagement:

Priority for funding is given to applications that demonstrate engagement with the affected communities and/or populations, especially local residents, to ensure their meaningful participation with respect to the design, planning, and performance of the project. Meaningful involvement means people have an opportunity to participate in decisions about activities that may affect their environment and/or health; the public's contribution can influence the regulatory agency's decision; community concerns will be considered in the decision-making process; and decision makers will seek out and facilitate the involvement of those potentially affected.

10. Workforce Development

DEQ will evaluate this criterion based on the quality and extent of the workforce planning activities described in the application. The applicant should describe how the proposed project will:

- a. Establish plans and activities to prepare their workforce for the project;
- b. Establish policies and protections that currently exist or will be put in place to prevent existing workers from being replaced or displaced because of new technologies;
- c. Demonstrate that they engage with workers and their representatives directly in the development of workforce planning activities to incorporate worker voice into the project.

C. Project Selection

DEQ will select the highest scoring projects received prior to each rolling deadline to recommend for funding.

D. Notifications

DEQ will notify all applicants by email once applications have been scored and projects have been selected for funding. Notifications to successful applicants will indicate that the evaluation process is complete and that Go RED! program staff recommends the applicant for award. The Agency will send the notification to the original signatory of the application. **This initial notification, which advises that the applicant's proposed project has been recommended for award, is not an authorization to begin the project. The formal notification of award, which will be a MOA, is the only document that authorizes commencement of the project.** The formal notification will be delivered by the U.S. Postal Service and will require a signature from both the recipient and a DEQ official. The MOA will outline the following:

eligible expenses, allowable reimbursement amounts, reporting requirements, photographic evidence, record retention requirements, and additional documentation required for reimbursement. The replacement vehicle, equipment, and/or engine must be ordered within ninety (90) days of a signed agreement.

VIII. REPORTING REQUIREMENTS

DEQ requires the project manager for selected projects to submit quarterly progress reports to DEQ between the time of MOA signature and completion of the project and to submit a detailed final report upon completion of the project. Report requirements will be specified in the MOA.