

DERA Project Eligibility and Cost-Share Overview

Summary

EPA’s Diesel Emission Reduction Program (DERA) offers funding in the form of grants and rebates for projects that protect human health and improve air quality by reducing harmful emissions from diesel engines. This document provides an overview of project eligibility and cost-share for the grants offered under the 2016 Clean Diesel Funding Assistance Program competitive Request for Proposals (RFP). This overview can also be helpful in understanding the DERA State and Tribal Clean Diesel programs, though some cost-share and eligibility requirements may differ slightly between these funding assistance programs.

Eligible diesel emission reduction solutions under the 2016 Clean Diesel Funding Assistance Program include verified emission control technologies such as exhaust controls, engine upgrades, verified idle reduction technologies, verified aerodynamic technologies and low rolling resistance tires, and certified engine configurations such as engine repowers and vehicle or equipment replacement. Eligible exhaust controls (retrofits) include Diesel Oxidation Catalysts (DOC), Closed Crankcase Ventilation Systems (CCV), Selective Catalytic Reduction (SCR), and other technologies verified by EPA and the California Air Resources Board. See the following links for lists of verified exhaust control technologies:

Note: This outline is designed to provide an overview of DERA funding and eligibility and is not a substitute for DERA program guidance. For more specific information on eligibility, funding, and the application process, please refer to the Request for Proposals documents for the National and Tribal Clean Diesel Funding Assistance Programs, and the State Clean Diesel Grant Program Information Guide, as well as the Clean Diesel homepage. Program eligibility and guidance may change year to year.

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1. Class 5 – Class 8 Medium and Heavy-duty Highway Vehicle Eligibility

This category includes long-haul and local freight, drayage, delivery, bucket, beverage, refuse, furniture, dump, cement, and other highway vehicles with gross vehicle weight ratings (GVWR) over 16,000 lbs.

Current Engine Model Year (EMY)	DOC +/- CCV	DPF	SCR	Drayage Truck Replacement: EMY 2011 or Newer	Other Vehicle Replacement: EMY 2015 or Newer	Engine Repower: EMY 2015 or Newer	Replacement or Repower: All-Electric
	+/- idle reduction						
1994-2006	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2007 to 2010	No	No	Yes	No	No	No	Yes

- a. Replaced vehicles and engines must be scrapped.
- b. Eligible medium and heavy, heavy-duty highway vehicles are limited to Class 5 through Class 8:

Class	Gross Vehicle Weight Rating
5	16,001 -19,500 lbs
6	19,501 - 26,000 lbs
7	26,001 - 33,000 lbs
8a	33,001 - 60,000 lbs
8b	60,001 lbs and over

- c. EPA will fund:
 1. Retrofits: 100% of the cost of verified exhaust control technologies, including the cost of installation.
 2. Engine Repowers:
 - i. 40% of the cost of a repower with a 2015 model year or newer engine (diesel or alternative fuel) certified to EPA emission standards including the cost of installation.
 - ii. 50% of the cost of a repower with a 2015 model year of newer engine certified to CARB's Optional Low-NOx standards including the cost of installation.
 - iii. 60% of the cost of an all-electric repower, including the cost of installation and charging infrastructure associated with the new all-electric engine.
 3. Vehicle Replacements:
 - i. 25% of the cost of a replacement vehicle powered by a 2015 model year or newer engine (diesel or alternative fuel) certified to EPA emission standards.
 - ii. 35% of the cost of a replacement vehicle powered by a 2015 model year or newer engine certified to CARB's Optional Low-NOx standards.
 - iii. 45% of the cost of an all-electric replacement vehicle including charging infrastructure associated with the new all-electric vehicle.

- iv. 50% of the cost of a replacement drayage truck powered by a 2011 model year or newer certified engine, or an all-electric drayage truck including charging infrastructure associated with the new all-electric vehicle.
- 4. Aerodynamic Technologies and Low Rolling Resistance Tires: 100% of the cost (labor and equipment) of EPA SmartWay verified aerodynamic technologies or EPA SmartWay verified low rolling resistance tires if the technology is installed on the same vehicle at the same time as a new eligible verified exhaust control technology is installed on the vehicle.
- 5. Idle Reduction Technologies: 100% of the cost (labor and equipment) of eligible, EPA SmartWay verified idle reduction technology if the technology is installed on the same vehicle at the same time as a new eligible verified exhaust control technology is installed on the vehicle.

2. Bus Eligibility

This category includes school buses, shuttle buses, transit buses, and other buses as defined below.

Current Engine Model Year (EMY)	DOC +/- CCV	DPF	SCR	Vehicle Replacement: EMY 2015 or Newer	Engine Repower: EMY 2015 or Newer	Replacement or Repower: All-Electric
	+/- idle reduction					
1994-2006	Yes	Yes	Yes	Yes	Yes	Yes
2007 to 2010	No	No	Yes	No	No	Yes

- a. Replaced vehicles and engines must be scrapped.
- b. Eligible school buses include 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.
- c. Eligible non-school buses include Class 5 – Class 8 transit, shuttle and other buses.
- d. EPA will fund:
 - 1. Retrofits: 100% of the cost of verified exhaust control technologies, including the cost of installation.
 - 2. Engine Repowers:
 - i. 40% of the cost of a repower with a 2015 model year or newer engine (diesel or alternative fuel) certified to EPA emission standards including the cost of installation.
 - ii. 50% of the cost of a repower with a 2015 model year or newer engine certified to CARB's Optional Low-NOx standards including the cost of installation.
 - iii. 60% of the cost of an all-electric repower, including the cost of installation and charging infrastructure associated with the new all-electric engine.
 - 3. Vehicle Replacements:
 - i. 25% of the cost of a replacement vehicle powered by a 2015 model year or newer engine (diesel or alternative fuel) certified to EPA emission standards.

- ii. 35% of the cost of a replacement vehicle powered by a 2015 model year or newer engine certified to CARB’s Optional Low-NOx standards.
- iii. 45% of the cost of an all-electric replacement vehicle including charging infrastructure associated with the new all-electric vehicle.

4. Idle Reduction Technologies:

- i. 100% of the cost (labor and equipment) of eligible, EPA SmartWay verified idle reduction technology on school buses with model year 2006 or older engines that had previously been retrofitted with a verified emission control device.
- ii. 100% of the cost (labor and equipment) of eligible, EPA SmartWay verified idle reduction technology if the technology is installed on the same vehicle at the same time as a new eligible verified exhaust control technology is installed on the vehicle.

3. Locomotive Eligibility

This category includes both line-haul locomotives (freight and passenger) and switcher locomotives.

Current Locomotive Tier	Replacement or Repower: Engine Model Year 2015 or Newer			Verified Exhaust Controls	Verified Idle-Reduction Technology
	Tier 0+ - 3	Tier 4	All-Electric	SCR	
Unregulated - Tier 2	No	Yes	Yes	No	Yes
Tier 2+ switcher	No	Yes	Yes	Yes	Yes
Tier 2+ line haul	No	No	No	Yes	Yes

- a. Eligible locomotives must operate 1000 or more hours per year.
- b. Replaced locomotives and engines must be scrapped.
- c. Emission reduction activities/technologies required by EPA’s locomotive and marine rule, “Control of Emissions of Air Pollution from Locomotives and Marine Compression-Ignition Engines Less than 30 liters per Cylinder,” are not eligible for DERA funding.
- d. Tier 0+, Tier 1+, and 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.
- e. EPA will fund:
 - 1. Retrofits: 100% of the cost of verified exhaust control technologies, including the cost of installation.
 - 2. Engine Repowers:
 - i. 40% of the cost of a repower with a 2015 model year or newer engine (diesel or alternative fuel) certified to EPA emission standards including the cost of installation.
 - ii. 60% of the cost of an all-electric repower, including the cost of installation and charging infrastructure associated with the new all-electric engine.
 - 3. Vehicle Replacement:

- i. 25% of the cost of a replacement vehicle/equipment powered by a 2015 model year or newer engine (diesel or alternative fuel) certified to EPA emission standards.
 - ii. 45% of the cost of an all-electric replacement vehicle/equipment including charging infrastructure associated with the new all-electric vehicle/equipment.
4. Idle Reduction Technologies:
- i. 40% of the cost (labor and equipment) of eligible, EPA SmartWay verified idle reduction technology. Automatic Engine Start-Stop technologies are only eligible to be installed on locomotives currently certified to Tier 0 or unregulated.
 - ii. 100% of the cost (labor and equipment) of eligible, EPA SmartWay verified idle reduction technology if the technology is installed on the same locomotive at the same time as a new eligible verified exhaust control technology is installed on the locomotive. Automatic Engine Start-Stop technologies are only eligible to be installed on locomotives currently certified to Tier 0 or unregulated.

4. Marine Engine Eligibility

This category applies to marine auxiliary and propulsion engines in vessels such as tugboats, ferries, fishing vessels, etc.

Current Engine Tier	Engine Repower: Engine Model Year 2015 or Newer		Certified Remanufacture System	Verified Engine Upgrade
	Tier 1-2	Tier 3-4		
Unregulated – Tier 2	No	Yes	Yes	Yes
Tier 3 - 4	No	No	No	No

- a. Eligible marine engines must operate 1000 or more hours per year.
- b. Replaced engines must be scrapped.
- c. Emission reduction activities/technologies required by EPA’s locomotive and marine rule, “Control of Emissions of Air Pollution from Locomotives and Marine Compression-Ignition Engines Less than 30 liters per Cylinder,” are not eligible for DERA funding.
- d. EPA will fund:
 - 1. Engine Upgrades: 40% of the cost of verified engine upgrades, including the cost of installation.
 - 2. Engine Repowers:
 - i. 40% of the cost of a repower with a 2015 model year or newer engine (diesel or alternative fuel) certified to EPA emission standards including the cost of installation.
 - ii. 60% of the cost of an all-electric repower, including the cost of installation and charging infrastructure associated with the new all-electric engine.

5. Marine and Locomotive Shore Connection System Eligibility

This category includes shore connection systems that reduce unnecessary idling of locomotives and marine vessels by providing electrical services that would otherwise require the operation of the main drive or auxiliary engines while the locomotive or marine vessel remains stationary.

- a. Marine shore power projects are eligible for funding on the condition that the following criteria are satisfied:
 1. Applicants must attest to compliance with international shore power design standards (ISO/IEC/IEEE 80005-1-2012 High Voltage Shore Connection Systems or the IEC/PAS 80005-3:2014 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 utilized for more than 1,000 MW-hours per year. Smaller projects will be considered if the applicant can demonstrate cost/benefits.
 4. If the project proposal is selected for funding, the final design of the marine shore power connection system will require specific EPA approval prior to purchase and installation.
 5. Applicants must commit to reporting usage information to EPA 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 utilize the shore power system, with limited exceptions for extreme circumstances.
- b. Eligible locomotive shore connection system projects must be utilized 1000 hours or more per year.
- c. EPA will fund:
 1. 25% of the cost (labor and equipment) of eligible verified marine shore connection systems.
 2. 40% of the cost (labor and equipment) of eligible EPA SmartWay verified locomotive shore connection systems.

6. Electrified Parking Spaces Eligibility

Electrified Parking Spaces (EPS), also known as Truck Stop Electrification (TSE), provide off-board electrical power to operate either an independent heating, cooling, and electrical power system, or a truck-integrated heating and cooling system, or a plug-in refrigeration system that would otherwise be powered by a diesel engine.

- a. EPA will fund 25% of the cost (labor and equipment) of eligible EPA SmartWay verified electrified parking space technologies, including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional.

7. Nonroad Engine Eligibility

This category includes nonroad engines used in:

- Construction (including bull dozers, cranes, backhoes, etc.);
- Handling of cargo (including container and baggage handling vehicles/equipment at a port or airport);
- Agriculture (including tractors, irrigation pumps, etc.);
- Mining; or
- Energy production (including stationary generators and pumps).

		Replacement or Repower: EMY 2015 or Newer		
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Current Engine Horsepower	Current Engine Model Year (EMY)	Tier 0 - 3	Tier 4	All-Electric	Verified Exhaust Control	Verified Engine Upgrade
0-50	2004 and Newer	No	Yes	Yes	Yes	Yes
51-300	1994 and Newer	No	Yes	Yes	Yes	Yes
301-99999	1984 and Newer	No	Yes	Yes	Yes	Yes

- a. Eligible nonroad engines and equipment must operate 500 or more hours per year.
- b. Replaced engines, equipment, and vehicles must be scrapped.
- c. Emission reduction activities/technologies from stationary engines required by EPA’s RICE rule, “National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines” (40 CFR Part 63 Subpart ZZZZ), are not eligible for DERA funding.
- d. EPA will fund:
 1. Retrofits: 100% of the cost of verified exhaust control technologies, including the cost of installation.
 2. Engine Upgrades: 40% of the cost of verified engine upgrades, including the cost of installation.
 3. Engine Repowers:
 - i. 40% of the cost of a repower with a 2015 model year or newer engine (diesel or alternative fuel) certified to EPA emission standards including the cost of installation.
 - ii. 60% of the cost of an all-electric repower, including the cost of installation and charging infrastructure associated with the new all-electric engine.
 4. Vehicle Replacements:
 - i. 25% of the cost of a replacement vehicle/equipment powered by a 2015 model year or newer engine (diesel or alternative fuel) certified to EPA emission standards.
 - ii. 45% of the cost of an all-electric replacement vehicle/equipment including charging infrastructure associated with the new all-electric vehicle/equipment.

8. Cleaner Fuel Eligibility

This category includes biodiesel, diesel emulsions or additives verified by EPA or CARB, compressed natural gas, propane and other certified alternative fuels.

- a. EPA will fund up to 100% of the cost differential between eligible cleaner fuels and conventional diesel fuels if the cleaner fuels are used in combination, and on the same vehicles, with new eligible verified exhaust controls, eligible engine upgrades, eligible certified engine repowers, or eligible certified vehicle/equipment replacements listed in this document.

If you have any questions after reviewing this document and the related program guidance, please contact the Clean Diesel Helpline at 877-NCDC-FACTS (877-623-2322) or email CleanDiesel@epa.gov.