



State of Oregon Department of Environmental Quality

EPA Fiscal Year 2020 Eligible Grant Funded Activity for Highway and Non-road Diesel

Overview of EPA Grant

EPA is once again making grant funds available for diesel emissions reductions projects on a competitive basis. EPA grant requirements may change from one year to the next. Please carefully review this summary to make sure your project is eligible. A complete description of project eligibility and requirements is found at <https://www.epa.gov/sites/production/files/2019-12/documents/2020-derational-grants-competition-12-2019.pdf>. **Applications are due February 26th, 2020.**

Who is eligible to apply?

- Regional, state and local governments
- Tribal governments, intertribal consortia and native villages
- Port Authorities
- Nonprofit organizations

To qualify applicants must:

- have jurisdiction over transportation or air quality; or
- provide pollution reduction or educational services to diesel fleets; or
- have as their principal purpose the promotion of transportation or air quality.

Highway diesel vehicles and non-road equipment

This funding can cover the partial costs of a newer, cleaner vehicle or piece of non-road equipment replacing an older eligible engine that has at least three years remaining life. Eligible vehicle upgrades and EPA funding limits can be found in Table 1. Any vehicle or equipment replaced must be scrapped.

Under this program, highway diesel vehicles and non-road equipment can be replaced with newer, cleaner vehicles and equipment that operate on diesel or alternative fuels and use engines certified by EPA and, if applicable, the California Air Resources Board, known as CARB. Replacement projects can include the replacement of diesel vehicles/equipment with newer, cleaner diesel, electric (battery or fuel cell), hybrid or alternative fuel vehicles/equipment. Project eligibility requirements are listed in tables 2 and 3. All zero tailpipe emissions vehicles and equipment do not require EPA or CARB certification.

The replacement vehicle/equipment must be of the same type and similar gross vehicle weight rating or horsepower as the vehicle/equipment being replaced. The replacement vehicle/equipment must perform the same function as the vehicle/equipment that is being replaced. For example, a 300 horsepower bulldozer is replaced by a bulldozer of similar horsepower. For non-road equipment, horsepower increases of more than 40 percent will require specific EPA approval before purchase.

Dray truck replacement

Trucks operating through port or intermodal rail yard property to load, unload, transport cargo may qualify as dray and be eligible to apply for funding. Dray trucks are eligible to receive up to 50 percent of the costs of an eligible replacement vehicle with an engine model year 2014 and newer. For additional information, please visit: <https://www.epa.gov/sites/production/files/2019-12/documents/2020-derational-grants-competition-12-2019.pdf>.

Replacement restrictions and additional criteria

For all replacement projects as defined above, the following activity is **not** eligible for funding under this solicitation:

- The purchase of new vehicles or equipment to expand a fleet.

Replacement projects are eligible for funding on the condition that the following criteria are satisfied:

- The existing vehicle must be fully operational.
- The participating fleet owner must have owned and operated the vehicle during the twenty-four months prior to upgrade.
- The existing vehicle 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 vehicle/equipment being replaced will be scrapped or rendered permanently disabled. Drilling a three inch diameter hole in the engine block and manifold and disabling the chassis while retaining possession of the vehicle/equipment is an acceptable scrapping method. Other methods may be considered and will require prior EPA approval.
- Evidence of appropriate disposal such as a photograph of the scrapped equipment, including engine serial number and vehicle identification number, is required in a final assistance agreement report submitted to EPA.

Engine repower

Repowering to lower emitting engines in highway vehicles and non-road equipment can also be funded. Repowers using 100 percent alternative fuels (e.g., natural gas, electricity or propane) are allowed. The repowered vehicle/equipment must continue to perform the same function as before the repower. The repowered highway engine's primary service class must match the vehicle's weight class. The repowered non-road engine must be of similar horsepower. Increases of more than 40 percent require EPA approval prior to purchase. The engine being replaced must be scrapped.

The existing engine must have at least three years of remaining life at the time of the 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.

Exhaust after treatment

Funding can cover 100 percent of the cost to purchase and install exhaust controls on existing engines that achieves emission reductions beyond what was currently required by EPA at the time of engine certification. The after treatment technology must be on EPA's (<https://www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel>) or CARB's (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>) verified technology list.

Table 1: EPA Eligible Vehicle Upgrades for the 2020 Competitive DERA program

Eligible Upgrades	EPA Funding Limit	Mandatory Cost Share
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 Emissions Power Source	60%	40%
Certified Remanufacture Systems	100%	0%
Highway Idle Reduction Technologies when combined with new or previously installed exhaust after-treatment retrofit	100%	0%
Highway Idle Reduction Technologies without new exhaust after-treatment retrofit	25%	75%
Locomotive Idle Reduction Technologies	40%	60%
Marine Shore Connection Systems	25%	75%
Electrified Parking Space Technologies	30%	70%
Exhaust After-treatment Retrofits	100%	0%
Engine Upgrade Retrofits	100%	0%
Hybrid Retrofit Systems	100%	0%
Fuel and Additive Retrofits when combined with new retrofit, upgrade or new replacement	Cost differential	Cost of conventional
Aerodynamics and Low Rolling Resistance Tires when combined with new exhaust after-treatment retrofit	100%	0%
Alternative Fuel Conversion	40%	60%

Table 2: Medium and Heavy-Duty Truck, Transit Bus, and School Bus Project Eligibility*

Current Engine Model Year (EMY)	DOC +/- CCV	DPF	SCR	Verified Idle Reduction, Tires, or Aerodynamics	Vehicle or Engine Replacement: EMY 2018+ (2014+ for Drayage)	Vehicle or Engine Replacement: EMY 2018+ Zero Emission² or Low-NOx	Clean Alternative Fuel Conversion
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 units 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.

*Table source: <https://www.epa.gov/sites/production/files/2019-12/documents/2020-dera-national-grants-competition-12-2019.pdf>

Table 3. Non-road Engine Project Eligibility*

Current Engine Tier	Vehicle/Equipment Replacement: EMY 2020					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	No	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	No	No

¹Tier 3 and Tier 4 interim (4i) allowed for vehicle/equipment replacement only when Tier 4 final is not yet available from OEM for 2020 model year equipment under the Transition Program for Equipment Manufacturers.

²Tier 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 I.B.4.a., below.

³Eligible 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 source: <https://www.epa.gov/sites/production/files/2019-12/documents/2020-dera-national-grants-competition-12-2019.pdf>

For additional information and technical guidance please contact: Eric Feeley, 503-229-6549 or email FEELEY.Eric@deq.state.or.us.