



Volkswagen Trust

Be Part of the Solution

Fiscal Year 2020 Implementation Guidelines: Diesel Emission Reduction Act (DERA) Option

The DERA Option award category will result in additional NO_x emission reductions by ensuring Missouri qualifies for the federal matching bonus from the federal DERA grant for 2018 through 2027. Missouri's Beneficiary Mitigation Plan dedicates \$3 million to this award category for use as a match for each DERA grant year during the 10-year trust period allowed by the VW consent decree.

The use of DERA grants allows the Department more flexibility in funding projects. Many projects eligible for DERA grants (such as stationary engine upgrades or idle reduction/retrofits) do not have a corresponding VW Trust category. Because of this, the Department will prioritize projects eligible under DERA, not otherwise eligible under the VW Trust, when considering projects to fund with this award category.

Eligible Projects and Funding Percentages

Projects eligible under DERA overlap with many of the other VW award categories. The following tables summarize projects that are eligible under DERA and how these projects compare to the other VW Categories. In general, the main difference between VW projects and DERA projects is the eligible engine model years. Engine model years between 1992 and 2009 are eligible for all VW categories, but most DERA projects are limited to engine model years between 1996 and 2009. Another difference between the two funding programs is the required model year of engine replacements. VW requires that the new engine be the same model year as the year that the replacement action occurs or at most one model year older. DERA allows variation of new engine model years per project type as stated in the Program Requirements. For example, highway diesel vehicle replacement projects allow the new engine model year to be 2016 or newer, while locomotive engines must be 2019. A final difference of note is that DERA allows new replacement vehicles to be gasoline while the VW Trust does not allow new gasoline replacement vehicles. In the following tables, note that projects receiving preference in the federal FY19 State Clean Diesel Program (state FY20) are not shaded.

Table: Comparison of VW Bus Projects and DERA Bus Projects

VW Category 1: School Buses and Category 3: Transit and Shuttle Buses				DERA: Type A, B, C, D Buses and Class 5-8 Transit, Shuttle, or other Buses		
VW Project	Eligible Engine Model Years	Funding Maximums		DERA Project	Eligible Engine Model Years	Funding Maximums
		Privately-Owned	Government-Owned			
Engine Replacement with new diesel or alternate fueled engine	1992-2009	Transit and Shuttle Buses: Up to 40%	Transit and Shuttle Buses: Up to 75%	Engine replacement with diesel or alternate fuel engine	1996-2009	40%
		School Buses: not eligible for repower		Engine replacement with engine certified to CARB's optional low-NOx standards	1996+	50%
Engine replacement with new all-electric engine.	1992-2009	Transit and shuttle Buses: Up to 50%	Transit and Shuttle Buses: Up to 75%	Engine replacement with an electric motor or an electric power source	1996+	60%
		School Buses: not eligible for repower				
Vehicle replacement with new diesel or alternate fueled vehicle	1992-2009	Transit and Shuttle Buses: Up to 25%	Transit and Shuttle Buses: Up to 50%	Vehicle replacement with diesel or alternate fueled vehicle	1996-2009	25%
		School Buses: Up to 25%	School Buses: Up to 50-80% based on model year and miles driven	Vehicle replacement with vehicle powered by engine certified to CARB's optional low-NOx standards	1996+	35%
Vehicle replacement with all-electric vehicle	1992-2009	Transit and Shuttle: Up to 50%	Transit and Shuttle: Up to 50%	Vehicle replacement with all-electric vehicle	1996+	45%
		School Buses: Up to 75%	School Buses: Up to 60-90% based on model year and miles driven			
(No projects comparable to DERA)				Retrofits with verified exhaust control technologies	1996-2009	100%
				Verified Idle Reduction Technologies (APU's and generators are not eligible on vehicles with 2007 and newer engine model years)	1996+-	25%
				Clean Alternative Fuel Conversion	1996+	40%

Table: Comparison of VW Diesel Truck Projects and DERA Diesel Truck Projects

VW Category 2: Government Trucks and Category 4: Nongovernment Trucks				DERA: Class 5-8 Medium and Heavy Highway Vehicles		
VW Project	Eligible Engine Model Years	Funding Maximums		DERA Project	Eligible Engine Model Years	Funding Maximums
		Privately-Owned	Government-Owned			
Engine replacement with new diesel or alternate fueled engine	1992-2009	Up to 40%	Up to 75%	Engine replacement with diesel or alternate fuel engine	1996-2009	40%
				Engine replacement with an engine certified to CARB's optional low-NO _x standards	1996+	50%
		Engine replacement with new all-electric engine		1992-2009	Up to 50%	Engine replacement with an electric motor or an electric power source
Vehicle replacement with new diesel or alternate fueled vehicle	1992-2009	Up to 25%	Up to 50%	Vehicle replacement with diesel or alternate fueled vehicle (replacement engine may be 2013 model year or newer if used for drayage.)	1996-2009	25% (50% for drayage)
				Vehicle replacement with a vehicle powered by an engine certified to CARB's optional low-NO _x standards	1996+	35% (50% for drayage)
		Vehicle replacement with all-electric vehicle		1992-2009	Up to 50%	Vehicle replacement with all-electric vehicle
(No projects comparable to DERA)				Retrofits with verified exhaust control technologies	1996-2009	100%
				Verified Aerodynamic Technologies and Low Rolling Resistance Tires (only in combination with another eligible diesel emission reduction project)	1996-2009	100%
				Verified Idle Reduction Technologies (APU's and generators are not eligible on vehicles from 2007 and newer engine model years)	1996+	25%
				Clean Alternative Fuel Conversion	1996+	40%

Table: Comparison of VW Locomotive and Marine Projects and DERA Locomotive and Marine Projects

VW Category 5: Locomotive and Marine				DERA: Line haul (Freight and Passenger) and Switcher Locomotives		
VW Project	Eligible Engine Model Years	Funding Maximums		DERA Project	Eligible Engine Model Years	Funding Maximums
		Privately-Owned	Government-Owned			
Locomotive engine replacement with new diesel or alternate fueled engine or generator sets that are EPA certified for the engine year in which the action occurs	Pre-Tier 4	Up to 40%	Up to 75%	Locomotive engine replacement with a Tier 4 engine	Unregulated, Tier 2, Tier 2+ Switcher	40%
Locomotive engine replacement with new all-electric engine	Pre-Tier 4	Up to 50%		Locomotive engine replacement with an all-electric engine	Unregulated, Tier 2, Tier 2+ Switcher	60%
Locomotive replacement with new diesel or alternate fueled freight switcher that is EPA certified for the engine model year in which the action occurs	Pre-Tier 4	Up to 25%	Up to 50%	Locomotive replacement with equipment powered by diesel or alternate fuel	Unregulated, Tier 2, Tier 2+ Switcher	25%
Locomotive replacement with a new all-electric freight switcher	Pre-Tier 4	Up to 50%		Locomotive replacement with all-electric equipment	Unregulated, Tier 2, Tier 2+ Switcher	45%
(No projects comparable to DERA)				Certified remanufacture system or verified locomotive engine upgrade	Unregulated, Tier 2+	40%
				Locomotive retrofit with verified exhaust control technology	Unregulated, Tier 2+	100%
				Idle reduction technology including shore power	Unregulated, Tier 2+	40%
Marine engine replacement with new Tier 3 or 4 diesel or alternate fueled engine	Pre-Tier 3	Up to 40%	Up to 75%	Marine engine replacement with Tier 3 or Tier 4 diesel or alternate fuel engine	Pre-Tier 3	40%
Marine engine replacement with new all-electric engine	Pre-Tier 3	Up to 50%		Marine engine replacement with an all-electric engine	Pre-Tier 3, Tier 3-4	60%
Certified remanufacture system or verified marine engine upgrade	Pre-Tier 3	Up to 40%		Certified remanufacture system or verified marine engine upgrade	Pre-Tier 3	40%
(No projects comparable to DERA)				Costs associated with shore-side marine power system	N/A	25%

Table: Comparison of VW Airport and Cargo Projects and DERA Airport and Cargo Projects

VW Category 6: Airport and Cargo				DERA: Nonroad Diesel Engines		
VW Project	Eligible Engine Model Years	Funding Maximums		DERA Project	Eligible Engine Model Years	Funding Maximums
		Privately-Owned	Government-Owned			
Engine or equipment replacement with new all-electric engine or equipment	GSE: Pre-Tier 3 diesel, or 3g/bhp-hr and higher spark ignition.	Up to 50%	Up to 75%	Engine replacement with all-electric engine	0-50 HP: 2006 and newer engines	60%
	CHE: greater than 8000 lbs lift capacity			Equipment replacement with all-electric equipment		45%
(no projects comparable to DERA)				Engine replacement with a diesel or alternate fuel engine	301+ HP: 1986 and newer engines See the DERA Program Requirements for complete engine Tier restrictions	40%
				Equipment replacement with equipment powered diesel or alternate fuel engine		25%
				Retrofit with verified exhaust control technology		100%
				Verified engine upgrade		40%

Table: Comparison of VW EV Infrastructure Projects and DERA EV Infrastructure Projects

VW Category 8: EV Infrastructure	DERA: Electrified Parking Spaces (Truck Stop Electrification)		
See Category 8 Guidelines for details.	DERA activity	Eligible Years	Funding Limits
		Labor and equipment EPA SmartWay verified electrified parking space technologies	N/A

Application Process:

To ensure an appropriate amount of flexibility and a robust applicant pool, the Department will solicit applications for all DERA eligible projects including those that qualify under another VW award category (e.g. school buses).

Selection Process:

The Department will prioritize projects that are not eligible under other VW categories. For as long as DERA funding is available, projects in this award category will not be ranked competitively. In the event that the funding requested for projects that are not eligible under other VW categories is more than the available DERA funding, the Department will choose awardees by a lottery process.

If funding remains after all projects that are not eligible for other VW Trust award categories have been funded, the Department will choose unfunded projects from other award categories to fund under the State Clean Diesel Program.