

Department of Environmental Protection

PHILIP D. MURPHY
Governor

Department of Environmental Frotects

CATHERINE R. McCABE

Commissioner

SHEILA Y. OLIVER
Lt. Governor

PROJECT PROPOSAL

OVERALL GOAL

The State of New Jersey, as a beneficiary of the Trust established pursuant to the national Volkswagen settlement, intends to use its allocation from the mitigation trust to efficiently implement projects that reduce oxides of nitrogen (NOx) emissions in a cost effective and technically feasible manner. The implemented projects must meet the criteria of the Consent Decree. New Jersey is issuing this solicitation for project ideas to ensure a broad range of project ideas are considered.

NJDEP anticipates primarily funding pilot electrification projects, including the replacement of heavy-duty vehicles/engines such as buses, trucks, and non-road equipment in urban areas disproportionately impacted by diesel emissions, as well as electric vehicle charging/fueling infrastructure installation in strategic locations across the state.

Submissions must contain all the information outlined in the "Project Proposals" section of this document.

ELIGIBLE PROJECTS

A general summary is below. Click here for comprehensive list and associated definitions.

Source Category	Emission Reduction Strategy	Allowed Expenditure Amount
1. Class 8 local freight trucks & port drayage trucks	Repower and replacement	Up to 40% for repower with diesel or alternative fuel or up to 75% (up to 100% if government owned) for repower with electric. Electric charging infrastructure costs are an eligible expense.
		Up to 25% for replacement with diesel or alternative fuel or up to 75% (up to 100% if government owned) for electric replacement. Electric charging infrastructure costs are an eligible expense.
2. Class 4-8 school bus, shuttle bus or transit bus	Repower and replacement	Same as row 1
3. Freight switching locomotives	Repower and replacement	Same as row 1
4. Ferries/Tugs	Repower	Same as row 1
5. Oceangoing vessels	Shorepower	Up to 25% for shore side infrastructure if non-government owned (up to 100% if government owned)

Source Category	Emission Reduction Strategy	Allowed Expenditure Amount
6. Class 4-7 local freight trucks	Repower and replacement	Same as row 1.
7. Airport ground support equipment	Repower and replacement	Up to 75% to repower or replace with electric (100% if government owned). Electric charging infrastructure costs are an eligible expense.
8. Forklifts and Port Cargo Handling Equipment	Repower and replacement	Up to 75% to repower or replace with electric (100% if government owned). Electric charging infrastructure costs are an eligible expense.
9. Electric vehicle charging stations or hydrogen fueling stations for light duty vehicles only		Up to 100% to purchase, install and maintain infrastructure if available to public at government owned property. Up to 80% to purchase, install and maintain infrastructure if available to public at non-government owned property. Up to 60% to purchase, install and maintain infrastructure at a workplace or multi-unit dwelling that is not available to the general public. Up to 33% to purchase, install and maintain infrastructure for publicly available hydrogen dispensing that is high volume or 25% for lower volume.

PROJECT PROPOSALS (Open with Adobe Reader)

Electronic submittals are preferred and should be sent to WWComments@dep.nj.gov, however paper submittals will also be accepted and should be sent to:

NJDEP Division of Air Quality Mail code 401-02E Trenton, NJ 08625-0420 Attn: VW Settlement

To enter information electronically, use Adobe Reader

CONTACT INFORMA	ATION								
Applicant Name									
Applicant Address									
City, State, Zip Code									
Contact Person									
Title/Position									
Phone									
E-mail									
Owner Name									
Owner Address									
City, State, Zip Code									
Contact Person									
Title/Position									
Phone									
E-mail									
PROJECT NAME									
PROJECT CATEGO	RY OR	CATEG	ORIES	(choos	e from 1	-9 in "Eli	gible Pı	rojects" sect	tion above)
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PROJECT PRIORIT		Priority#		0			roposa		
If submitting more that	n one pr	oposal, w	hat is th	e spor	sor's p	riority (of this	proposal?	
NOTE FOR CATEG	ORV 9	PROPO	SALS						
NOTE FOR CATEG	ORI	IKOIO	ST TL S						
If your proposal is for Ca	ategory 9	(Light D	utv Zero	Emissi	on Vehi	cle Sun	olv Eau	ipment), fo	ollow
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Electric Vehicle stations: Do not complete this form. Instead, go to It Pay\$ to Plug In - NJDEP's									
Electric Vehicle Chargin						ng Gran	t. Volk	swagen fui	nds for
charging stations will be administered through It Pay\$ to Plug In.									
Hydrogen fiel cell vehicle supply equipment, Complete all of the exections on this forms									
Hydrogen fuel cell vehicle supply equipment: Complete all of the questions on this form.									
PROJECT BUDGET									
Provide total estimated project budget, include source, amount of cost share, and									
administrative costs if									

PROJECT DESCRIPTION (Briefly describe the project by completing the following questions)
Geographic area where emissions reductions will occur?
Estimated size of population benefitting from the emission reductions?
Estimated useful life of the project?
Number of engines/vehicles/vessels/equipment included in the project?
DEP will be modeling emission benefits for all projects. Please provide the necessary
information below:
Model Year
Horsepower
Annual hours of use
Annual amount of fuel used
Will the project benefit one or more communities that are disproportionately impacted by air pollution? If so, please describe?
polition: If so, picase describe:
Only shovel ready projects will be considered. Please list project partners.
Estimated timeframe for implementation? Include a project timeline that identifies start
and end dates, as well as the timeline for key milestones.
Demonstrated success in implementing similar projects?

If your proposed project involves alternative fuels, provide a demonstration of current or				
future plans to provide adequate refueling infrastructure.				
Management and the second of the second of the second of the second of the second for the second for the second of				
Has your organization been approved to receive and expend any other grant funds related to				
this project? If so, please provide details.				
Diagrams it and additional information that are not this ancient				
Please provide any additional information that supports this project.				

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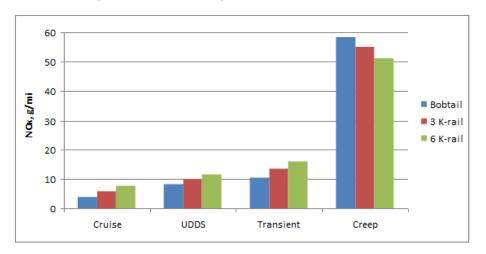
Two additional pages have been provided as supplemental space to answer any of the questions

Supplemental Information

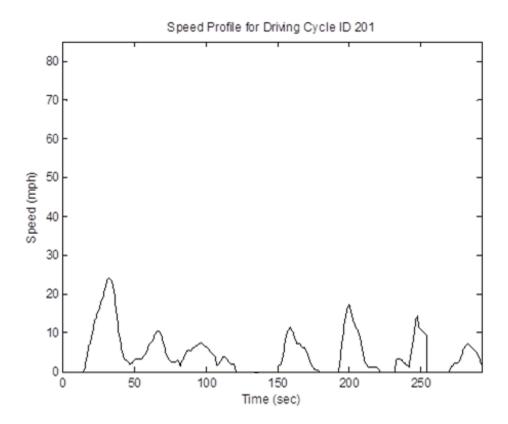
The unique characteristics of garbage trucks are that they: (i) drive very slowly, where the engine efficiency is very low and emissions correspondingly high; and (ii) are frequently stopped in idling mode, continuing to emit pollutants while loading. This results in a diesel fuel consumption of only about 3 miles per gallon, whereas a drayage truck usually realizes about 5 or 6 miles per gallon of fuel consumed.

USEPA data for a 2008 truck shows that NOx emissions at slow speeds are seven times (7X) greater than for trucks moving at cruising speeds. Garbage trucks spend most of their duty cycle time driving through communities causing direct exposure at the receptor level to the carcinogenic by-products of diesel fuel combustion, made even worse by the slow speed of travel.

A USEPA document shows the difference in NOx emissions for a 15,326 pound 2008 truck, depending on differing modes of drive operation (note "creep" mode):



The same document also shows the following chart for a cyclical driving cycle of a garbage truck (speed vs. time):



Proposed Retirement Vehicles

Make & Model Year	<u>Horsepower</u>	Annual Hours	Annual Amount	
		of Operation	of Diesel Fuel	
			<u>Consumed</u>	
2009 Ford E-450 (for	362 hp	780 hours	833 gallons	
the shuttle bus)				
2000 International	310 hp	1,800 hours	2,173 gallons	
F-2654 Garbage Truck				
1996 International	310 hp	1,800 hours	2,894 gallons	
2654 Garbage Truck				

Note: All units average 1,200 hours per year and 2,750 – 3,000 gallons of diesel fuel