



State of New Jersey

Department of Environmental Protection

CHRIS CHRISTIE
Governor

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

PROJECT SOLICITATION

OVERALL GOAL

The State of New Jersey, as a potential 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. Additional opportunities will be provided for public input during the upcoming months.

Submissions must be received by November 27, 2017 and 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 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 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)

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 (up to 100% if government owned). Electric charging infrastructure costs are eligible expense.
8. Forklifts and Port Cargo Handling Equipment	Repower and replacement	Up to 75% to repower or replace with electric (up to 100% if government owned). Electric charging infrastructure costs are 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 <i>government owned</i> property. Up to 80% to purchase, install and maintain infrastructure if available to public at <i>non-government owned</i> 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 up to 25% for lower volume.

PROJECT PROPOSALS

Proposals must be submitted by close of business on November 27, 2017. Electronic submittals are preferred and should be sent to VWComments@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

All proposals must contain the following information; incomplete applications will not be considered. If your project is selected, you may be contacted for additional detailed information. Send questions to VWComments@dep.nj.gov

To enter information electronically use Adobe Reader

CONTACT INFORMATION

Organization Name	Township of Bloomfield
Organization Address	1 Municipal Plaza
City, State Zip Code	Bloomfield, NJ 07003
Contact Person	Matthew Watkins
Title/Position	Township Administrator
Phone	(973) 680-4006
E-mail	mwatkins@bloomfieldtwpnj.com

PROJECT NAME	Bloomfield Municipal EV Charging Station Project
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PROJECT CATEGORY OR CATEGORIES (choose from 1-9 in "Eligible Projects" section above)																	
1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>	6	<input type="checkbox"/>	7	<input type="checkbox"/>	8	<input type="checkbox"/>	9	<input checked="" type="checkbox"/>

PROJECT PRIORITY	Priority # 1	of 1	proposals
If submitting more than one proposal, what is the sponsor's priority of this proposal?			

PROJECT BUDGET	\$ 80,000.00
Provide total estimated project budget, include source and amount of cost share if applicable.	
The total cost estimated for this project is \$80,000 determined from price estimates for ten charging stations at approximately \$8,000 per station. This includes the units, installation and all electrical components for the stations.	

PROJECT DESCRIPTION (Briefly describe the project by completing the following questions)
Geographic area where emissions reductions will occur? Bloomfield, NJ
Estimated size of population benefitting from the emission reductions? 47,000
Estimated useful life of the project? 7-10 years
Number of engines/vehicles/vessels/equipment included in the project? 10
Estimated emission benefits should be expressed in tons per year (TPY) of emission reduced for NOx and for PM 2.5 over the lifetime of the project. Identify methodology used. Estimated NOx benefits? 127.70 TPY Methodology Used? FHWA CMAQ Emissions Calculator Particulate matter (PM 2.5) benefits? 2.92 TPY Methodology Used? FHWA CMAQ Emissions Calculator
Will the project benefit one or more communities that are disproportionately impacted by air pollution? If so, please describe. The Bloomfield Electric Vehicle Charging Station Project will directly benefit residents within Bloomfield and the surrounding communities, as well as those travelling through the Township. Bloomfield is densely populated with heavily travelled routes, including the Garden (continued on supp. pg. 1)

<p>Project partners, if any? Bloomfield Center Alliance and Municipal Green Team</p>
<p>Explain how the project will provide cost effective and technically feasible emission reductions. Cost effectiveness should be expressed in dollars per ton per year of emissions reduced for NOx and for PM 2.5.</p> <p>The Township is working to conduct an engineering and feasibility study for the placement of electric vehicle charging stations with solar power canopies in the Township's municipal parking lot and the adjacent public parking lot. This study will determine whether there is adequate electrical service, or if an upgrade is needed for a lot with charging stations as well as (continued on supp. pg. 1)</p>
<p>Estimated timeframe for implementation? Include a project timeline that identifies start and end dates, as well as the timeframe for key milestones.</p> <p>The Bloomfield Electric Vehicle Charging Station Project is ready for implementation in 2018. Once the ongoing engineering and electrical study is completed, the Township will have a project design ready for the appropriate infrastructure and power supply necessary to fully implement the electrical vehicle charging stations proposed at this site. As such, it is estimated that the EVCSs will be fully operational at the municipal lot in September 2018.</p>
<p>Demonstrated success in implementing similar projects?</p> <p>The Administration of Bloomfield Township has demonstrated its commitment to implementing strategic long-term solutions that will allow for a sustainable future for the residents of Bloomfield. Utilizing various strategies that reduce greenhouse gas emissions, effectively managing water and energy resources and creating more livable communities, the Township hopes to become a model community for sustainable practices. This project will also help further the efforts and (continued on supp. pg. 2)</p>
<p>If your proposed project involves alternative fuels, provide a demonstration of current or future plans to provide adequate refueling infrastructure.</p> <p>By implementing this project, the charging of electric vehicles will be accessible to residents in Bloomfield. Once the initial installation and infrastructure is established, the Township will be able to fund any additional units or upgrades as necessary. Service fees and maintenance costs will be included within future budgets to ensure the stations provide adequate refueling options for the Township.</p>
<p>Has your organization been approved to receive and expend any other grant funds related to this project? If so, please provide details.</p> <p>The Township has not yet received any funds in relation to this project; however, has applied for other funding opportunities for these EVCSs. In addition, if there are funds available through the state's "It Pay\$ to Plug In" program, the Township will apply to utilize these funds. In addition, if Bloomfield's electric service company is making funds available or providing incentives for purchasing energy, the Township will utilize these funds toward the project as well.</p>
<p>Please provide any additional information that supports this project.</p> <p>With ten stations available at this municipal lot, it is expected that residents will be encouraged to utilize electric vehicles as there will be charging stations available within the Township. The Township hopes there will be an increased demand for additional charging stations not only at this site, but at other locations throughout Bloomfield.</p>

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

Supplemental Page 1

Disproportionate Impact: State Parkway and Bloomfield Avenue, which create a high level of vehicle traffic and congestion on a daily basis. As a result, residents in the Township are disproportionately impacted by air pollution. Particularly in the downtown area, which surrounds the municipal complex, there are high levels of vehicle traffic, idling, noise pollution and carbon emissions on a daily basis. To combat this, the EVCSs will be placed in this high-congestion area.

According to the EPA's EJSCREEN: Environmental Justice Screening and Mapping Tool, the Township ranks in the 66th percentile for particulate matter (PM2.5), in the 66th percentile for National Scale Air Toxics Assessment Air (NATA) Toxics Cancer Risk in the state, and in the 91st percentile for higher traffic proximity and volume for the state. As Bloomfield residents are exposed to higher levels of air pollution than the surrounding areas, the installation of these EVCSs will help to lessen these levels in the Township. The Electric Vehicle Charging Station Project will have a significant impact on the Township's ability to conserve and more efficiently utilize energy.

Project partners:The Township's community development organization, Bloomfield Center Alliance, manages the downtown Business District and will assist the Township with the management of the charging stations as well as helping to determine their usage by residents and their positive impact on the environment. The municipal Green Team, Greener Bloomfield, will assist in the publicizing and education efforts regarding the charging station project and availability for public use as well as the environmental impact.

Cost Effective and Technically Feasible Emission Reductions: solar canopies for additional energy storage. This will create a framework and appropriate design for the implementation of the charging station project with the sitework and optimal type and placement of charging stations determined. This will also help the Township identify necessary policies and/or regulations for zoning requirements for electric vehicles.

Alternative fuel options, specifically EVCS, are very limited in this area even though these lots are used daily. The nearby Garden State Parkway and Bloomfield Ave. offer traditional fuel options, but options are very limited for electric vehicle owners. As such, the Township seeks to install the first ten contiguous electric vehicle charging stations (continued)

in its existing parking lot at the municipal building. Six of these stations will be available for the general public to use on a fee-basis and four of the stations will be for municipally owned vehicles and municipal employees. The level of charging stations to be installed (quick-charge or slow-charge) will be determined as part of the study for electrical capacity. Each EVCS can facilitate charging for two electric vehicles for a total of 20 electric vehicles to be charged at one time. With the convenient location of this municipal lot, the charging stations will be useful for those visiting the municipal complex as well as those travelling on Bloomfield Ave. and the Garden State Parkway. Completing this project will have a significant impact on the Township's ability to conserve and more efficiently utilize energy. The cost effectiveness of this project is \$63 to remove one ton of NOx and \$2,739 to remove one ton of PM 2.5.

Demonstrated Success: complement work previously completed by the Township by expanding sustainable transportation options. Electric vehicles have proven to help reduce greenhouse gas emissions and as a result improve air quality. In addition, the solar canopies paired with the charging stations have multiple benefits aside from the solar power generated for the charging stations, including reducing the urban heat island effect, helping keep vehicles cool in the summer, and protecting them from the elements. As there is currently a demand for the charging stations at this municipal lot, the Township hopes that through the implementation of this project, there will be an increased demand for additional charging stations not only at this site, but at other locations throughout the Township. This project will act as a catalyst for the installation of multiple charging station sites all over Bloomfield, which will ultimately result in the advancement of energy conservation and efficiency initiatives within the municipality.