



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRIVING PA FORWARD



“We’re driving the transition towards zero-emission and low-emission vehicles and accelerating the build-out of infrastructure necessary to support the next generation of transportation options.”

—Governor Tom Wolf

Funding Clean Energy Transportation for Healthier Air Quality

Driving PA Forward funds projects across Pennsylvania to replace or repower old diesel engines with clean energy transportation options and increase electric vehicle charging infrastructure.

Funding comes from Pennsylvania's \$118.5 million share of the national Volkswagen lawsuit settlement, after VW cheated on nitrogen oxide (NOx) emissions tests. DEP held public meetings statewide and heard a range of suggestions on types of transportation projects to fund. Funding programs began opening in 2018.

Goal: Reduce NOx emissions by as much as 27,700 tons in Pennsylvania



How NOx Emissions Harm Pennsylvanians' Health

Transportation generates more NOx emissions in Pennsylvania than any other source. NOx contributes to ground-level smog and fine particulate matter in the air. This has many negative effects on health, including¹:

- chest pain, coughing, throat irritation, shortness of breath
- heart attacks and worsened bronchitis and emphysema
- aggravated asthma—one out of every nine Pennsylvanians has been diagnosed with asthma, including more than 382,000 children

Funding Progress as of October 2019

- 40 projects approved for approximately \$8 million
- 530 tons of NOx emissions will be reduced
- About \$109 million remains to be awarded by October 2027

Who's received funding? Cities, townships, schools, port authorities, grocery chains, electric charging station companies, bus companies, railroad companies, parking authorities, condo associations, and more. And we're just getting started!

¹<https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>;
<https://www.health.pa.gov/topics/programs/Asthma/Pages/Surveillance-Reports.aspx>



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Projects Eligible for Funding

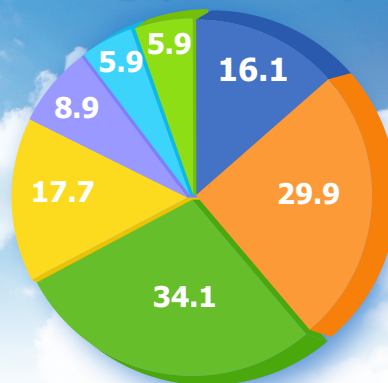
Driving PA Forward aims to eliminate the most NOx emissions per dollar of funding awarded, to benefit as many Pennsylvanians as possible. So a variety of clean energy transportation options are funded:

- Replacing or repowering switcher locomotives, or repowering tugboats and ferries, with new cleaner technology. Opening late 2019.
 - **This will achieve at least 80 percent of DEP's total NOx emissions goal**
- Replacing or repowering older diesel engines in school/transit/shuttle buses and heavy- and medium-duty trucks with:
 - Electric
 - Compressed natural gas
 - Other alternative fuels
 - New clean diesel
 - Propane
- Installing new charging infrastructure for light-duty electric vehicles.
- Converting cargo-handling equipment to electric and installing charging infrastructure at airports, intermodal terminals, and other facilities.
- Installing auxiliary electric power for ocean-going vessels while they're in port.

Driving PA Forward Funding (\$million)

- Marine and Rail Freight Movers
- Onroad Rebate
- ZEV Supply Equipment (Level 2 EV Charging Rebate and DC Fast Charging and Hydrogen Fueling)
- Class 8 Truck and Transit Bus
- Pennsylvania State Clean Diesel
- Electric Cargo Handling
- Ocean-Going Vessel Shorepower

Total = \$118.5 million



Helping Pennsylvanians Today

Driving PA Forward is committed to funding a range of clean energy transportation options, including new clean diesel and compressed natural gas (CNG), to fit the diverse needs of communities across Pennsylvania who want to reduce NOx emissions for healthier air quality.

Did you know that new clean diesel and CNG emit much less NOx than old diesel engines?

Sample NOx emissions comparison: Class 8 truck (tractor trailer)²

1999 diesel engine: 2.3 tons/year
2020 diesel engine: 84% reduction
2020 CNG engine: 94.7% reduction

And Sparking Tomorrow's Electric Transition

Driving PA Forward is laying the groundwork for a future significant conversion to electric transportation, helping to slow climate change. Because technology for electric heavy-duty vehicles isn't yet widely available, Driving PA Forward offers a higher reimbursement rate for these projects, to offset the initial higher purchase higher costs and help encourage this needed transformation.

\$3.4 million awarded to electric projects as of October 2019:

- One project to replace two diesel transit buses with two new battery electric buses and install two charging stations
- Multiple projects to make 542 new Level 2 EV charging plugs and 12 DC Fast (Level 3) chargers available in just the first year of the program
 - **Expanding charging infrastructure enables more organizations and businesses to choose electric vehicles**

How to Apply for Funding

Programs are open at various times. Find all the information you need and application instructions at:

<http://www.depgis.state.pa.us/DrivingPAForward/>

Eligible applicants:

- Local, state, and federal government agencies
- Schools
- Businesses
- Nonprofit organizations
- Farms

Sign up to receive Driving PA Forward news:

<https://www.dep.pa.gov/Business/Air/Volkswagen/Pages/Driving-PA-Forward-Newsletter.aspx>

²EPA Diesel Emissions Quantifier: <https://cfpub.epa.gov/quantifier/index.cfm?action=main.home>

