



Cleaner Air Starts with Cleaner Trucks

Champion Natural Gas Transportation with VW Settlement Funding

Structure your state's VW Settlement Plan around basic clean air tenets:

- ✓ **Fund Cleaner Alternatives to Diesel.** Given that the Volkswagen Environmental Mitigation Trust was created to address nitrogen oxide (NOx) pollution associated with non-compliant diesel vehicles, funding should be prioritized for clean, alternative fuel vehicle projects that focus on maximizing NOx reduction for the resources allocated.
- ✓ **Incentivize the Cleanest Proven Technologies.** Provide a larger incentive and greater overall funding for medium- and heavy-duty engines that deliver greater NOx reductions than currently required.
- ✓ **Account for Real World Emissions.** Target funding for technologies that have demonstrated the ability to deliver actual lower in-use emissions when operated in real-world conditions.
- ✓ **Target Critical Emissions Reductions.** Provide the highest level of funding to applications that produce the largest share of NOx emissions. In most regions, this means prioritizing for short-haul, regional-haul and refuse trucks.
- ✓ **Support Ready-Right-Now Products.** Prioritize funding for commercially-available products that are proven and ready for use.
- ✓ **Fund Vehicles Over Fueling.** Prioritize funding for clean vehicles rather than fueling infrastructure for greater emissions impact.
- ✓ **Scale Funding to Incentivize the Cleanest Engines Available.** At a minimum, provide parity among alternative fuels that funds non-diesel alternative vehicles in the private sector at 25% of the cost of the vehicle and public sector vehicles at 40%.
- ✓ **Mix Private and Public.** Ensure that funding incentivizes adoption by both public and private fleets.
- ✓ **Push Partnerships.** Prioritize projects that include partnerships that provide a match such as a construction of a new CNG or LNG station in funded locales.
- ✓ **Maximize Up Front Reductions.** Accelerate funding in the early years to maximize and compound NOx reduction benefits over time.
- ✓ **Use Best Tools.** In evaluating actual emission benefits associated with proposed projects to be funded, use tools that reflect current technologies and performance under real world operation duty cycles. Argonne National Laboratory's Heavy-Duty Vehicle Emissions Calculator (HDVEC) is the most current and complete.

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Help ensure your state's VW funds are expended to make an immediate and tangible impact on air quality by targeting medium- and heavy-duty vehicles, the leading source of toxic nitrogen oxide (NOx) contaminants.

Natural gas vehicles are commercially ready-right-now and, dollar for dollar, deliver the most cost-effective NOx emissions reductions.



✓ Heavy-duty vehicles (HDVs) are the fastest growing segment of U.S. transportation in terms of energy use and emissions.

✓ HDVs are major emitters of nitrogen oxide (NOx), diesel particulate matter (DPM), and green house gases (GHGs).

✓ While HDVs total 7% of all vehicles on our roads, they account for 33% of America's smog-precursor emissions from mobile sources and 20% of all transportation-related GHGs.

The newest natural gas engines with Near-Zero or "Zero Emissions Equivalent" technology produce **90% fewer NOx emissions** than the current standard. In fact, the cleanest heavy-duty truck engine in the world is powered by natural gas. And when fueled with renewable natural gas, it produces up to 115% fewer greenhouse gas emissions than diesel counterparts well-to-wheel.



New Vehicle Emissions Calculator Launched by DOE's Argonne Lab



HEAVY-DUTY VEHICLE EMISSIONS CALCULATOR

Compare emissions of commercially-available alternative fuel medium- and heavy-duty vehicles with the Heavy-Duty Vehicle Emissions Calculator (HDVEC) tool.

Developed by the U.S. Department of Energy's Argonne National Laboratory using its AFLEET Tool 2017, this online resource aids fleet managers and decision makers in comparing vehicle technologies for emission reduction in order to maximize their state's VW funding investment.

Accessible online at: <http://afleet-web.es.anl.gov/hdv-emissions-calculator/> or <http://www.ngvamerica.org/vwactioncenter/>.