





NGV U.P.-T.I.M.E. Analysis:

Updated Performance Tracking Integrating Maintenance Expenses

Natural Gas Vehicle (NGV) Maintenance Cost Study:

Clean Fuels Ohio and Energetics are leading an NGV maintenance cost study funded by the Department of Energy (DOE) collecting real-world, up-to-date fleet vehicle maintenance data and costs from Class 7/8 freight & goods movement trucking fleets across the country. The study will create a nationwide dataset and perform comprehensive analysis comparing the relative maintenance costs of NGVs and diesel trucks, and document best practices and technology solutions capable of reducing maintenance related costs to cite lower total cost of ownership of NGVs to comparable diesel-powered vehicles. The analysis will inform research priorities to further improve NG engine technology and cost-effectiveness.







Fleet Data Partner Requirements to Participate:

- ✓ Operates natural gas & diesel vehicles/trucks
- ✓ Medium-/Heavy-Duty Trucks (Class 6-8)
- ✓ Freight and Goods (includes parcel/package, food/beverage, raw materials, finished consumer products)
- ✓ Available lifetime NGV & Diesel maintenance data
- ✓ Uses VMRS (Vehicle Maintenance Reporting Standards) or similar coded maintenance data/costs tracking systems for fleet vehicles

What The Project Needs from Fleet Data Partners:

- 1. Fleet Profile Information: Truck/engine inventory, operations information, maintenance practices, warranty details, feedback on natural gas and diesel truck maintenance insights, etc.)
- 2. Raw maintenance data and costs: VMRS digital records for natural gas and diesel trucks that will be uploaded to project's secure SharePoint site)

Benefits for Fleet Data Partners:

- Data protection from project NDA
- One-time dataset submission
- Free data cleaning & analysis
- Fleet Specific Maintenance Report
- Access to Final Study Report



The study will deliver comparison of NGVs & Diesels from Real Data:

- Current generation natural gas trucks
- Previous generation natural gas trucks
- Current generation diesel trucks
- Impacts of different technology solutions and best practices capable of reducing maintenance costs

Our partners include Energetics, multiple NGV freight/goods movement trucking fleets across various geographic regions and the country, Clean Cities coalitions, the National Renewable Energy Laboratory, and a Project Advisory Committee made up of natural gas industry experts, OEMs, fuel station providers, trucking associations, and others.