



# National Clean Diesel Campaign

## Diesel Emissions Quantifier

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Office of Transportation and Air Quality  
Innovative Funding for Clean Diesel Initiatives Workshop  
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## National Clean Diesel Campaign

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Reducing emissions from diesel engines is one of the most important air quality challenges facing the country. Even with more stringent heavy-duty highway engine standards set to take effect over the next decade, over the next twenty years millions of diesel engines already in use will continue to emit large amounts of nitrogen oxides and particulate matter, both of which contribute to serious public health problems. These problems are manifested by thousands of instances of premature mortality, hundreds of thousands of asthma attacks, millions of lost work days, and numerous other health impacts.



Building on the successes of EPA's regulatory and non-regulatory efforts to reduce emissions from diesel engines, EPA has created the National Clean Diesel Campaign (NCDC). The Campaign will work aggressively to reduce the pollution emitted from diesel engines across the country through the implementation of varied control strategies and the aggressive involvement of national, state, and local partners.

NCDC participants are committed to reducing diesel emissions and finding innovative ways to protect human health and the environment. To fully address the challenges of reducing diesel emissions the NCDC is using a multi-pronged approach:

- Commitment to the successful implementation of the [Clean Air Highway Diesel Rule \(the "2007 Highway Rule"\)](#) and the [Clean Air Nonroad Diesel Rule](#).
- Developing new emissions standards for [locomotive](#) and [marine](#) diesel engines.
- Promoting the reduction of emissions for existing diesel engines through cost-effective and innovative strategies, including use of cleaner fuels, [retrofitting and repairing](#) existing fleets, [idling reduction](#) among others.

### The Quantifier

- The **Diesel Emissions Quantifier** tool for estimating diesel emissions reductions from clean diesel projects is now available.

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### The Diesel Emissions Quantifier

Complete the initial information for the Quantifier below. If you are only quantifying emissions, you need to select which U.S. state you are in. If you are submitting data to the EPA, you will also need to enter your contact information. Click "continue" to go to the next Quantifier page.

#### Select a Scenario

- Are you ...
- ... quantifying emissions?
  - ... submitting data to the EPA (contact information required)?

#### Select a State

Choose the U.S. state for which you want to enter your information:

[Continue >>](#)

(pick one)

- (pick one)
- Alabama (AL)
- Alaska (AK)
- Arizona (AZ)
- Arkansas (AR)
- California (CA)
- Colorado (CO)
- Connecticut (CT)
- Delaware (DE)
- District Of Columbia (DC)
- Florida (FL)

[Complete Quantifier User's Guide \(HTML\)](#)

The Diesel Emission Quantifier should not be used for the calculation of any emission reductions to be incorporated in a State Implementation Plan (SIP) or conformity determination, and certain other technical applications. Please do not continue using the Quantifier until you have read the [important usage information](#).

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**Apply a Technology to Vehicle Group 1 (V1)**

Enter or edit information about the Emissions Reduction Technology.

Select technology type:

Select technology:

Apply technology to:  vehicles in this group

Pollutants:	NOx	PM	HC	CO	CO2
Reduction:	<input type="text"/> %	<input type="text" value="20"/> %	<input type="text" value="50"/> %	<input type="text" value="30"/> %	<input type="text"/> %

Unit cost: \$

Installation cost: \$

Note that the percent reduction associated with a particular retrofit technology may vary by manufacturer and application and may change as more information becomes available. Please refer to EPA's [verified technology web page](#) for the latest detailed information on verified emission reductions from retrofit technologies. Some of the technologies listed here are not yet verified by EPA or the California Air Resources Board (CARB). Emission reductions calculated by this model based on user-entered percent reductions not based on EPA or CARB's verified technology list should not be used for any official purposes or to meet any reporting requirements.

**Technology Actions**

Click "Save New" keep this entry in case you want to go back and work on others. You can call it up later in this session and use it or edit it. Please note you cannot save calculations once you log off this Web site. Click "Save New and Add Another" if you want to add another technology to this vehicle group.

**Current Vehicles and Applied Technologies**

Any vehicle groups and technologies that you may have saved are listed here. Use the edit and delete buttons to make any changes before proceeding to the results.

ID	Qty.	Equipment/Technology	Action
<b>Vehicle Group 1 (V1):</b>	<b>10 x</b>	<b>School Bus</b>	<a href="#">Edit</a> <a href="#">Delete</a>
Technology 1 (T1):	10 x	Diesel Oxidation Catalyst	<a href="#">Edit</a> <a href="#">Delete</a>

## Emissions Results: Annual, Daily

not continue using the Quantifier until you have read the [important usage information](#).

	NO <sub>x</sub> (tons/year)*	PM (tons/year)*	HC (tons/year)*	CO (tons/year)*	CO <sub>2</sub> (tons/year)*	Diesel-Equivalent (gallons/year)
Baseline of Entire Fleet	1.86	0.02	0.10	0.30	0.01	1.00
Baseline of Vehicles Retrofitted	1.86	0.02	0.10	0.30	0.01	1.00
Percent Reduced (%)	0.00	20.00	50.00	30.00	0.00	0.00
Amount Reduced Per Year	0.00	0.00	0.05	0.09	0.00	0.00
Kilograms Reduced Per Day (kg/day)	0.00	0.01	0.13	0.22	0.00	--

\* Units are in tons/year except for the row labeled Percent Reduced (%) and the row labeled Kilograms Reduced Per Day (kg/day).

## Emissions Results: Lifetime

**Note:** The lifetime results are dependent on each vehicle group's remaining life. To determine the remaining life for each vehicle group, divide the lifetime results by the annual results using the Detailed Results tables below.

	NO <sub>x</sub> (tons)*	PM (tons)*	HC (tons)*	CO (tons)*	CO <sub>2</sub> (tons)*	Diesel-Equivalent (gallons)
Baseline of Entire Fleet	24.26	0.27	1.37	3.87	0.14	13.04
Baseline of Vehicles Retrofitted	24.26	0.27	1.37	3.87	0.14	13.04
Percent Reduced (%)	0.00	20.00	50.00	30.00	0.00	0.00
Amount Reduced	0.00	0.05	0.68	1.16	0.00	0.00
Amount Emitted After Retrofit, Entire Fleet	24.26	0.22	0.68	2.71	0.14	13.04
Amount Emitted After Retrofit, Retrofitted Vehicles	24.26	0.22	0.68	2.71	0.14	13.04
Capital Cost Effectiveness (\$/ton), Retrofitted Vehicles	0.00	0.00	0.00	0.00	0.00	--
Total Cost Effectiveness (\$/ton), Retrofitted Vehicles	0.00	0.00	0.00	0.00	0.00	--

# For More Information

Visit EPA's National Clean Diesel Campaign  
Website

[www.epa.gov/cleandiesel](http://www.epa.gov/cleandiesel)



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