

Paving the Way Toward Cleaner, More Efficient Trucks

Under new rules announced by the Administration today, the nation's fleet of medium- and heavy-duty trucks will be required to meet fuel efficiency and greenhouse gas emission standards for the first time ever beginning in 2014.

Developed jointly by the U.S. Department of Transportation (DOT) and the Environmental Protection Agency (EPA) with support from the trucking industry, the State of California and leaders from the environmental community, the groundbreaking national program will improve energy and national security, benefit consumers and businesses, reduce harmful air pollution, and lower costs for transporting goods while spurring job growth and innovation in the clean energy technology sector.

First-Ever Standards for Heavy-Duty Trucks

The new program sets fuel efficiency and greenhouse gas emission standards for three categories of medium- and heavy-duty trucks beginning in model year 2014:

1. Certain combination tractors – commonly known as big rigs or semi trucks – will be required to achieve up to **approximately 20 percent** reduction in fuel consumption and greenhouse gas emissions by model year 2018, saving up to 4 gallons of fuel for every 100 miles traveled.
2. For heavy-duty pickup trucks and vans, separate standards are required for gasoline-powered and diesel trucks. These vehicles will be required to achieve up to about **15 percent** reduction in fuel consumption and greenhouse gas emissions by model year 2018. Under the finalized standards a typical gasoline or diesel powered heavy-duty pickup truck or van could save one gallon of fuel for every 100 miles traveled.

3. Vocational vehicles – including delivery trucks, buses, and garbage trucks – will be required to reduce fuel consumption and greenhouse gas emissions by approximately **10 percent** by model year 2018. These trucks could save an average of one gallon of fuel for every 100 miles traveled.

Impact and Benefits of the Truck Standards

The new standards for trucks are expected to result in significant savings and benefits over the lifetime of vehicles built for model years 2014-2018, including:

- Saving a projected 530 million barrels of oil and reducing carbon pollution emissions by about 270 million metric tons.
- Saving vehicle owners and operators an estimated \$50 billion in fuel costs.
- Yielding an estimated \$49 billion in societal benefits.
- Ensuring long-term savings for vehicle owners and operators above their initial upfront costs – a semi truck operator could pay for the technology upgrades in under a year and realize net savings of \$73,000 through reduced fuel costs over the truck's useful life.

In addition, EPA estimates the standards will improve air quality by reducing particulate matter and ozone, resulting in societal benefits ranging from about \$1.3 billion to \$4.2 billion in 2030.

The Need to Reduce Fuel Consumption and Greenhouse Gas Emissions

Heavy-duty trucks are the fastest-growing contributors to greenhouse gas emissions within the transportation sector and account for a significant portion of domestic oil use:

- Transportation accounts for about 72 percent of our total domestic oil consumption.
- Heavy-duty vehicles account for 17 percent of transportation oil use – and 12 percent of all US oil consumption.
- Nearly 6 percent of all U.S. greenhouse gas emissions and 20 percent of greenhouse gas emissions from the transportation sector in 2007 were produced by heavy-duty vehicles.

How the Standards Will Work

The new standards for heavy-duty trucks are specifically designed to account for the different kind of work done by the three categories of vehicles:

- Heavy-duty pickup trucks and vans must meet targets for gallons of fuel consumed per mile as well as grams of carbon dioxide (CO₂) emissions per mile.
- The other two categories of trucks – combination tractors or semi-trucks and vocational vehicles – must meet targets for gallons of fuel consumed and GHG emissions per ton-mile. This figure is calculated by dividing gallons of fuel consumed and grams of CO₂ emissions per mile by tons of freight hauled.

- Within each of the three categories of trucks, even more specific targets are laid out based on the design and purpose of the vehicle – such as a semi truck with a low roof versus a semi truck with a high roof. Serious but achievable fuel efficiency improvement goals are then charted for each year and for each vehicle category and type.

For example, combination tractors or semi trucks built in 2017 or after must meet the standards outlined in the chart below:

Final MY 2017 Combination Tractor Standards

	EPA Emissions Standards (g CO ₂ /ton-mile)			NHTSA Fuel Consumption Standards (gal/1,000 ton-mile)		
	Low Roof	Mid Roof	High Roof	Low Roof	Mid Roof	High Roof
Day Cab Class 7	104	115	120	10.2	11.3	11.8
Day Cab Class 8	80	86	89	7.8	8.4	8.7
Sleeper Cab Class 8	66	73	72	6.5	7.2	7.1

While the first two years of the standards administered by DOT will be voluntary, vehicle manufacturers will be required to meet the corresponding EPA standards for those two years. Small businesses are excluded from both the EPA and DOT standards.

For More Information

More information about the Heavy-Duty National Program is available on EPA’s web site at:

www.epa.gov/otaq/climate/regulations.htm

and on NHTSA’s web site at:

www.nhtsa.gov/fuel-economy