Regulatory Announcement

EPA and NHTSA Propose Greenhouse Gas and Fuel Efficiency Standards for Medium- and Heavy-Duty Trucks: By the Numbers

On June 19, 2015, the U.S. Environmental Protection Agency (EPA) and National Highway and Traffic Safety Administration (NHTSA) jointly proposed standards for medium- and heavy-duty vehicles that would improve fuel efficiency and cut carbon pollution, while bolstering energy security, and spurring manufacturing innovation. The standards would cover model years 2021-2027, and apply to semi-trucks, pickup trucks, and all types and sizes of buses and work trucks. Standards for trailers would start in model year 2018.

Addressing GHG Emissions from Medium- and Heavy-Duty Vehicles is Critical

- Heavy-duty trucks are the **second largest** and **fastest growing** segment of the U.S. transportation sector in terms of emissions and energy use.
- The trucking industry hauls about **70 percent** of all freight in the U.S.
- Medium- and heavy-duty vehicles currently account for about **20 percent** of GHG emissions and oil use in the U.S. transportation sector, but are only about **5 percent** of the vehicles on the road.
- Globally, GHG emissions from heavy-duty vehicles are growing rapidly and are expected to surpass emissions from passenger vehicles by **2030**.

Large Cuts in Carbon Pollution and Substantial Fuel Efficiency Improvements

- The program would cut carbon pollution by about **1 billion metric tons.**

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- This is roughly equivalent to the GHG emissions associated with the **electricity and power use from all U.S. residences for one year**

- The program would save approximately **1.8 billion barrels** of oil or **75 billion gallon**s of fuel over the lifetime of the vehicles subject to these standards.
  - The oil savings would **exceed** a year's worth of U.S. imports from the Oil Producing and Exporting Countries (OPEC)

- In 2027 when the standard is fully phased in, heavy-duty vehicles across all classes would achieve up to the following CO2 emissions and fuel use reductions.
  - **24 percent** for combination tractors designed to pull trailers and move freight when compared to Phase 1 standards
  - **8 percen**t for trailers when compared to an average model year 2017 trailer
  - **16 percent** for vocational vehicles when compared to Phase 1 standards
  - **16 percent** for pick-up trucks and light vans when compared to Phase 1 standards

Substantial Benefits for Society, Businesses and Consumers

- The program would save vehicle owners **$170 billion**[1] in fuel costs over the lifetime of the vehicles sold.

- When fuel savings bring down the costs of transporting goods, the average household could save nearly **$150 a year** by 2030 and **$275** by 2040 assuming all savings and costs are passed through to consumers.

- In total, the program would result in about **$230 billion** in net benefits to society over the lifetime of vehicles sold under the program.
  - This includes fuel savings, carbon reductions, health benefits, energy security benefits, along with travel benefits, and refueling benefits

- The benefits to society outweigh costs over the lifetime of vehicles sold under the program by about **10 to 1**.

Reasonable Payback Periods for the Trucking Industry

In model year 2027, the buyer of a new vehicle would recoup the extra cost of technology used to achieve the standard within:

- **2 years** for a tractor/trailer combo
- **3 years** for pick-ups and vans

- **6 years** for a vocational vehicles such as garbage trucks, buses, and on-road construction trucks (e.g. cement mixers, dump trucks, etc.), which are typically used longer than vehicles in other heavy-duty sectors

[1]All numbers measured in 2012 dollars