

Savings from

THE EPA VEHICLE EMISSIONS PROGRAM

The Environmental Protection Agency (EPA) vehicle and fuel emissions testing program sets maximum average emissions levels for new cars, vans, trucks, and buses. The National Vehicle and Fuel Emissions Laboratory oversees fuel economy and emissions testing as they are closely related. The program also addresses fuel economy labels, fuel standards, and nonroad engines.

Vehicle fuel economy benefits:

- **\$17 billion/year** savings at the pump
- **1/2 million barrels/day** oil savings (gasoline use of 14 million typical cars and light trucks)
- **83 MMT CO₂** emissions reduction
- **\$1,650 (net)** savings on a typical 2016 car/light truck, over its life span

How does the program help?

Improving the fuel economy and reducing emissions of all kinds of vehicles saves consumers—and truckers—billions of dollars, cuts air pollution and associated health problems, and reduces our reliance on foreign oil. EPA fuel economy window stickers on new cars help buyers choose cars that will save them money.



A pickup truck being tested at the National Vehicle and Fuel Emissions Laboratory. (Source: EPA)

How much does it cost?

In 2018, lab and emissions standards work was funded at about \$100 million. Consumers and businesses spent \$20 billion on improved vehicle fuel economy in 2016, but will save more than \$50

billion in reduced fuel costs over the lives of those vehicles.

What is at stake?

If average new-vehicle fuel economy were to stay at 2016 levels rather than meet the emissions and fuel economy standards that have been set for 2017–25, we estimate the vehicle fuel economy benefits would be lost:

	2025	2017–30
Consumer fuel savings	\$43 billion	\$370 billion
Oil savings	380 million barrels	4.4 billion barrels

Without these improvements, an American who owns a car made in 2025 would likely spend an extra \$3,200 (net) over the life of the vehicle. A tractor-truck owner would spend an extra \$31,000 (net).

Is it cost effective?

The EPA vehicle emissions program leverages billions of dollars in savings from a small federal investment. For 2025 vehicles, the benefit-cost ratio for fuel savings compared to added consumer cost will be about 3:1.

Logging Fuel Savings: From a North Carolina Plant to Michigan Roads



An Eaton worker assembling a transmission. (Source: Eaton)

Eaton produces advanced transmissions at its Kings Mountain, NC, facility. About 400 people work at the plant making truck transmissions that save fuel by using lighter materials, fewer parts, better integration with the powertrain, and smarter shifting. The facility's efficient operation also saves energy. It is one of Eaton's centers of excellence.

The efficient transmissions help people like Jim Hansen. Hansen's work week begins each Monday around 6 a.m. with a 200-mile ride up to northern Michigan from his home to collect some 100,000 pounds of logs. That same day Hansen typically travels another 200 miles to deliver the wood to mills in southeastern and central Michigan. The next day he does it again.

For businesses like Hansen's, fuel economy is crucial, as every gallon of diesel saved equates to revenue that can be reinvested in operations. Hansen now averages about 4.1 miles per gallon with his truck, which he says is very good for a heavy hauler, and his fuel savings have helped him get a larger truck that can carry more logs and will allow his business to grow. "My previous truck...gave me a million miles of reliable performance," Hansen said. "But this new UltraShift PLUS has just made my job so much easier."