Diesel as Dirty as it Ever Was

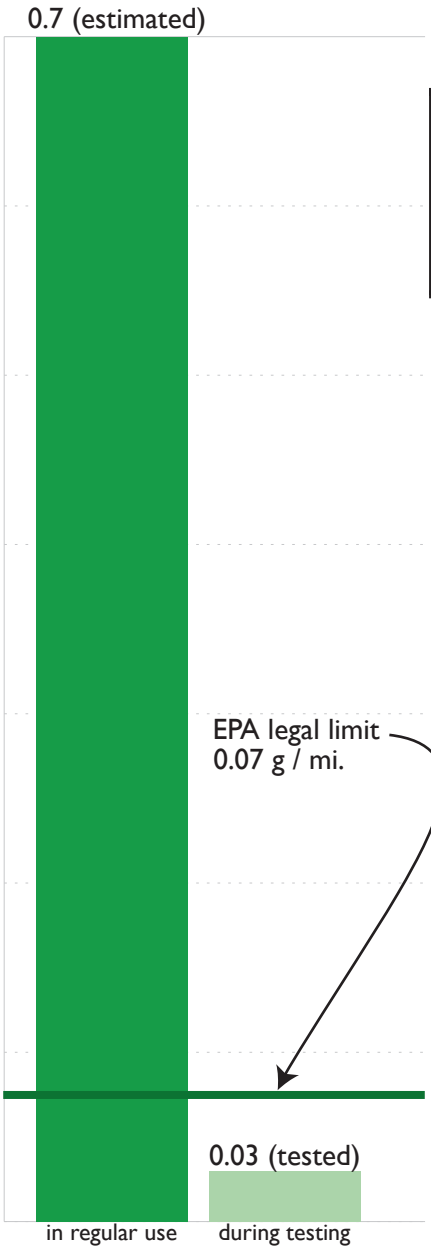
U.S. drivers who bought "clean diesel" were told it was fuel efficient and climate friendly. While diesel does provide higher mpg ratings than gasoline, it also produces higher levels of atmospheric pollutants that can harm human health and the environment. Volkswagen claimed that it had developed efficient diesel engines yielding low levels of pollutants like N2O, methane, and NOx. The EPA and a laboratory at West Virginia University revealed that VW's on-road emissions far exceeded those measured during the EPA's standardized testing - leading to the revelation that VW had installed "defeat devices" into the computer code of many vehicles. These devices, designed to down-regulate emissions only during testing, allowed VW to sell smog-spewing machines while collecting awards for green machines- including the 2009 and 2010 Green Car of the Year. The company's CEO, Martin Winterkorn, has since resigned. The EPA and U.S. Department of Justice, among other agencies, are launching investigations into the extent of the emissions differences and which parties were at fault.

Will This Be on The Test?

Emissions from small passenger cars during road use are estimated to be 10-40 times the EPA legal standard. Among these cars is the Jetta, VW's top-selling model in the U.S. and 2009's Green Car of the Year.

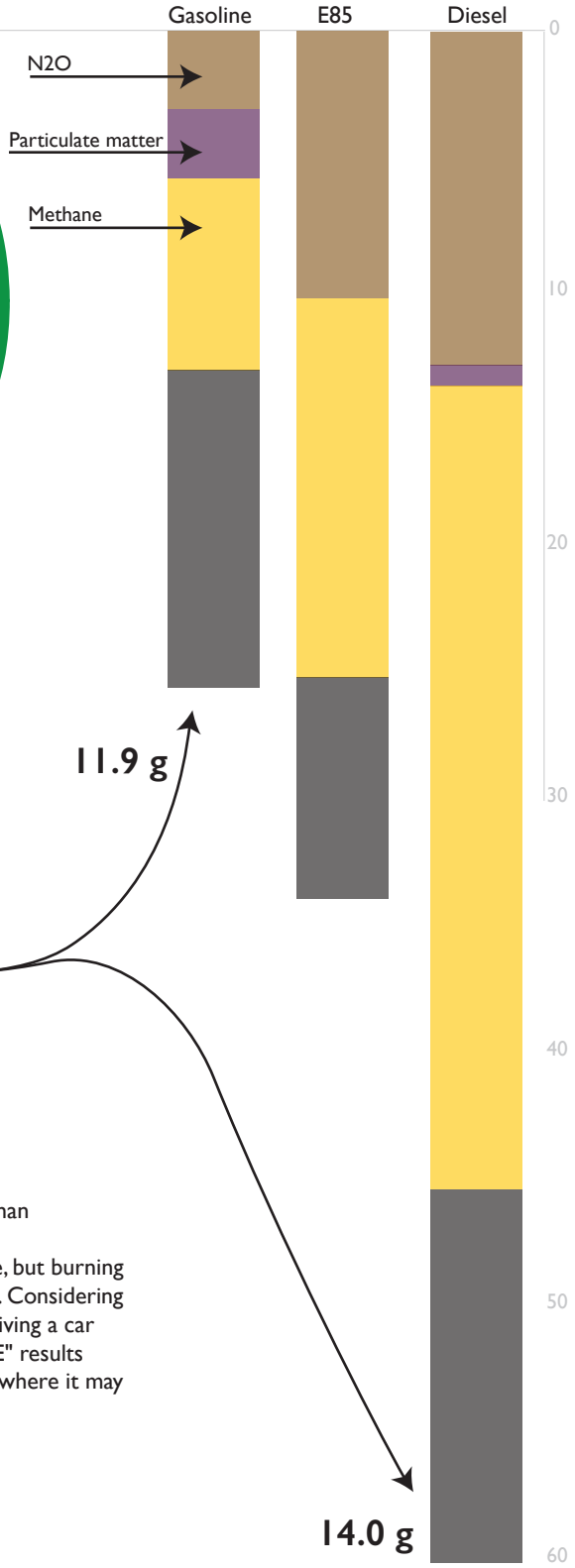
Jetta NOx emissions

2015 Jetta, in g / mi.



Dirty Diesel

Emissions by light-duty vehicles, grams per 1000 mi. driven, averages.



DIESEL: 87%

Cars with diesel engines comprised 87% of VW's light-duty vehicle sales in the United States in 2014, the last year for which data is available. Beetle, Jetta, and Golf vehicles sold from 2009-2015 and Passat from 2014-2015 stand accused.

NOx

Nitrogen oxides (NO and NO_2) are harmful pollutants that cause respiratory problems. Differences in NOx emissions were among the most eggregious.

Diesel fuel is a lighter-weight fuel than gasoline, but combustion of diesel is intrinsically dirtier than burning gasoline. Burning one gallon of gasoline emits 19.6 lbs CO2 into the Earth's atmosphere, but burning one gallon of diesel fuel produces 22.4 lbs CO2. Considering that a typical full tank holds about 15 gallons, driving a car from the petrol station to that dangerous red "E" results in 42 lbs. of CO2 emitted into the atmosphere, where it may reside for 5 to a few hundred years.

SOURCES: EPA, Volkswagen, U.S. Department of Energy, U.S. Energy Information Administration

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