

Volkswagen Clean Diesel Cars (A)

In 2004 the US Environmental Protection Agency (EPA) tightened standards on vehicle emission of Nitrogen Oxides (NO_x)ⁱ. Nitrogen Oxides include Nitric Acid (NO) and Nitrogen Dioxide (NO₂). Nitrogen Oxides cause acid rainⁱⁱ and harm human health. For example, Nitrogen Dioxide creates serious breathing concerns, e.g., asthma.ⁱⁱⁱ (NO_x differs from Nitrous Oxide (N₂O), laughing gas, which is mainly generated by agriculture. N₂O also harms human health^{iv} and is a greenhouse gas with a global warming potential nearly 300 times than of Carbon Dioxide over a 100 year period^v.)

In 2004 Light duty vehicles (cars, SUVs, pickups) were often powered by petrol (gas) or diesel. Diesel vehicles often gave more miles to the gallon making them popular in Europe where 50% of vehicles were diesel compared to 5% in the US. Some observers claimed that diesel's relative efficiency made it a more environmentally-friendly choice. The new EPA rules were a significant challenge for diesel manufacturers. How could diesel achieve high performance under the EPA standards? Many major companies chose not to market diesel cars in the US, including Nissan, Honda, and Hyundai^{vi}.

Volkswagen (VW) was keen to replicate its European success with diesel vehicles in the US. In 2008 VW launched new diesel models, winning Green Car of the Year award at the Los Angeles Auto Show^{vii}. In 2009 VW produced a "TDI Truth and Dare" website.

"TDI [Turbocharged Direct Injection, VW's diesel technology] Truth & Dare will engage consumers in conversation while it educates them about the clean diesel facts and how well our TDI family compares against competitive alternative fuel offerings." Tim Ellis, VP of Marketing for Volkswagen of America^{viii}

A full advertising campaign followed over seven years highlighting VW's clean diesel vehicles. These commercials often targeted environmentally conscious consumers, and VW received the accolade of "world's most sustainable automotive group"^{ix}. There was a major boost to the company's US market share^x, underpinned by a large increase in the percentage of the VW vehicles sold that were diesel^{xi}.

Endnotes

ⁱ Newsweek, “Why Volkswagen Cheated”, <https://www.newsweek.com/2015/12/25/why-volkswagen-cheated-404891.html>, Dec 15, 2015, Accessed August 8, 2024

ⁱⁱ EPA, “Basic Information about NO₂”, <https://www.epa.gov/no2-pollution/basic-information-about-no2>, accessed August 8, 2024

ⁱⁱⁱ National Library of Medicine, “WHO Guidelines for Indoor Air Quality: Selected Pollutants: 5 Nitrogen Dioxide” <https://www.ncbi.nlm.nih.gov/books/NBK138707/>, accessed August 8, 2024

^{iv} Alcohol and Drug Foundation (ADF), “Nitrous oxide – uses, impacts and risks”, <https://adf.org.au/insights/nitrous-oxide/>, January 20, 2023, accessed August 8, 2024

^v National Oceanic and Atmospheric Administration (NOAA), “Nitrous oxide emissions grew 40 percent from 1980 to 2020, accelerating climate change”, <https://research.noaa.gov/2024/06/12/nitrous-oxide-emissions-grew-40-percent-from-1980-to-2020-accelerating-climate-change/>, June 12, 2024, accessed August 8, 2024

^{vi} Newsweek, “Why Volkswagen Cheated”, <https://www.newsweek.com/2015/12/25/why-volkswagen-cheated-404891.html>, Dec 15, 2015, accessed August 8, 2024

^{vii} Newsweek, “Why Volkswagen Cheated”, <https://www.newsweek.com/2015/12/25/why-volkswagen-cheated-404891.html>, Dec 15, 2015, accessed August 8, 2024

^{viii} Scott Evans, Motortrend, “Volkswagen Launches Clean Diesel Fact vs. Fiction Website “TDI Truth and Dare” <https://www.motortrend.com/news/volkswagen-launches-clean-diesel-fact-vs-fiction-website-tdi-truth-and-dare-4401/>, March 14, 2018, accessed August 8, 2024

^{ix} ABC News, “Why Volkswagen May Have Risked It All by Allegedly Cheating on Emissions”, <https://abcnews.go.com/Business/volkswagen-risked-allegedly-cheating-emissions/story?id=34011457>, September 25, 2015, accessed August 8, 2024

^x Eric Brandt, The Drive, “Volkswagen Wants 5 Percent U.S. Market Share in 10 Years”, <https://www.thedrive.com/news/19229/volkswagen-wants-5-percent-u-s-market-share-in-10-years>, September 25, 2015, accessed August 8, 2024

^{xi} ABC News, “Why Volkswagen May Have Risked It All by Allegedly Cheating on Emissions”, <https://abcnews.go.com/Business/volkswagen-risked-allegedly-cheating-emissions/story?id=34011457>, September 25, 2015, accessed August 8, 2024