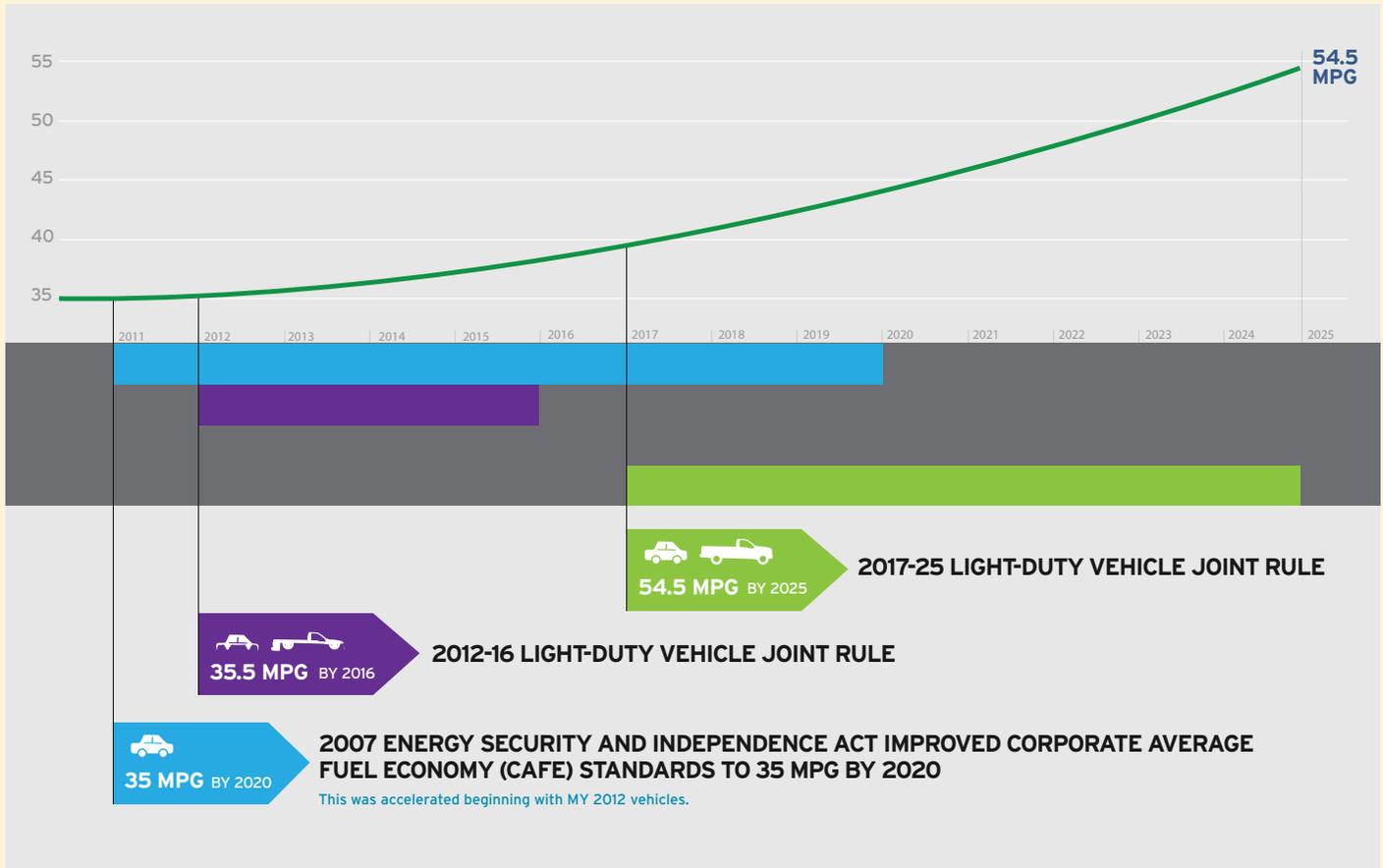




Fuel Economy

DRIVING TO **54.5 MPG** A History of Fuel Efficiency in the United States



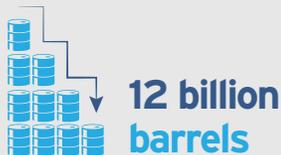
To meet the demands of the transportation sector, the United States imports more than \$1 billion worth of oil per day. The Oak Ridge National Laboratory estimates that U.S. oil dependence has cost our economy more than \$5 trillion since the 1970s. Closer to home, the average household spent a record \$4,155 on gas in 2011.

Over the past four decades, federal policymakers have acted several times to increase fuel efficiency standards for cars and light trucks, culminating in a standard of 54.5 miles per gallon in 2025. This latest joint rule will reduce U.S. dependence on foreign oil, save consumers money at the pump, and provide incentives for production of advanced technologies in the transportation sector.

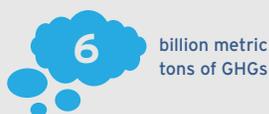


COMBINED SAVINGS FOR ALL FUEL EFFICIENCY RULES OVER THE LIFETIME OF LIGHT-DUTY VEHICLES MY 2011-25

OIL SAVINGS



GREENHOUSE GAS REDUCTIONS



FUEL SAVINGS



Source: Whitehouse.gov

2000-PRESENT

- **Light-duty vehicle final rule:** In August 2012, President Barack Obama announced final fuel efficiency standards that increase to 54.5 mpg for light-duty vehicles produced from model years (MY) 2017 to 2025. These standards will effectively double the fuel efficiency of U.S. vehicle fleets by 2025, reduce U.S. oil consumption by 2.2 million barrels a day, and save the average family \$8,200 in fuel costs over the life of a 2025 vehicle.
- **Light-duty vehicle proposed rule:** In November 2011, the Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) issued a proposed rule that would increase joint fuel efficiency and tailpipe emission standards to a fleet average of 54.5 mpg by MY 2025. The proposal received broad support from automobile and other manufacturers, organized labor, environmental advocates, and national security organizations.
- **Medium- and heavy-duty vehicle final rule:** In August 2011, the EPA and NHTSA announced the final joint fuel efficiency and tailpipe emission standards for heavy-duty vehicles. The new rule covers MY 2014-18 heavy-duty vehicles in three groups: combination tractors, heavy-duty pickup trucks and vans, and certain vocational vehicles (such as dump trucks and

“This will be win, win, win; it will reduce reliance on oil, strengthen energy security, and mitigate climate change.”

— Transportation Secretary Ray LaHood, referring to the proposed fuel efficiency and greenhouse gas emission standards in 2010

“Cost-efficient fuel economy increases of 12 to 27 percent for cars and 25 to 42 percent for light trucks were estimated to be possible without any loss of performance characteristics ... [or] degradation of safety.”

—National Academy of Sciences in 2002

cement mixers). This standard will save vehicle owners and operators \$50 billion in fuel costs, reduce oil consumption by 530 million barrels, and decrease carbon pollution emissions by 270 million metric tons over the life of vehicles produced in MY 2014-18.

- **Medium- and heavy-duty vehicle proposed rule:** In October 2010, the administration proposed the first joint fuel efficiency and tailpipe emission standard for medium- and heavy-duty trucks. Transportation accounts for 72 percent of oil consumption in the United States, and heavy-duty vehicles are the fastest-growing segment within the transportation sector.
- In October 2010, the administration proposed a Corporate Average Fuel Economy (CAFE) standard for medium- and heavy-duty trucks. The program was projected to save 500 million barrels of oil and 250 million metric tons of carbon dioxide emissions in the first five years. Covered vehicles would be separated by type and fuel, with fuel economy improvements of 20 percent for combination tractors, 10 percent for gasoline trucks and vans, and 10 percent for diesel trucks and vans and all vocational vehicles by MY 2018.



- In April 2009, the Obama administration accelerated the increase in the previous administration's CAFE standards. The joint EPA/NHTSA rule applies to MY 2012-16, requiring a fleetwide average of 35.5 mpg by 2016. Increasing at an average of 5 percent annually, most passenger cars must achieve 39 mpg, and light trucks 30 mpg, by 2016. Accompanying this announcement was a memo expressing the intent to create emissions standards for medium- and heavy-duty trucks, as required by the 2007 Energy Independence and Security Act (EISA).
- In December 2007, Congress passed the first changes to U.S. fuel economy standards in nearly 20 years. A part of the larger EISA measure, the provision raised CAFE standards for cars, SUVs, and pickups by about 40 percent to 35 mpg by 2020.
- The 2006 light-truck rule replaced the single average standard for each automaker's light-truck fleet with a size-based system that tied mileage requirements to a vehicle's footprint.
- After Congress lifted the freeze on fuel economy in 2000, the administration enacted a pair of minimal light-truck increases. The most stringent of these, finalized in 2006, raised standards from 22.2 mpg to 24 in MY 2008-11, an annual increase of 2 percent
- In 2002, the National Academy of Sciences reported that cars and trucks could meet a 37-mpg fleetwide standard within 10 to 15 years without sacrificing performance or safety. The group also estimated that the nation was saving 2.7 million barrels of gasoline a day because of previous increases in vehicle efficiency.

- In 1990, Sens. Richard H. Bryan (D-Nev.) and Slade Gorton (R-Wash.) sponsored legislation that would raise fuel economy standards for cars and light trucks by 40 percent over a decade. It was passed by the commerce committee but was filibustered on the Senate floor. Had it passed, the United States would now be saving more than a million barrels of oil per day.

"There's no better argument for reducing our dependence on foreign oil than news reports from the Persian Gulf."

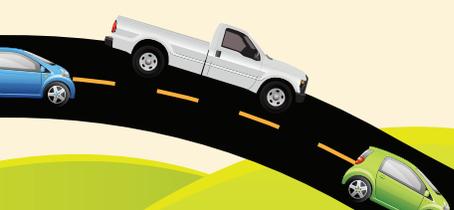
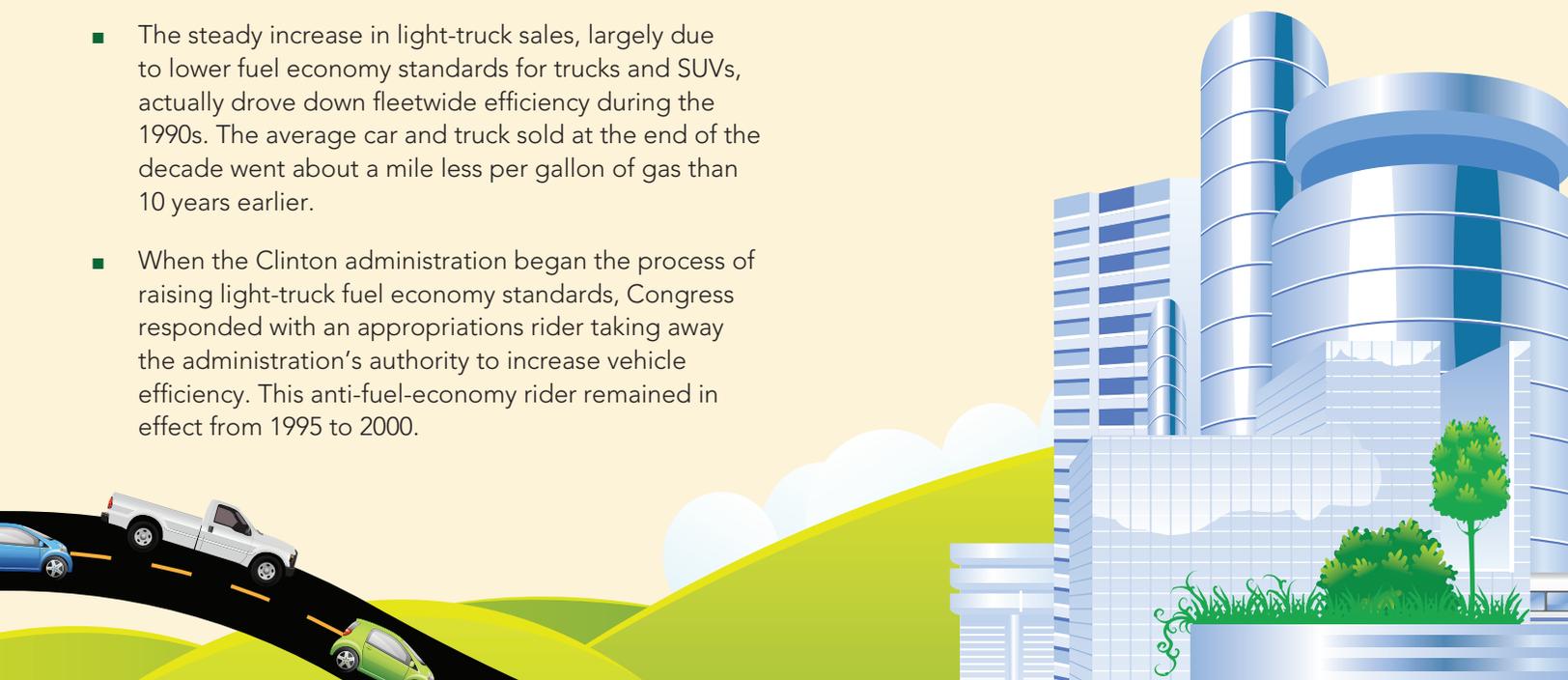
—Sen. Richard H. Bryan, fuel economy bill co-sponsor, in March 1991

1980s

- Vehicle efficiency increased steadily throughout the early 1980s as the fuel economy law of 1975 was phased in.
- From 1975 to 1985, average passenger vehicle mileage doubled from about 13.5 mpg to 27.5, while fuel economy for light trucks increased from 11.6 mpg to 19.5.
- In the mid-1980s, however, Ford and General Motors lobbied the Reagan administration to lower the standard. NHTSA complied, setting a 26-mpg standard for 1986, prompting Chrysler Chairman Lee Iacocca to declare, "We are about to put up a tombstone: 'Here lies America's energy policy.' "

1990s

- The steady increase in light-truck sales, largely due to lower fuel economy standards for trucks and SUVs, actually drove down fleetwide efficiency during the 1990s. The average car and truck sold at the end of the decade went about a mile less per gallon of gas than 10 years earlier.
- When the Clinton administration began the process of raising light-truck fuel economy standards, Congress responded with an appropriations rider taking away the administration's authority to increase vehicle efficiency. This anti-fuel-economy rider remained in effect from 1995 to 2000.



- At industry's urging, NHTSA kept fuel economy levels at 26 mpg, below the benchmark set by Congress. The agency also failed to raise light-truck standards during this period, holding them at 20.5 mpg. Finally, in 1989, NHTSA restored the 27.5-mpg passenger-vehicle standard but lowered light-truck requirements to 20 mpg.

"CAFE protects American jobs. If CAFE is weakened now, come the next energy crunch American manufacturers will not be able to meet the demand for fuel-efficient cars."

—Chrysler advertisement, *New York Times*,
Aug. 11, 1985

- That fuel economy law gave NHTSA the authority to propose standards beyond 27.5 mpg for passenger vehicles, subject to veto by the Senate.
- Domestic automakers predicted that fuel economy improvements would require a fleet primarily of subcompacts. In 1974, a Ford executive testified that the standards ... of all sub-Pinto-sized vehicles." Despite these objections, Congress passed the law, and Ford's top seller in 2011 was its F-Series pickup.

1970s

- In response to the oil price shocks of the early 1970s, Congress passed the nation's first CAFE standards in 1975. The law called for a doubling of passenger-vehicle efficiency—to 27.5 mpg—within 10 years. NHTSA was also given the authority to set a separate standard for light trucks, which accounted for a fifth of new vehicle sales at the time. By 2002, light trucks had surpassed cars as the leader in light-duty vehicle sales.

