

In 2011, about 33 percent of the fuel sold in this country was reformulated.⁸¹ In 1999, 69 percent of reformulated fuel contained MTBE, but since that time there has been a steady decline in the percentage of MTBE.⁸² While many refiners have shifted toward ethanol, some refiners still prefer MTBE for fuel to be shipped to cities outside the Midwest for economic reasons. Unlike ethanol, MTBE can be shipped through existing pipelines, and its volatility is lower, making it easier to meet the emission standards.⁸³ Part of the reason for the decline in the use of MTBE was state action to limit MTBE use. Starting with California in 1999, 25 states have banned the use of MTBE in some way, creating a much larger incentive for refiners to produce ethanol rather than MTBE.⁸⁴

In addition to regulating the type of fuels used in mobile sources, the government also regulates how much fuel can be used. In 1975 Congress passed the Energy Policy Conservation Act, which created the mandate for fuel efficiency for vehicles.⁸⁵ The National Highway Traffic and Safety Administration (NHTSA) and the EPA are responsible for establishing and reporting the Corporate Average Fuel Economy (CAFE) standards. The CAFE standard is the average fuel economy for a manufacturer's passenger cars and light trucks for a model year. Cars and light trucks that weigh less than 8,500 pounds and that are sold in the United States are subject to this standard. As of 2004, all passenger cars had to meet a standard of at least 27.5 miles per gallon (mpg), while light trucks were required to exceed 20.7 mpg. Manufacturers that fail to meet this standard must pay a penalty. Between 1983 and 2009, over \$590 million in CAFE civil penalties were paid.⁸⁶

For years, environmental groups were critical of the fact that the standards remained unchanged. However, in December 2007, Congress passed a new energy bill under which automakers would be required to achieve a Corporate Average Fuel Economy standard of 35 mpg by 2020. The new standards were still criticized by environmentalists because no changes would occur until 2011. There would be 4.5 percent increases in CAFE standards for passenger vehicles and light trucks over the five-year period spanning 2011 to 2015, meaning that standards for passenger vehicles will increase to 35.7 mpg by 2015, while light trucks will increase to 28.6 mpg.⁸⁷

In August of 2012, the EPA issued a final rule that would increase the national vehicle fleet average to 54.5 mpg by 2025. The standards go into effect gradually, with the standards initially raising average fuel efficiency to 35.5 mpg by 2016.⁸⁸ The new targets are expected to reduce greenhouse gas emissions by 6 billion metric tons by 2025, as well as near-doubling the fuel economy of many vehicles.⁸⁹ In addition to the CAFE standards, the EPA may directly regulate carbon dioxide emissions from motor vehicles. In 2007, the Supreme Court, in *Massachusetts v. EPA*,⁹⁰ ruled that the EPA has the statutory authority to regulate four greenhouse gases, including carbon dioxide, under the Clean Air Act. Further, the court held that if the EPA declines to regulate carbon dioxide, it must provide sound reasons for its inaction. This case is significant because until 2007, the EPA had declined to regulate carbon dioxide from motor vehicles. As a result, the EPA must regulate carbon dioxide the same way it would any other air pollutant. It remains to be seen what action the EPA will take as a result of the court's ruling.

CASES AND CONTROVERSIES

Massachusetts v. EPA

549 U.S. 497 (2007)

The Legal Controversy

The Clean Air Act requires that the EPA "shall by regulation prescribe . . . standards applicable to the emission of any air pollutant from any class . . . of new motor vehicles . . . which in [the EPA administrator's] judgment caus[e]s, or contribut[e]s to, air pollution . . . reasonably . . . anticipated to endanger public health or welfare." 42 U.S.C. § 7521(a)(1). Further, the act defines "air pollutant" to include "any air pollution agent . . . including any physical, chemical . . . substance . . . emitted into . . . the ambient air." § 7602(g). In light of this definition, several states and public interest groups sued the EPA, arguing that the EPA had the authority to regulate carbon dioxide and other pollutants associated with climate change as air pollutants under the act, and that given that it was an air pollutant, it must issue emission standards for motor vehicles.

Questions to Consider

1. Does the EPA have the statutory authority to regulate certain greenhouse gases, including carbon dioxide, from new motor vehicles?
2. Should the EPA decline to promulgate emissions regulations from new motor vehicles based on factors other than public health, safety, and welfare?
3. What factors do you think explain the EPA's reluctance to regulate?

The Court's Holding

The court found that greenhouse gases fit well within the Clean Air Act's definition of "air pollutant." The court also held that "the EPA can avoid promulgating regulations only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do."

THE 1990 CLEAN AIR ACT AMENDMENTS

The Clean Air Act was amended in 1990 to reflect growing concerns with certain air-quality problems. The original Clean Air Act said little about the concerns of acid rain and air toxics; the 1990 amendments to the act included programs to address these issues. In addition, Congress was concerned about the inability of many areas to attain the NAAQS, as discussed earlier in this chapter. Thus, the 1990 amendments contained programs requiring the EPA to work with states in achieving air-quality goals. These programs required the EPA to issue nearly 200 regulations soon after the enactment of the amendments. The EPA was slow to promulgate these regulations, causing states to miss their deadlines in preparing SIPs. To prevent litigation and to implement the amendments as quickly as possible, the EPA used reg-neg