

Background on Reductions in Oil Consumption from the Transportation Sector

Background

The United States consumed approximately 18.7 million barrels of oil per day in 2009, and over 50 percent (9.7 million barrels per day) was imported. The U.S. accounts for 22 percent of the world's oil consumption and has about 1.5 percent of the world's oil reserves.

Congress has enacted important measures to reduce the nation's dangerous addiction to oil, but few have been as significant as the Renewable Fuel Standard (RFS) and increases in Corporate Average Fuel Economy (CAFE), both of which were authorized in the *Energy Independence and Security Act* of 2007 (EISA).

The impacts of these programs on the nation's addiction to oil have been significant. The Energy Information Administration's (EIA) latest annual energy forecast predicts that because we will now be using each gallon of liquid fuel more efficiently, and replacing gallons of gasoline and diesel with renewable energy sources, all of the growth in U.S. liquid fuels consumption between now and 2035 will come from biofuels.

The nation's dependence on imported oil is also predicted to decline, reversing decades of increased reliance on foreign sources of oil. When combined with the Department of Transportation and EPA's harmonized fuel economy standards for cars and light trucks that were finalized this year, the oil savings are even more significant.

However, the United States is still projected to consume over 20 million barrels of oil per day in the coming decades, about 40 percent of which will have to come from imports. Therefore, despite these important first steps toward reining in our oil dependence, more needs to be done.

This document provides background information about how the enactment of these two measures combined with the EPA's greenhouse gas standards for cars and light trucks, has had on the nation's oil consumption.

Renewable Fuel Standard

The RFS in EISA requires the production of 36 billion gallons of biofuels in 2022, of which at least 21 billion gallons must be advanced biofuels, which does not include cornbased ethanol. The EIA analyzed the impacts that this program will have on the nation's consumption of oil and has concluded that:

- All of the increase in demand for transportation fuels over the coming decades will be met with biofuels and not petroleum-based fuels;
- Increased production of biofuels reduces the need for imports of crude oil and gasoline; and
- Production of advanced biofuels will ultimately surpass the RFS requirements, supported by higher oil prices and decreasing advanced biofuel production costs.

Fuel Economy and Greenhouse Gas Emission Standards

The requirements for improved CAFE standards enacted in EISA 2007 along with EPA's greenhouse gas reduction standards for cars and light trucks will result in significant oil savings. EISA required that the nationwide average fleet fuel economy standard for cars and light trucks achieve a standard of 35 miles per gallon by 2020—the first time CAFE standards had been increased in more than 30 years. The Obama Administration combined the EISA fuel economy requirements with EPA's greenhouse gas standards in a joint rulemaking that will further reduce oil consumption beyond the savings that would have been achieved by CAFE alone.

- EPA and the Department of Transportation estimate that this rulemaking will result in 1.8 billion barrels of oil savings over the lifetime of the vehicles subject to the new standards;
- EIA's 2010 Annual Energy Outlook concludes that more efficient vehicles in response to CAFE is among the most important factors leading to lower total energy demand in this year's Annual Energy Outlook when compared to previous EIA estimates.