

ETHANOL AND ENERGY SECURITY

DIVERSITY REPLACES DEPENDENCE

The unexpected shutdown of a major oil refinery in Indiana in 2015 provided a clear-cut reminder of the dangers of over-reliance on one energy source. Though the Indiana refinery represents less than 2 percent of national refining capacity, the shutdown caused gas prices to spike by 30-40 cents per gallon throughout the Midwest. Increasing our use of domestic alternative fuels, like ethanol, can help blunt the impacts of such market shocks.

Growth in ethanol production and use has already helped to decrease reliance on crude oil imports. In 2005, the year the original RFS was adopted, America's net dependence on foreign petroleum peaked at just over 60%. When President George W. Bush signed into law the bill establishing the RFS, he declared that the new law would "lead to greater diversity of fuels for cars and trucks....every time we use home-grown fuel, we're going to be helping our farmers, and at the same time, be less dependent on foreign sources of energy."

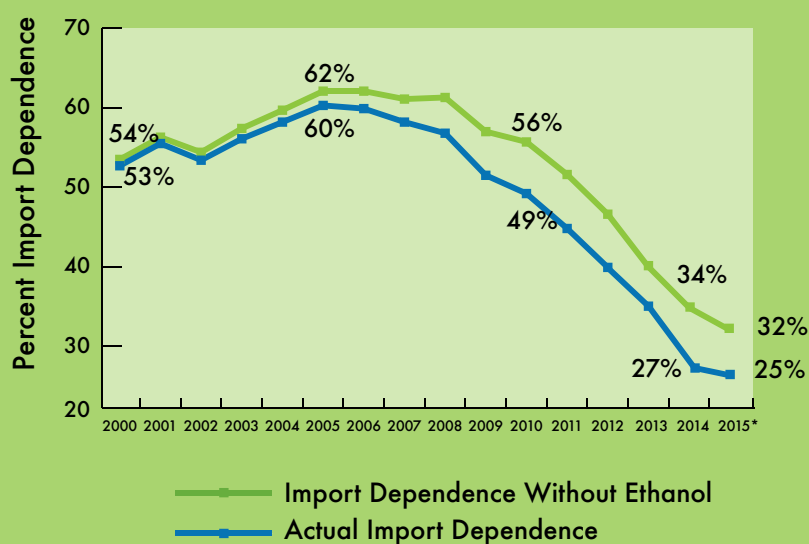
President Bush was right: the RFS has had a dramatic impact on our nation's energy security and diversity. Net petroleum import dependence fell to just 25% in 2015, but would have been 32% without the addition of 14.7 billion gallons of domestically produced ethanol to the fuel supply. The surge in ethanol production has reduced gasoline imports from nearly 10 billion gallons in 2005 to almost zero today. Looked at another way, the ethanol produced in 2015 displaced an amount of gasoline refined from 527 million barrels of crude oil. That's roughly equivalent to the volume of oil imported annually from Saudi Arabia and Kuwait combined.

The plunge in oil prices has given some the false impression that our fossil fuel supply is inexhaustible. However, nothing could be further from the truth. Petroleum remains a finite resource that will become harder to find and extract in the future. Our leaders need to embrace national energy policies and fuel sources that truly diversify and secure our energy supply.

"Biofuel production in the U.S. has increased rapidly over the last decade, enhancing energy security and reducing greenhouse gases from transportation. This growth has been driven in part by the Renewable Fuel Standard. Ethanol now displaces approximately 10 percent of U.S. gasoline demand by volume."

– U.S. Department of Energy

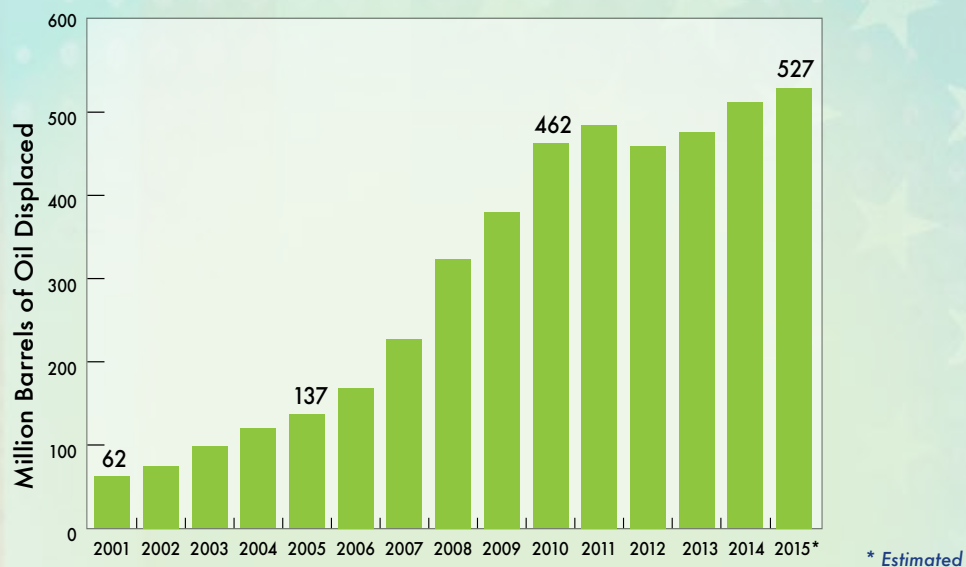
U.S. Petroleum Net Import Dependence (Crude Oil & Petroleum Products) With and Without Ethanol



Source: RFA based on U.S. Dept. of Energy data

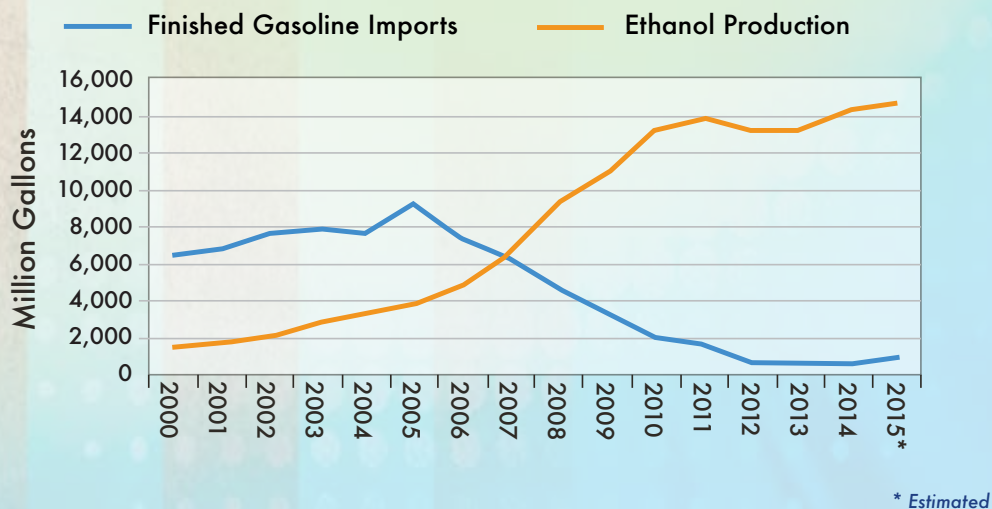


Historical Oil Import Displacement By Ethanol



Source: RFA based on U.S. Dept. of Energy data

U.S. Gasoline Imports vs. Ethanol Production



Source: RFA based on U.S. Dept. of Energy data