Why Consider Ethanol?

Ethanol is a domestically produced renewable fuel. Ethanol can positively affect the health of U.S. citizens by contributing to cleaner air. Also, ethanol can eventually lead to increased energy independence for the U.S.

There are more than 2,500 E85 fueling stations in the U.S.

Health Benefits of Ethanol

- Is biodegradable, nontoxic, and sulfur-free
- Contains 35% oxygen by weight; this results in more complete combustion and fewer tailpipe emissions
- Reduces the amount of carbon dioxide and greenhouse gas emissions produced during combustion

Environmental Benefits of Ethanol

- Plants used in the production of ethanol help offset the carbon emissions that result from using ethanol as a fuel
- High oxygen levels allow for a more complete combustion, which reduces the amount of hydrocarbon and carbon monoxide emissions produced during combustion
- Low levels of sulfur decrease the amount of particulate matter (soot) emissions

Economic Benefits of Ethanol

- Creates domestic jobs in growing, processing, and refining industries
- Added more than $42 billion to the national gross domestic product (GDP) in 2011, and is responsible for the creation of more than 400,000 jobs
- Jobs created help stimulate the economies of rural sections of the country

Energy Security Benefits of Ethanol

- In 2011, ethanol production displaced the equivalent of more than 485 million barrels of imported oil
- The growth, processing, and refining of ethanol can be done domestically; this lessens the nation's dependence oil imports

Renewable Benefits of Ethanol

- Has a positive energy balance; ethanol produces more energy during combustion than is used to produce the fuel itself
- Can be produced from biomass; biomass is largely renewable
- Biomass can be grown and gathered domestically

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What Is Ethanol?

Ethanol is a clean-burning, high-octane fuel that is produced from renewable sources. In its simplest form, ethanol is a grain alcohol, produced from crops such as corn and sugarcane.

Sugarcane

Ethanol as a Fuel

Pure ethanol is combined with varying amounts of conventional gasoline to form desired blends. About 97% of the gasoline sold in the U.S. contains some ethanol.

Did You Know?

Ethanol blended fuels currently in the market – whether E85 or E10 – meet stringent federal and state tailpipe emission standards.

E10 and **E85** are common ethanol blends in the U.S. E10 contains 10% ethanol and 90% conventional gasoline. E85 blends contain anywhere from 51-83% ethanol depending on season and location. E85 is usually given an octane rating of 95. Pure ethanol has an octane rating over 99. Higher octane fuels can be used in engines with higher compression ratios for increase engine efficiency.

What Vehicles Can Use Ethanol?

Ethanol blends that contain up to 10% ethanol can be used in all vehicles that currently run on conventional gasoline without any modification to the vehicle. In fact, most gasoline sold in the U.S. contains some percentage of ethanol. Most manufacturers produce flexible fuel vehicles (FFVs). FFVs can use any fuel blend up to E85.

Ethanol fuel vehicles

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