BIOFUELS: PROTECTING OUR PLANET

growth energy™
America's Ethanol Supporters

Ethanol is a renewable, earth-friendly biofuel that is made from plants. It's good for the air we breathe and for our environment, and is already added to nearly every gallon of gas sold in the U.S.

Thanks to continued innovation, biofuels like ethanol are driving the future of clean energy — keeping our planet healthier for generations to come. Access to higher ethanol blends — including E15, a gasoline blended with 15 percent ethanol — gives drivers across the country a more environmentally friendly choice at the pump at a more affordable cost.

HOW ARE BIOFUELS BETTER FOR THE ENVIRONMENT?

BIOFUELS CUT CARBON EMISSIONS

Ethanol reduces greenhouse gas emissions by 39 percent compared to traditional gasoline.

- By 2022, the USDA anticipates that corn ethanol's relative carbon benefits could reach up to 70 percent thanks to ongoing innovations.
- Over the first ten years of the Renewable Fuel Standard (RFS), biofuel use cut U.S. transportation-related carbon emissions by 589.33 million metric tons, equivalent to removing more than 124 million cars from the road, according to the Biotechnology Innovation Organization.

BIOFUELS KEEP AIR CLEANER

Thanks to ethanol, there are fewer toxic, dirty chemicals in our fuel, water, and our air. As an oxygenate, ethanol replaces harmful carcinogens and toxic additives like MTBE and benzene that can be found in petroleum-based fuels, while providing a high-octane boost. Ethanol also reduces carbon monoxide and ozone, which are chemicals that contribute to smog in urban communities.

- April 2018 research from the University of California Riverside demonstrates that ethanol blends reduce toxic emissions by up to 50 percent, including smog and ultra-fine particulates.
- Findings from a November 2018 U.S. Grains Council study evaluating the impact of higher ethanol blend levels in five cities outside of the U.S. show substituting E10 blends for current gasoline would result in an average 15.2 percent decrease in toxic emissions while E20 blends would reduce toxins even more significantly (31.7 percent on average).

ONGOING INNOVATIONS DRIVE SUSTAINABILITY IN BIOFUEL PRODUCTION

Steady demand for biofuels has helped farmers to make more efficient use of existing cropland, supplying consumer markets with more food and energy than ever before while protecting grasslands and forests.

- America's farmers are producing more food and energy than ever before, and they are doing it on less cropland than was under cultivation in the 1930s.
- Farmers have decreased the volume of water used for irrigating each acre of corn — thanks to smarter farming techniques, they're using less water.
- Thanks to increasingly sustainable practices, farmers are producing record harvests without the need for more fertilizer or pesticide.
- Lastly, credited to new technologies, energy consumption at ethanol plants has fallen 42 percent.

BIOFUELS REPLACE FOSSIL FUELS, WHICH THREATEN WILDLIFE HABITATS AND WATERWAYS

- The University of Montana found that the extraction and production of fossil fuels was responsible for destroying 7.4 million acres of vegetation from 2000 to 2012 and has severely jeopardized wildlife habitats. Surface mining is also responsible for the destruction of ecosystems and water pollution, harming fish and other wildlife.
- Hydraulic fracturing, known as fracking is a process that requires up to six million gallons of fresh water per wall, which is mixed with chemicals prior to being injected into the earth according to the EPA.