



# Ethanol: A renewable, earth-friendly biofuel

## QUICK FACT

Between 1980 and 2011, the land used to grow a bushel of corn shrank by 30 percent, while the need for irrigation fell by 53 percent.

Ethanol is a renewable biofuel produced from grains, plants, and grasses. Ethanol burns cleaner and cooler than oil, which is good for our environment and our car engines.

## ETHANOL IS GOOD FOR THE EARTH.

- Corn ethanol reduces greenhouse gas emissions by 43 percent and has the potential to reduce emissions by as much as 76 percent – an amount equal to removing nearly 20 million cars from the road each year.
- Without ethanol in the fuel supply, we are left with more toxic petroleum-based alternatives that have been linked to cancer, asthma, smog, and groundwater contamination.
- Advancements in cellulosic biofuels can reduce emissions by 100 percent, with the first commercial-scale plants now online.

## QUICK FACT

Ethanol reduces greenhouse gas emissions by an amount equal to removing nearly 20 million cars from the road each year.

## ETHANOL IS GETTING GREENER EVERY YEAR.

- Advancements in cellulosic biofuels are also driving down emissions, with the first commercial-scale plants now online. These technologies are only possible thanks to the foundation of research and development laid by conventional producers.
- The Renewable Fuel Standard (RFS) has driven technological advancements creating further efficiency in the ethanol process – the ethanol industry is using less water and land today than ever before while producing record-breaking higher yields.

## ETHANOL PRODUCTION DOES NOT THREATEN NATURAL GRASSLANDS AND PRAIRIES.

- Thanks to innovative farming techniques, U.S. corn production is up over the last 10 years, but agricultural land use is down.
- Farmers today grow five times as much corn as they did in the 1930s on 20 percent less land.

## ETHANOL PRODUCTION USES LESS WATER THAN GASOLINE.

- With ongoing innovations in agriculture and biofuel production, ethanol gets cleaner and more sustainable year after year, delivering great benefits for consumers and for our environment.
- The water required to produce ethanol has dropped almost 50 percent in the past 10 years. Modern production only requires 2.7 gallons of water per gallon of ethanol. In contrast, it takes 13 gallons of water to produce a gallon of gasoline.