

# ESTABLISH ETHANOL AS A LOW CARBON SOLUTION



The Biden Administration set an ambitious goal of achieving a 100% clean energy economy and net-zero emissions by 2050. Biofuels are a critical component towards achieving these goals and can immediately contribute to lowering carbon emissions and displacing fossil fuels.

## ETHANOL'S ENVIRONMENTAL BENEFITS

According to a recent study conducted by Environmental Health & Engineering, Inc., **ethanol reduces gasoline's greenhouse gas emissions by 46%**. Additionally:

- By 2022, **USDA** anticipates that corn ethanol's relative carbon benefits could reach up to 70% thanks to continued innovation in the ethanol process.
- **University of California – Riverside** study found ethanol blends reduce toxic emissions by up to 50%, including smog and ultra-fine particulates.
- A move to E15 would reduce CO2 emissions by more than 17.62 million tons – the equivalent of taking 3.85 million cars off the road each year.

## BIOFUELS WORK IN TANDEM WITH OTHER CLEAN ENERGY SOLUTIONS

A zero-carbon future must include all clean transportation solutions, and biofuels play a vital role in reducing fossil fuel use and decarbonizing our transportation sector. In fact, a recent analysis by the Rhodium group concluded that if we are to reach net-zero carbon reduction by 2050, low-carbon fuels like biofuels must be part of the mix.

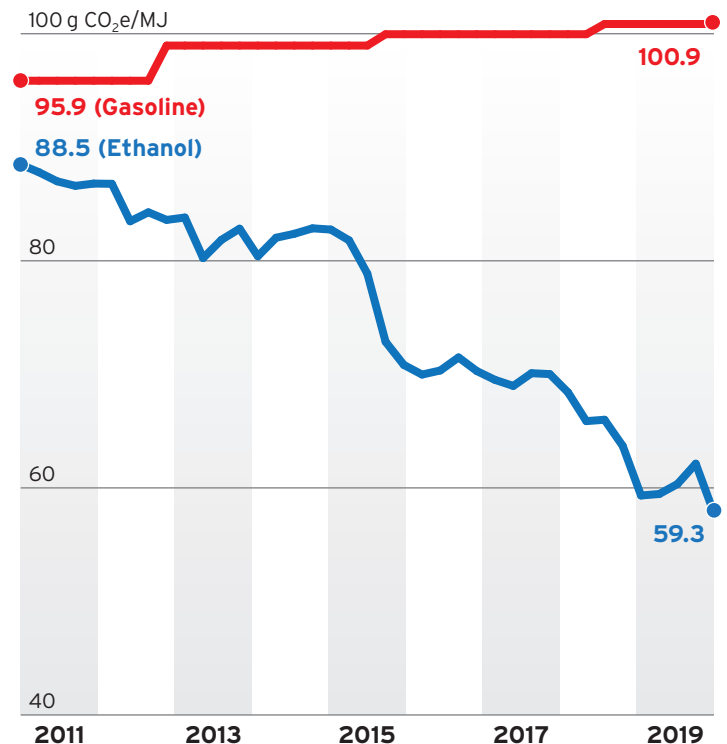
## LOW CARBON FUEL STANDARD (LCFS)

Growth Energy supports the idea of a national LCFS, with the understanding that any standard should not alter, replace, or supersede the existing Renewable Fuel Standard (RFS) and there must be a clear pathway toward higher biofuel blends for a LCFS to function effectively.

## GROWTH ENERGY'S ASKS:

- Biofuels like ethanol must be part of any solution towards decarbonization.
- Biofuels must contribute towards meeting federal and state carbon reduction goals.

## CARBON INTENSITY OF GASOLINE & ETHANOL UNDER CALIFORNIA LCFS



SOURCE: [California Air Resources Board](#)

California runs a statewide Low Carbon Fuel Standard program and tracks the carbon intensity (CI) of gasoline and ethanol. According to CARB and over the past 10 years, **ethanol's CI has dropped by 33%** while gasoline's CI has actually risen by 5%. Biofuels also account for nearly 80% of California's obligations under the LCFS.