

Ethanol Can Help Address Climate Change AND IMPROVE FUEL ECONOMY

EPA's Mismanagement of the RFS Inhibits Low Carbon Fuels and Hurts the Rural Economy

While statutorily intact, EPA's mismanagement of the Renewable Fuel Standard (RFS) has undermined the use of low carbon renewable fuels. Refinery waivers have contributed to the first decline in ethanol use in 20 years, with U.S. consumption falling from 14.49 billion gallons in 2017 to 14.38 billion gallons in 2018. The waivers also damage markets for farmers. With net farm income collapsing and expenses on the rise, bankruptcies are at the highest level in the last decade.

Focus on Federal Climate Policy is an Opportunity and Risk for Rural America

As the rural economy suffers, Congressional action on climate could be viewed as a significant cost or a chance for new economic opportunities. With depressed farm income and rising debt, farmers are extremely concerned that climate policy will result in increased costs for fuel, fertilizer, and other inputs.

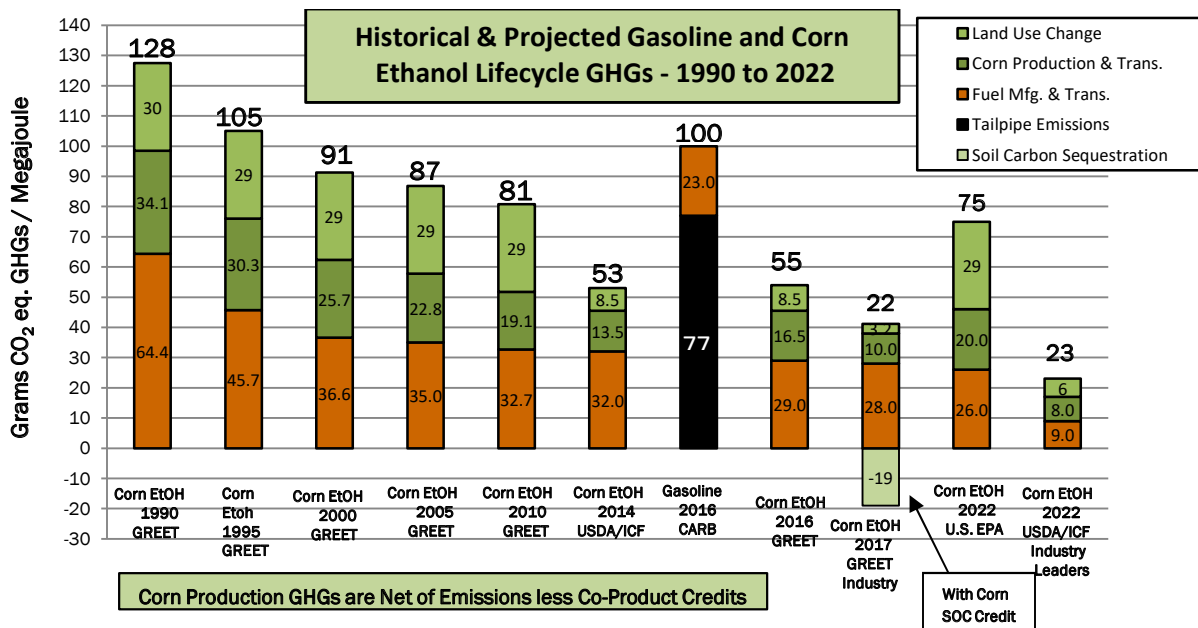
There is also opportunity. Congress could provide Rural America with concrete benefits from climate-centered policies that outweigh potential negatives. One important way of doing so is to recognize the role agriculture can play to address climate change and increase the use of low carbon fuels.

Agriculture Potential to Help Address Climate Change

Agriculture can play an important role in mitigating climate change through soil carbon sequestration. USDA identifies sequestration as "among the best options for carbon storage in terrestrial ecosystems," and estimates that U.S. farmers already store 20 million metric tons of carbon per year. USDA forecasts that agriculture could store an additional 180 million metric tons per year, representing an estimated 12-14 percent of total U.S. carbon emissions annually.

Lifecycle Science Shows Corn Ethanol is Part of the Solution to Reduce GHGs

In 2018 ACE published "The Case for Properly Valuing the Low Carbon Benefits of Corn Ethanol" to highlight how farmers and ethanol producers are improving efficiencies and adopting technologies to dramatically reduce lifecycle GHG emissions from corn ethanol. This report explains how increasing the use of corn ethanol beyond levels called for in the RFS will help reduce GHGs. It also calls on EPA to adopt the latest U.S. Department of Energy "GREET" model for making determinations about ethanol's lifecycle GHG emissions, because EPA's own analysis overstates reality.



CLIMATE CHANGE AND FUEL ECONOMY

Low Carbon Fuel Policies Unlock Climate Benefits and Generate Economic Opportunities

Significant carbon sequestration practices are currently left untapped due to a lack of proper market drivers, but work is underway at the state level to gain access to low carbon markets based on adopting soil health production practices. According to South Dakota State University, if all of South Dakota's six million corn acres were eligible to sell carbon offsets on the voluntary market it could mean nearly \$90 million per year in revenue for the state's farmers.

Unlocking the marketplace for low carbon fuels creates the economic driver to help farmers adopt practices that maximize atmospheric carbon sequestration in soil. For example, if the California Low Carbon Fuel Standard (LCFS) accounted for soil carbon sequestration benefits from corn production, Midwest ethanol delivered to the LCFS market could receive a \$0.26 per gallon premium at current credit prices in California and at current SOC sequestration rates found in the Midwest. This would generate an additional \$26 million in revenue per year for a 100 million gallon ethanol facility, creating meaningful rural economic and producer benefits.

Ethanol is a High Octane Source of Low Carbon Fuel

With a blending octane rating of 113, ethanol's low carbon attributes are matched by its potential to improve the octane of motor fuel. Research by the Department of Energy indicates high octane fuel comprised of 25 to 30 percent ethanol (98 to 100 RON) would benefit consumers and enable automakers to reduce GHG emissions and improve fuel economy.

While oil refiners can also produce high octane fuel, ethanol delivers the cleanest and highest octane at the lowest cost, allowing automakers to benefit by continuing to develop high-compression engine technologies and other product offerings to achieve efficiency improvements and reduced emissions.

Time is Right to Engage Agriculture/Ethanol on Pro-Climate Policies

Farmers and ethanol producers are becoming increasingly aware of the role they can play in mitigating climate change but the economic stakes intensify the need for policies which provide a return on investment.

As Congress considers ways to tackle climate change and maintain improvements in fuel economy, ACE supports efforts which would 1) further transform the motor fuel marketplace by increasing the use of renewable fuels like corn ethanol which are proven to reduce GHG emissions at accelerated rates and 2) promote fuel efficiency through a high octane fuel standard which harnesses the clean octane benefits of ethanol.