

05•20•2021

Feeding and Fueling A Growing World

Why corn ethanol is critical for a sustainable, clean energy future

BROUGHT TO YOU BY
NATIONAL CORN GROWERS ASSOCIATION



At the recent White House climate summit, President Biden announced a commitment to halve U.S. greenhouse gas (GHG) emissions by 2030, stating: “This is a moral imperative. An economic imperative. A moment of peril, but also a moment of extraordinary possibilities.” This ambitious target puts the U.S. at the forefront of the climate change fight – but getting there requires urgency and innovation.

Renewable fuels, such as corn ethanol, are an immediate climate change solution. As a low-carbon, clean energy source and an affordable, homegrown fuel, ethanol serves as a critical pathway for agriculture and rural America to contribute to a sustainable future.

“Corn growers continue to implement sustainable farming practices that reduce ethanol’s carbon footprint. When investing in climate and clean energy infrastructure, biofuels such as ethanol should be top of mind as an available low carbon solution,” says Jon Doggett, CEO of the National Corn Growers Association (NCGA).



Corn growers continue to implement sustainable farming practices that reduce ethanol’s carbon footprint. When investing in climate and clean energy infrastructure, biofuels such as ethanol should be top of mind as an available low carbon solution

JON DOGGETT

CEO of the National Corn Growers Association (NCGA)

With farming improvements that increase soil carbon sequestration and reduce emissions and carbon capture technologies, ethanol is on its way to reaching net zero emissions.

As Congress addresses the nation's energy transition, infrastructure and climate policy, legislation must take a technology-neutral approach. For the administration to make good on its 2030 commitment, agriculture and renewable fuels like corn ethanol – and the hundreds of thousands of jobs tied to these industries – are key solutions.

NCGA explains why, below.

Who Are We?



NCGA represents nearly 40,000 dues-paying corn farmers nationwide and the interests of more than 300,000 growers who contribute to corn promotion programs in their states. Corn farmers continuously improve production practices, making corn an abundant and versatile crop with the ability to provide food, feed, energy and biobased products, and sequester a significant amount of carbon.

U.S. corn farmers today produce more corn using less land and fewer resources to feed and fuel a growing world. Thanks to advancements in technology and productivity, average corn yields have **increased by 26 percent**, or 35 bushels per acre, since 2000. Corn farmers are leaders in soil health and stewardship, working every day to ensure farms can be passed on to the next generation. NCGA works side by side with farmers, industry and policymakers to advance efficient corn and renewable fuel production that supports a sustainable and equitable clean energy future.

Our farmers play a pivotal role in a low carbon future, both in agriculture production and transportation. Alongside new electric technologies, low carbon liquid fuels, like the corn ethanol that's available now, will be essential to successful and affordable decarbonization.

By increasing biofuel use, we reduce reliance on oil, allowing the U.S. to more quickly reach net zero emissions. Today's ethanol carbon footprint is shrinking, due in large part to how farmers grow corn, according to updated data based on actual corn and ethanol production. A recent study by **Environmental Health and Engineering** concluded the carbon intensity for today's ethanol is 46 percent less than for gasoline, based on market-driven changes in corn production, more efficient ethanol production and land productivity.

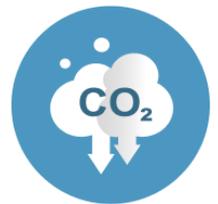
With ongoing improvements in farming practices, credit for soil carbon retention and carbon capture, ethanol's carbon intensity will only continue to decline. A strong biofuels market supports innovation in climate-smart agriculture, another priority for the administration.

Why Do We Matter?



By the Numbers

THE BIOFUELS EFFECT



46% FEWER GHG EMISSIONS

Compared to gasoline



1B METRIC TONS
GHG emissions reduced by the RFS



1B MORE BUSHELS GROWN

On fewer acres in 2020 than 2007 after RFS expansion

Higher blends of low carbon ethanol also provide a pathway to increasing vehicle fuel economy. Low carbon, high octane fuels used with advanced, high-efficiency engines enable automakers to meet stricter fuel economy and emissions standards.

Ethanol is a clean burning fuel that improves air quality, including in urban areas. Increased ethanol volumes **displace the most harmful compounds in gasoline**, which cause respiratory and cardiovascular harm, including premature death. In fact, higher ethanol blends are **recognized as a Clean Air Choice®** by the American Lung Association.

CORN'S SUSTAINABILITY IMPACT

Farmers are dedicated to continuous improvement in how they manage resources and how production impacts the land, water and air around their operations. Between 1980 and 2015:

Total corn for grain production increased 119 percent and crop yields improved by 61 percent.

Farmers have reduced soil loss per acre by 58 percent, decreased the amount of land required to produce a bushel of corn by 41 percent and improved energy use by 41 percent.



What Is Our Impact?

Corn production will deliver approximately \$60 billion in revenue to U.S. farmers, directly supporting the economic health of rural communities. The ethanol industry contributes \$34.7 billion to the national gross domestic product and has greatly affected the economic vitality of America's heartland where most of the nation's corn ethanol plants are located.

In 2020, **roughly 62,000 U.S. jobs** were directly associated with the industry, which supported an additional 242,600 indirect and induced jobs across all economic sectors.

Today, nearly every gallon of U.S. gasoline contains at least 10 percent ethanol derived from corn. The use of 15 percent ethanol blends is growing in more than 30 states as both a lower emission and cost choice, and continued expansion is an immediate decarbonization opportunity.

Driven by the state's Low Carbon Fuel Standard, California's consumer demand for E85 fuel, a high-level ethanol blend, has **grown roughly 30 percent annually** over the past several years while the state's ethanol carbon intensity declines. Across the country, higher blends of low carbon ethanol will produce greater environmental benefits, especially when used with high efficiency engines. Choice and competition drive equity and low-cost solutions for consumers.

Ethanol benefits the environment and consumers and supports clean energy jobs in rural America. To drive the nation's transition to clean transportation and support effective climate change policy, the U.S. must take a technology-neutral approach. Corn growers are committed to productivity, sustainability and compromise that brings the base of support needed to achieve cross-sector climate change solutions.

These key policies can help us do that:

Optimize the Renewable Fuel Standard (RFS): The RFS is the only federal law that requires GHG emissions reduction. Ending abusive waivers, accurately updating lifecycle accounting and supporting growth in RFS volume rulemakings for 2022 and beyond is essential. The RFS has delivered [nearly 1 billion](#) metric tons of GHG emission reductions and can do more.

Embrace a Low Carbon/Clean Fuel Standard: This market-based policy rewards fuels and technologies that offer GHG reductions. A federal Clean Fuel Standard must be technology and feed-stock neutral, based on consistent carbon measurement and designed to increase market access. Competition will advance the lowest cost solutions, and equity in measuring carbon intensity puts all low-carbon options on a level playing field.

Pass the Next Generation Fuels Act: Transitioning the gasoline supply to a lower carbon fuel will reduce emissions, increase vehicle fuel economy and remove barriers to higher ethanol blends.

What Do We Need?



NCGA'S SUSTAINABILITY COMMITMENT

U.S. Corn farmers are committed to continuous improvement in the production of corn, a versatile crop providing abundant high-quality food, feed, renewable energy, biobased products and ecosystem services. As stewards of the land, we understand the responsibility we have for creating a more environmentally and economically sustainable world for future generations with transparency and through continued advances and efficiencies in land, water and energy use.

What's at Stake?



A mix of technology-neutral solutions is critical for the U.S. to reach net zero emissions targets on time. Corn ethanol is a readily available, low carbon, high-octane, affordable energy source that can immediately supply consumers with cleaner homegrown fuel, while providing local jobs and driving economic vitality in some of the rural communities that need it most.

Today, corn farmers produce more corn on less land and with fewer resources. Obsolete projections from the early days of the RFS assumed that only more land would provide more corn. Current GHG emission reduction measures, such as from [Argonne National Laboratory](#), however, are based on actual corn and ethanol production. This dynamic data illuminates the pivotal role corn growers play in driving sustainable, low carbon ethanol production and ensures ongoing farm productivity and soil carbon retention will be accounted for as they occur.

With market-based incentives and consistent and accurate carbon performance measurement, corn farmers can help advance the most equitable and effective solutions when it comes to decarbonizing transportation, agriculture and beyond.



The above column is sponsor-generated content from The National Corn Growers Association. To learn more about sponsor-generated content please visit www.politico.com/sponsor-content.