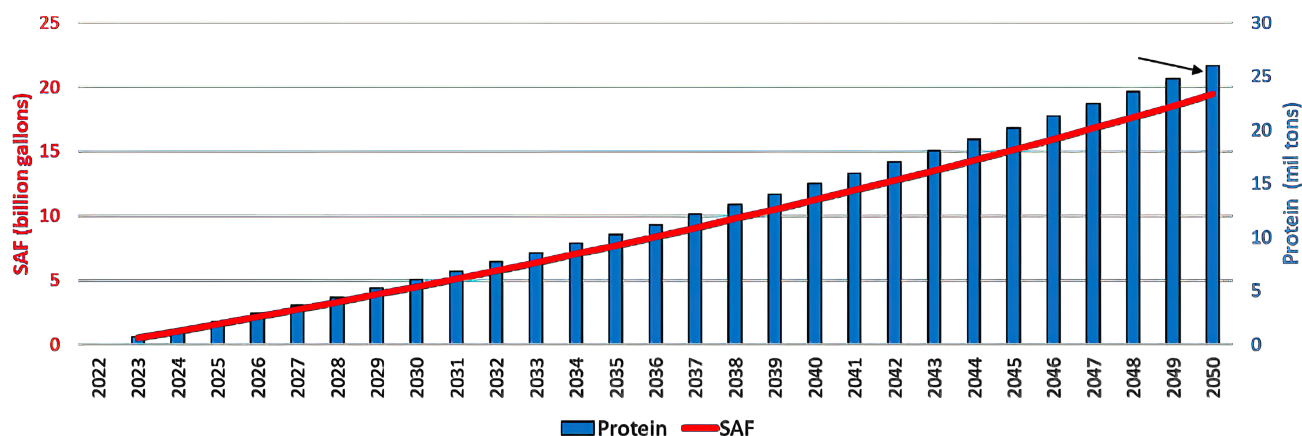


CORN AS A FEEDSTOCK FOR SUSTAINABLE AVIATION FUEL

Reaching 36 billion gallons of SAF by 2050 is an ambitious goal; however, given the historical year-over-year yield increase, corn alone could cover 150% of 2030's 3-billion-gallon needs and 53% of 2050's estimated 36-billion-gallon demand. This would require **no new land** and would additionally produce **25 million tons of protein for food and feed**.

Corn can supply most of SAF demand while increasing food and feed.

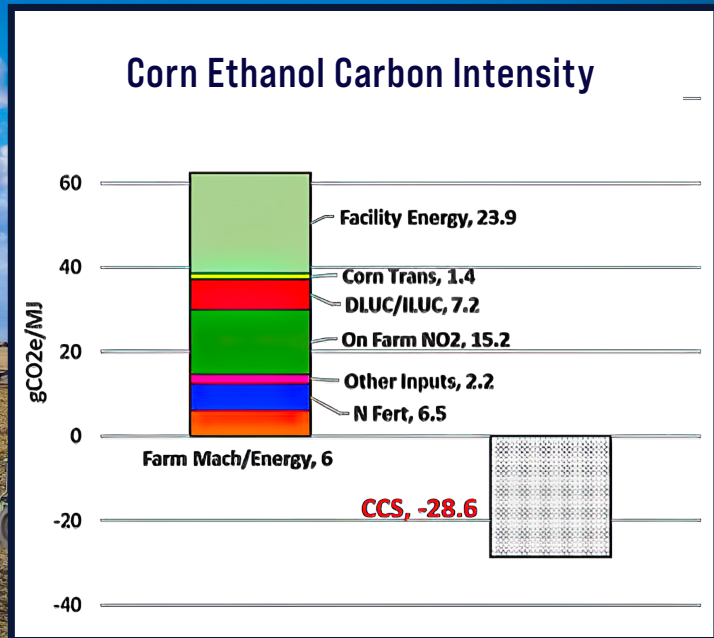


Corn's projected yield increase, based on historical increase trends, covers significant sustainable aviation fuel (SAF) demand while increasing food and feed.

How to Make Corn Ethanol to Jet a Reality

- **Adopt GREET as the accepted GHG accounting mode in the U.S.**
 - NCGA's goal is to have GREET named as the "similar methodology" in the Department of Treasury guidance implementing IRA SAF credit, Section 40B. NCGA has worked to get language into the FY24 National Defense Authorization Act (NDAA) and Federal Aviation Administration (FAA) reauthorization. There is similar language being considered as part of the next farm bill.
 - Build alliances with airlines
- **Communicate sustainability in a science-based manner**
 - Clear definitions
 - Clear accounting
 - Consistent methodology
- **Technology scale-up**
 - Increase support for research, development and commercialization of ethanol to jet technologies using commercially available corn ethanol feedstock
- **Infrastructure development**
 - Provide capital and support for technology installation and development
 - Provide incentives and support for facilities and expansions

The corn ethanol industry is working to cut its carbon intensity (CI) even further both at the ethanol plant AND on the farm.



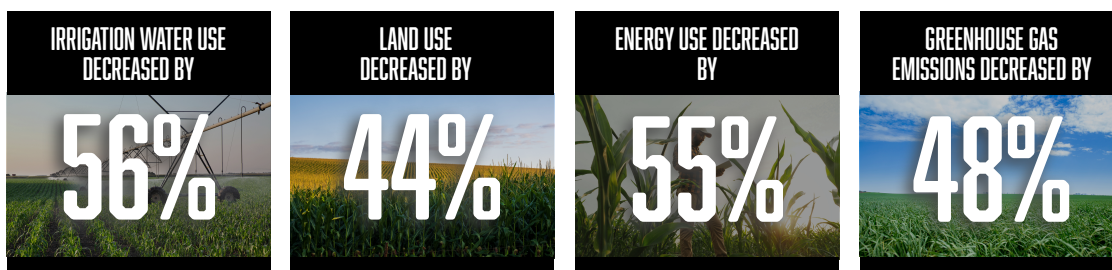
Ethanol plant:

- Reduction of energy through less drying of DDGS and increasing WDGS utilization
- Utilization of green electricity
- Utilization of renewable natural gas
- Utilization of co-generation of power and heat
- Improvement of ethanol yields
- Utilization of corn kern fiber
- Continued extraction of corn oil

On-farm:

- To date, corn growers have made significant improvements. Continued opportunities include:
 - On-farm NO₂ reductions from fertilizer and biomass via
 - 4R Nutrient Stewardship (right source, right rate, right time and right place)
 - Maximum return to nitrogen (MRTN)
 - Enhanced efficiency fertilizers (EEFs)
 - Cover crops
 - No-till/strip-till and reduced tillage
 - Utilization of green nitrogen

Since the 1980s, corn growers have improved efficiencies per bushel:



Source - Field to Market: The Alliance for Sustainable Agriculture, 2021. Environmental Outcomes from On-Farm Agricultural Production in the United States (Fourth Edition). ISBN: 978-0-578-33372-4