



March 31, 2025

# Low Carbon Fuels Overview

For Nebraska's Natural Resources  
Districts Meeting



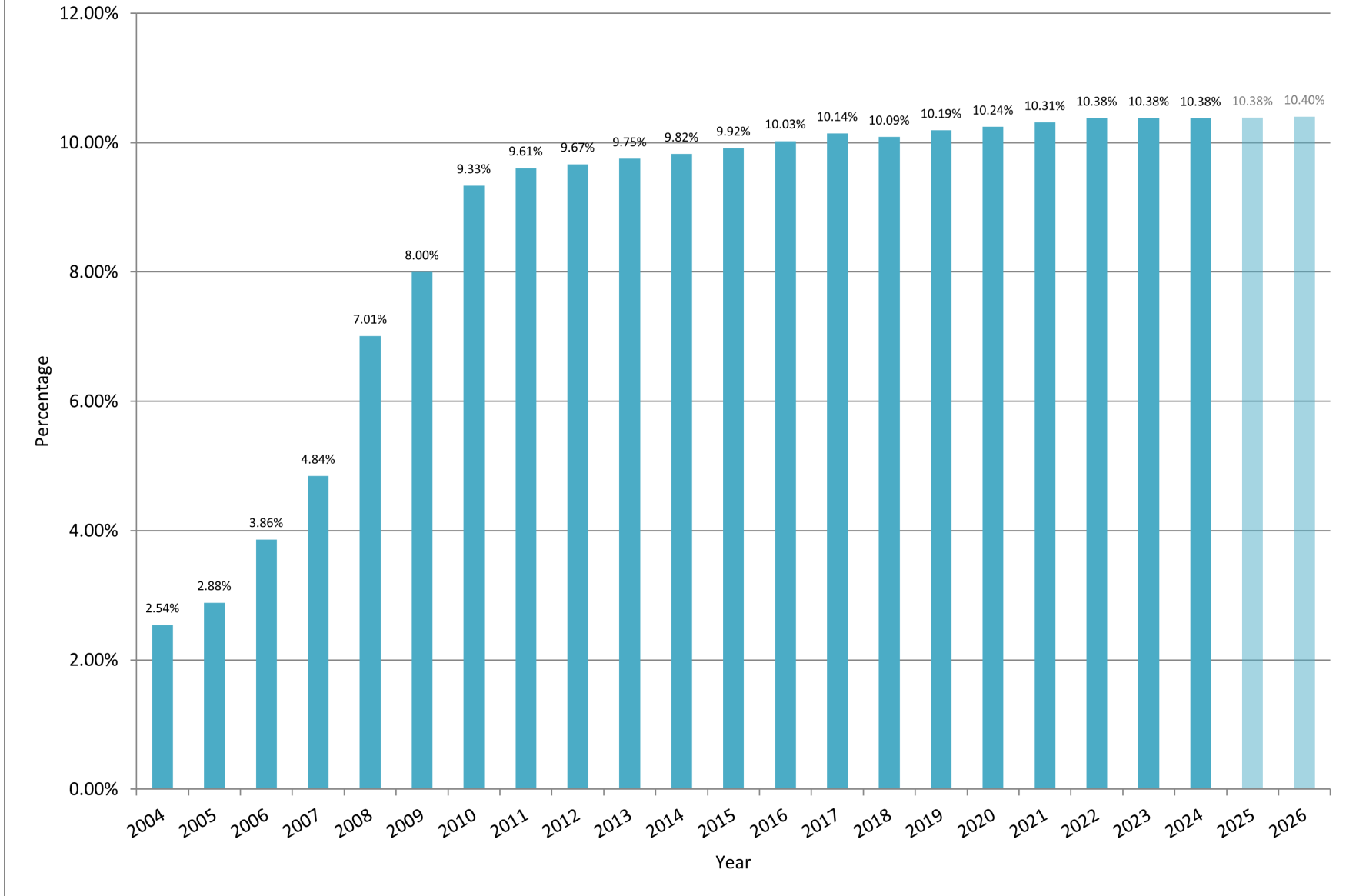


# Topics

- **Overview of Ethanol Market Dynamics**
- **Efforts to Increase Ethanol Demand**
  - E15
  - RFS
- **Efforts to Increase Value of Ethanol**
  - Federal Tax Credits (45Z)
  - State Policies
  - International Programs
- **Quantifying On-Farm Conservation Practices**
  - USDA Technical Guidelines for Crops used as Biofuel Feedstocks
  - ACE RCPP Program

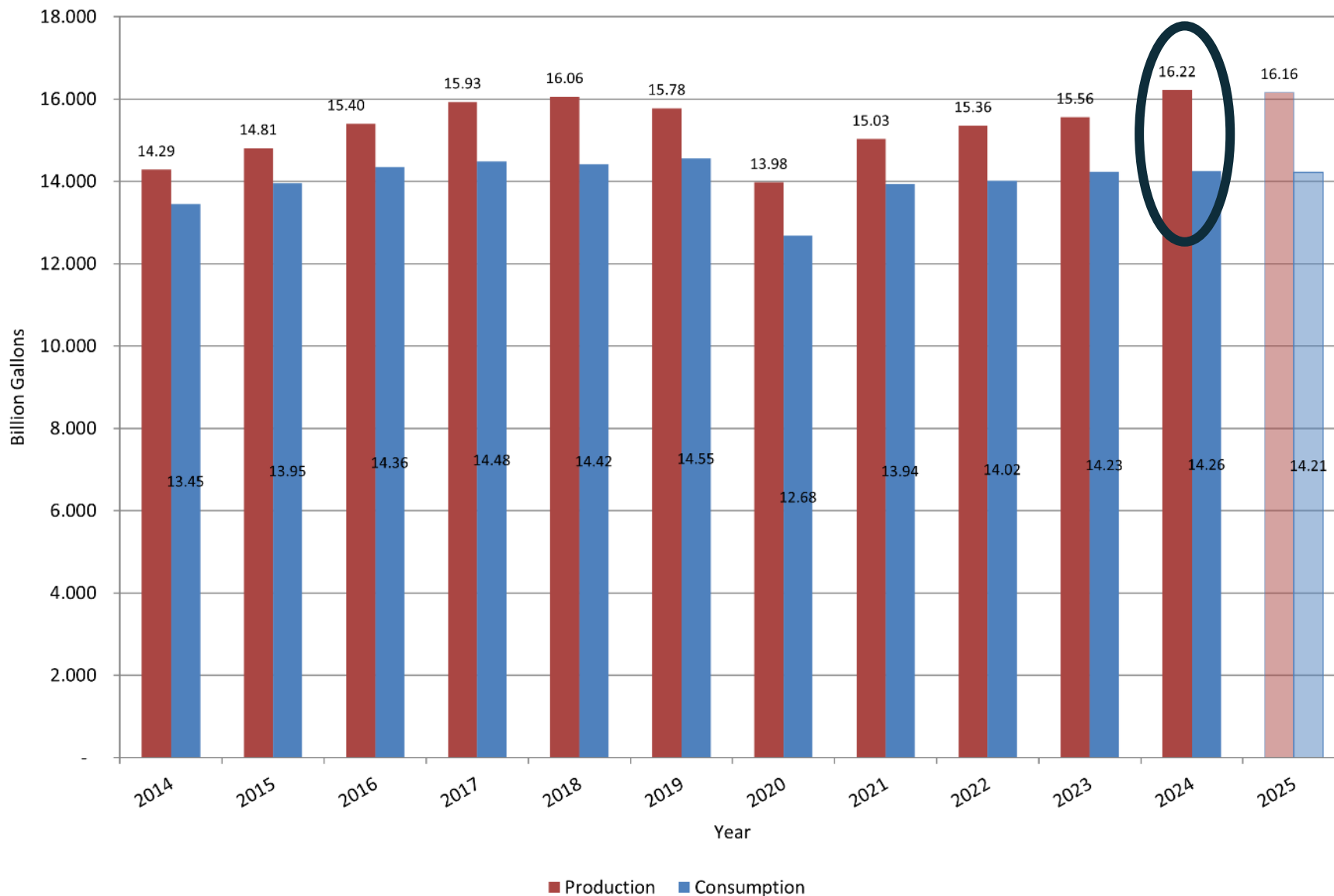
# Ethanol Share of Finished US Gasoline Consumption

Produced by The ProExporter Network<sup>®</sup> using EIA's March 2025 Short-Term Energy Outlook data with forecasts in lighter shades



# US Fuel Ethanol Production & Consumption

Produced by The ProExporter Network® using EIA's March 2025 Short-Term Energy Outlook data with forecasts in lighter shades



Domestic ethanol demand will climb by approximately **7 billion gallons** once E15 becomes the nationwide standard

# Tariffs

AP

## Trump's tariff threat worked on Colombia, but his plans for Canada and Mexico carry higher stakes

JOSH BOAK and CHRISTOPHER SHERMAN

Tue, January 28, 2025 at 6:03 AM CST · 5 min read



106



## White House narrows April 2 tariffs, targets 'dirty 15' nations

## Trade Talks Ramp Up in Race to Avoid Trump's April 2 Tariffs

- US talks with EU and India are planned for this week
- UK offers concession as Canada cushions economy for pain

POLITICO PRO  
NEWSLETTER

## Trump's port fee plans could sink farmers



BY: GRACE YARROW | 03/25/2025 05:45 AM EDT

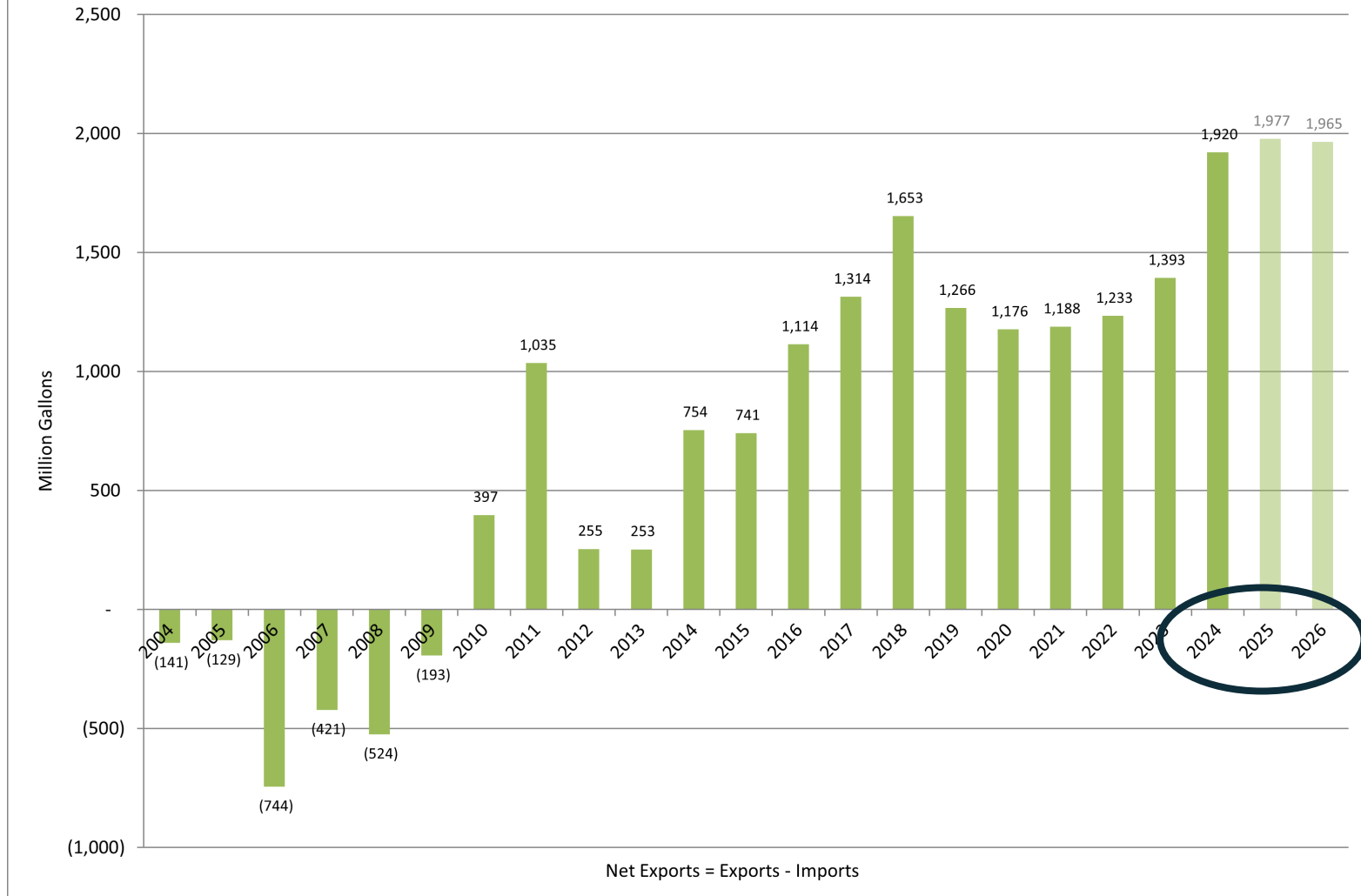
## Trump to announce new auto tariffs in major escalation ahead of April 2 deadline

## Why Trump's tariffs might not work the way he's promised

The president said Monday that he expects to collect "astronomical" amounts of tariff revenue.

# US Fuel Ethanol Net Exports

Produced by The ProExporter Network® using EIA's March 2025 Short-Term Energy Outlook data with forecasts in lighter shades



Partial rationale for increasing RFS is based on possibility of losing export markets over trade war retaliation



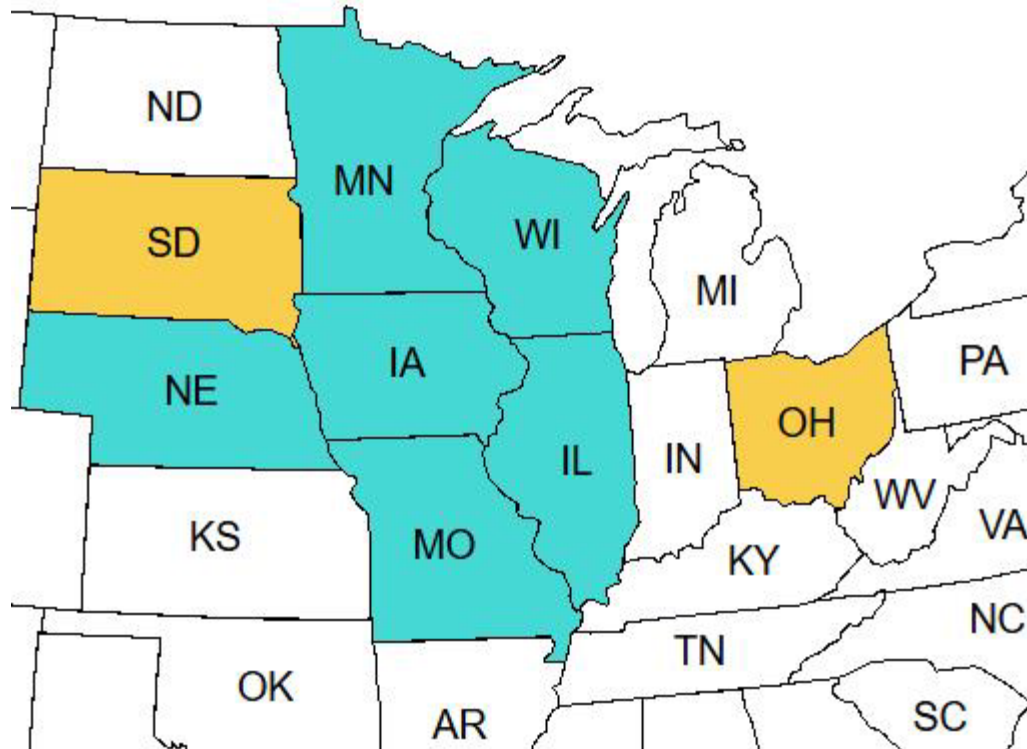
# E15 Year Round

- In 2011, EPA approved E15 for use in all 2001 and newer model year vehicles
- Unfortunately, EPA did not provide E15 with an evaporative emissions (Reid vapor pressure or RVP) waiver at that time
- The result: E15 has not been considered a “year-round” fuel in all parts of the U.S.





# E15 - Midwest Governors' Opt-out Petitions



- In 2024, Biden EPA approved 8 states to opt-out of the 1lb RVP waiver: IL, IA, MN, MO, NE, OH, SD, and WI
  - Beginning April 28, 2025, those states can provide permanent E15 availability
- Ohio and South Dakota requested one-year delay to 2026. Granted by EPA
  - Ohio: CountryMark refinery infrastructure
  - SD: Wyoming refinery fire (9 western counties)
- Patchwork of rules motivates refiners to help with national legislative solution



# So close.....

- E15 year-round was in final 2024 “continuing resolution” funding bill
- Elon Musk came out against the bill, Trump followed suit
- E15 provision cut along with other policy “riders”



# Executive Order: National Energy Emergency



**Trump executive order signals continued support for emergency E15 waivers**





Chuck Grassley @ChuckGrassley · Mar 5



We will not stop beating the drum for E15 yr round it's good for family farmers & consumers Thx to EPA Admin Zeldin & Ag Scty Rollins for mtg w us



52

18

188

15K



# E15 Support from Trump Administration

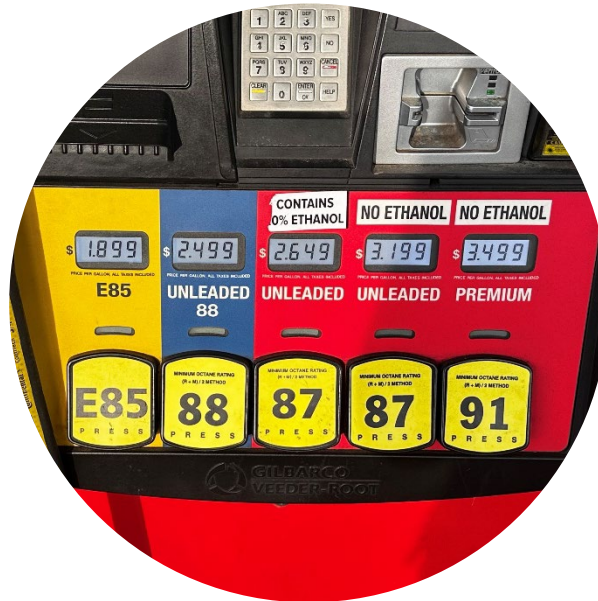
## Senate confirms Zeldin to head EPA

The former congressman arrives with a mandate to pull back Biden-era regulations and boost energy production and key technology sectors.

BY ALEX GUILLÉN | 01/29/2025 04:34 PM EST



Congressional champions trying to convince Trump administration the “big win” is enactment and signing of legislation vs emergency waivers



# E15 Year Round



# Increase RFS

- Farm economy heading in wrong direction, corn and ethanol face domestic supply-demand imbalances
- Important corn and ethanol export markets may be at risk due to trade wars
- E15 year-round and increasing RFS will grind more U.S. corn and create market demand for farmers

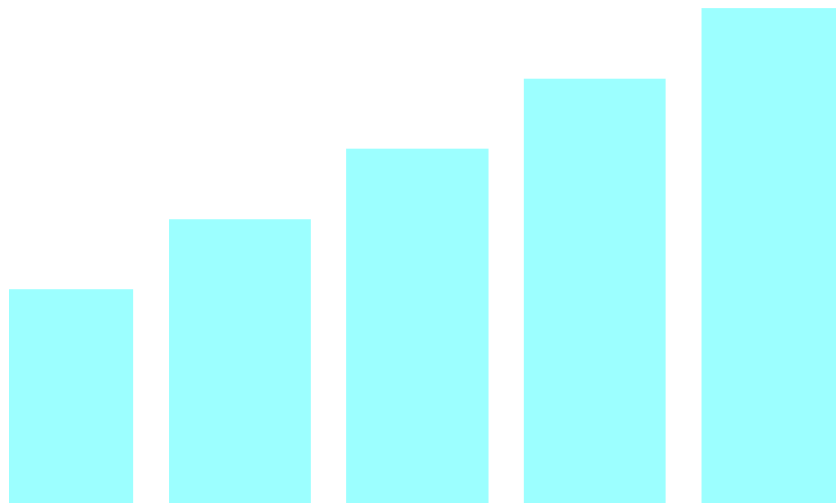
## Three Years of Losses for Corn Farmers



Source: NCGA



# Increase RFS



- EPA set to propose 2026, 2027, maybe 2028 renewable volume obligations (RVOs) soon, finalize in December
- ACE Position: EPA should increase RVOs for 2026 and 2027 (and 2028), at least 17 billion gallons for conventional biofuel to improve economic conditions for farmers, increase U.S. energy security, and compensate for potential export market losses
- RFS statute set levels through 2022 with implicit 15-billion-gallon constraint on conventional biofuels; post-2022, EPA has flexibility to set RVOs based on several factors, no conventional biofuels constraint



# Promote Innovation, Energy Security, and Economic Growth Through Carbon Markets

- Farmers and ethanol producers need new market opportunities and a tax code which supports certainty and economic growth potential
- Federal Policy: 45Z is about carbon intensity, but also about U.S. energy security, good-paying jobs, and new market opportunities (SAF, monetizing conservation practices on the farm)
- State Policies: State LCFS Markets (i.e. CA LCFS)
- International Policies: SAF, Clean Fuels





# 45Z Clean Fuel Production Credit

- Establishes tech-neutral credit for fuel with a CI of 50 kg CO<sub>2</sub>e/MMBtu or less
- Authorized for 3 years—Jan. 1, 2025 to Dec. 31, 2027
- For non-aviation fuel, base credit of 20 cents per gallon, \$1 max bonus credit based on CI score and compliance with prevailing wage and apprenticeship
  - Value of 2 cents per gallon for each CI point under 50 kg CO<sub>2</sub>e/MMBtu
- Statute specifies use of GREET for non-aviation fuel



# USDA Interim Rule “ Technical Guidelines for Crops used as Biofuel Feedstocks”

- Includes a new Feedstock Carbon Intensity Calculator (FDCIC) designed to be used in carbon markets
- Allows reduced till, no-till, cover crops, and nutrient management
- No all-or-none bundling requirement for practices, allows stacking, does not arbitrarily cap/limit GHG credits
- Cites ACE Regional Conservation Partnership Program (RCPP) projects
- GHG values seem consistent with existing science (i.e. no discounts)
- March 18 comment deadline, **need Treasury to include in final 45Z regulation**

# 2025 USDA Corn FD-CIC

USDA lowered GREET's "Default" US avg. Corn CI 2.5 Kg CO2/MMBtu by assuming "Reduced Till" is US avg

45Z USDA FD-CIC Default Corn Production CI =								26.26	Kg CO2e/mmbtu	
CSA Practices	Soil Organic Carbon	Farm Energy	Direct N2O	Indirect N2O	Nitrogen Use	Urea CO2	Total Reduction	Final CI	IRA 45Z Tax Value \$/Acre	
Kg CO2e/mmbtu										
Reduced Till	-1.84	-0.76	0.08	-0.02	0.00	0.00	-2.54	23.72	\$ 27.08	
No Till	-10.71	-1.42	0.48	-0.11	0.00	0.00	-11.76	14.50	\$ 125.61	
Cover crops	-6.89	-0.18	-2.47	-1.74	0.00	0.00	-11.29	14.97	\$ 120.53	
Spring only Nitrogen	-1.84	-0.81	-0.77	-0.38	0.00	0.00	-3.79	22.47	\$ 40.51	
Split Applied Nitrogen	-1.72	-0.51	-1.58	-0.85	-0.63	-0.11	-5.40	20.86	\$ 57.69	
Nitrification Inhibitors	-1.84	-0.76	-1.29	-0.48	0.00	0.00	-4.37	21.89	\$ 46.62	
<b>Stacked Practices</b>										
RT, CC	-6.89	-0.18	0.54	-1.74	0.00	0.00	-8.28	17.98	\$ 88.44	
RT, CC, Split N	-6.48	0.12	-3.17	-1.98	-0.63	-0.11	-12.25	14.01	\$ 130.82	
RT, CC, NIs	-6.92	-0.18	-3.73	-1.99	0.00	0.00	-12.81	13.45	\$ 136.84	
NT, CC	-16.72	-0.84	-2.42	-1.82	0.00	0.00	-21.79	4.47	\$ 232.74	
NT, CC, Split N	-16.35	-0.54	-3.05	-2.01	-0.63	-0.11	-22.68	3.58	\$ 242.23	
NT, CC, NIs	-17.11	-0.84	-3.86	-2.09	0.00	0.00	-23.90	2.36	\$ 255.18	

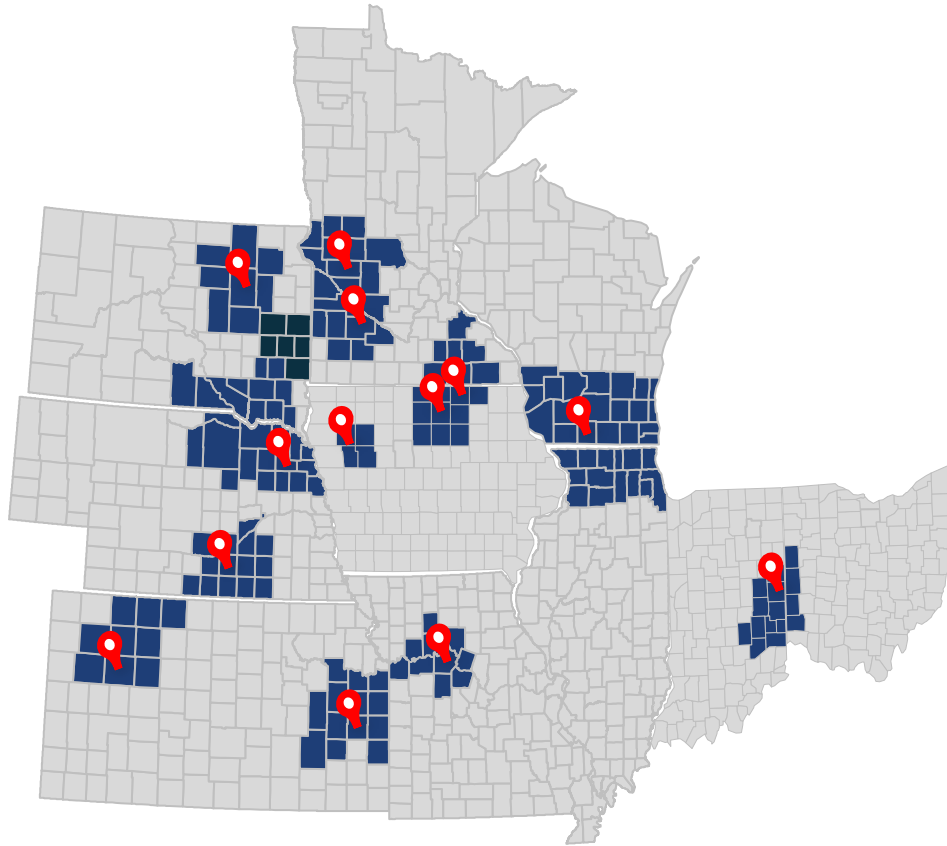
Assumes GREET Default Corn Yield of 176.7 bu/acre, and 2.864 gallons EtOH per bushel



# Biden Treasury “Intent to Propose” 45Z Regulations

- Late. Issued January 10, statutory start date for 45Z supposed to be January 1
- Incomplete, “intent to propose” is not a final rule
- Allows biofuel producers to use most recent/updated version of GREET model to determine emissions rates – allows our RCPP projects to help inform better emissions rates going forward
- April 10 comment deadline. Trump Treasury has been silent on plans for final regulation

# Overview: 10-State RCPP

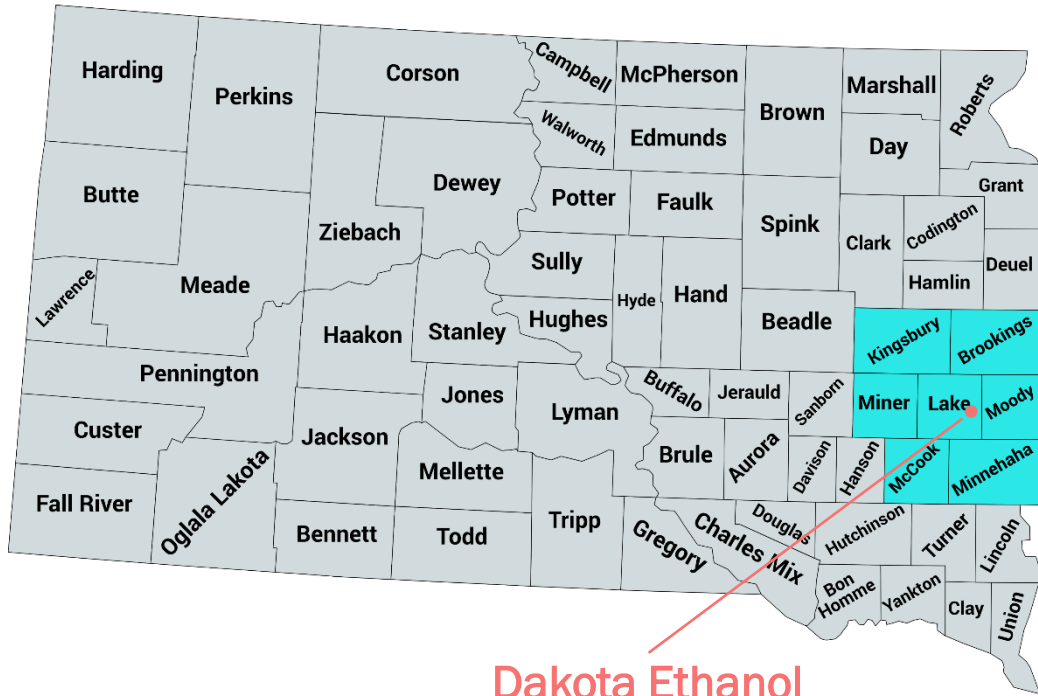


- USDA has committed \$25 million, opportunity for additional \$ once we contract the first tranche
- Incentivize farmers in **10 states** and **167 counties** supplying **13 partner ethanol facilities** to adopt climate-smart practices (but not requiring bushels to be reported or delivered to the plants)
- Collect field-based data to assess the GHG benefits of the practice. Extensive scientific expertise of Land Grant scientists and DoE's Sandia Lab to quantify and validate models at high confidence value required by market regulators
- Designed to help ACE members gain access to LCFS markets and new tax credits (45Z)
- With current \$25 million funding:
  - **\$15 million** in financial assistance (FA) to farmers in project area for adopting climate smart practices (\$1.15M per grainshed, approximately 7,000 acres )
  - **\$10 million** in technical assistance (TA) to assist producers implement practices, conduct soil sampling, and quantify and validate climate benefits

# Status of SD RCPP

## 100% of Funds Committed, More Interest than Funds Available

### SOUTH DAKOTA



Total Crop Acres: 2,037,839



Total Corn (for grain) Acres: 798,073



Current Climate-Smart Practice Adoption: No-Till (17%), Reduced-Till (30%), Cover Crop (8%)



Expressed Interest: 80,000+ acres



Committed Acres & Contracts: 27,641 acres from 29 farmers

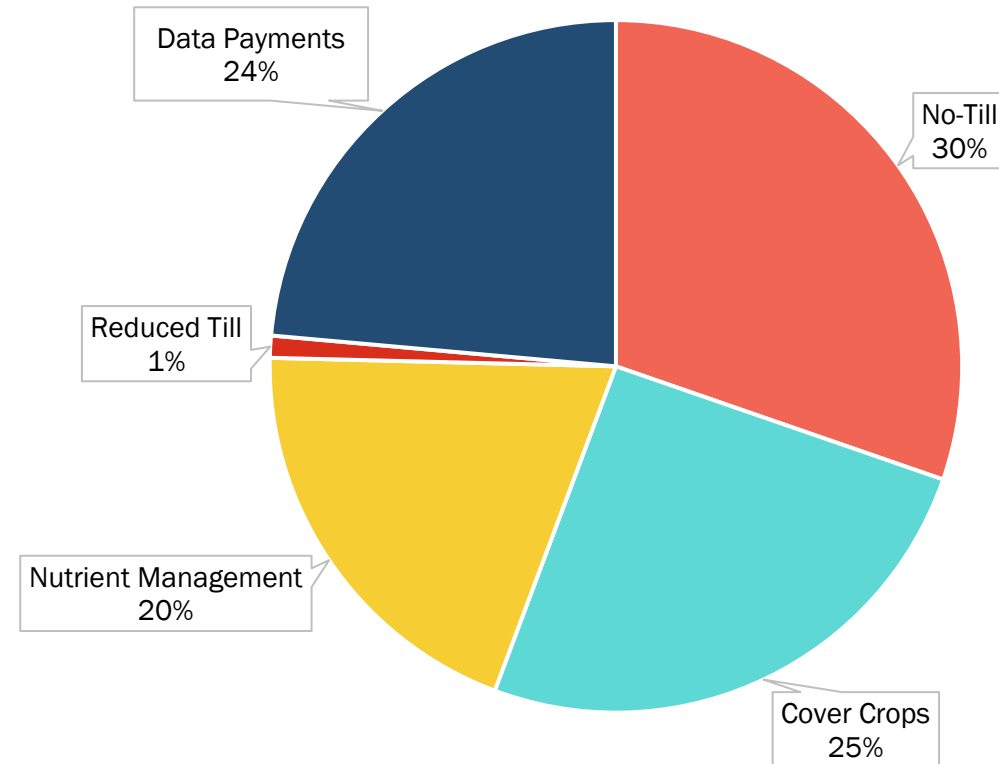


2025 Payments: Anticipate nearly \$1.3 million in farmer reimbursements

# SD RCPP Acres by Practice Type

Total of 27,640 Acres Under Contract

- No-till: 8,375 acres
- Cover Crops: 7,018 acres
- Nutrient Management: 5,446 acres
- Reduced Till: 284 acres
- Data Payments: 6,517 acres



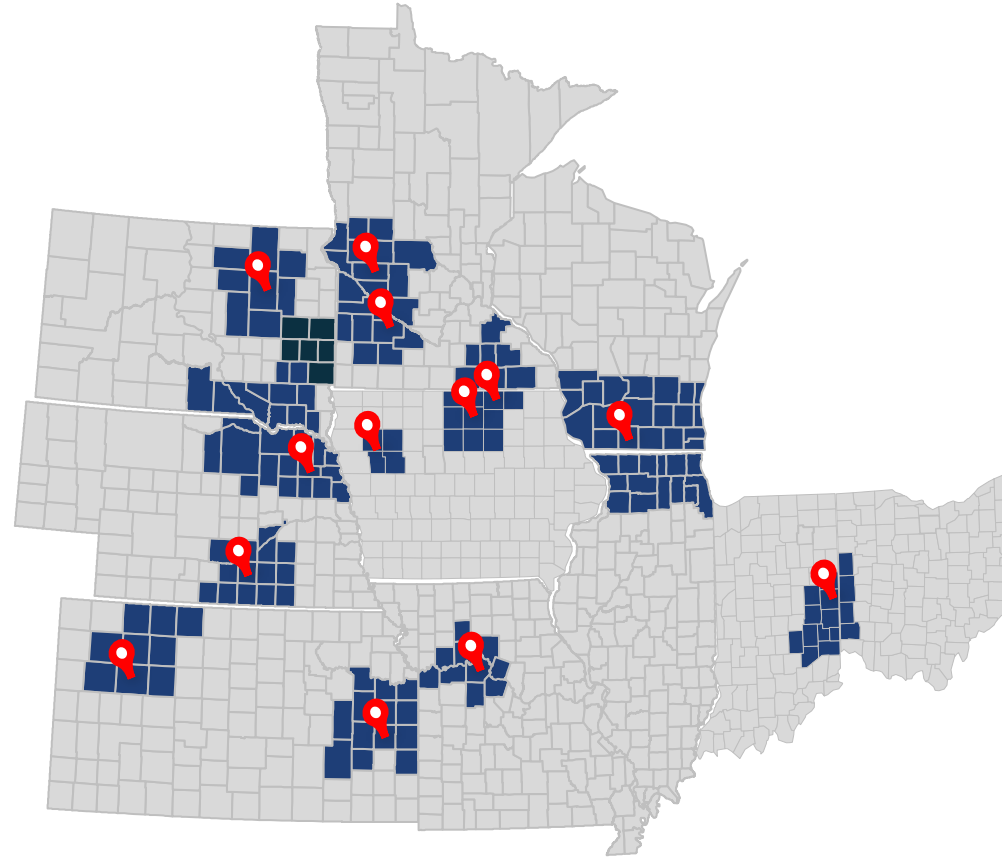
# 10-State RCPP Partners



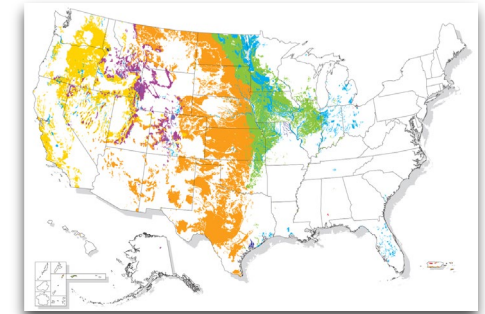


# 10-RCPP Designed to Improve Existing Soil Models Used for Clean Fuel Markets and New Tax Credits

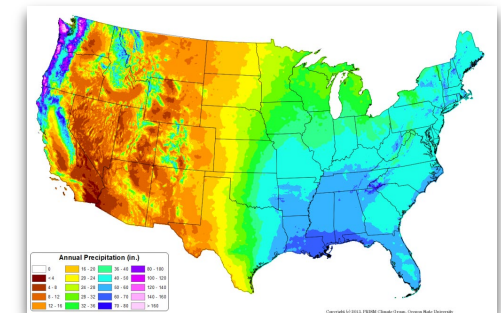
- Crop type, precipitation, soil type and temperature impact climate-smart practice GHG benefits
- ACE partnership with USDA and DoE designed to decrease perceived risks of "over-valuing" GHG benefits inherent in 40B, State LCFS, and voluntary carbon markets
- 10-State RCPP project areas selected to capture this variation and will enable scientific team to validate climate-smart practice GHG benefits



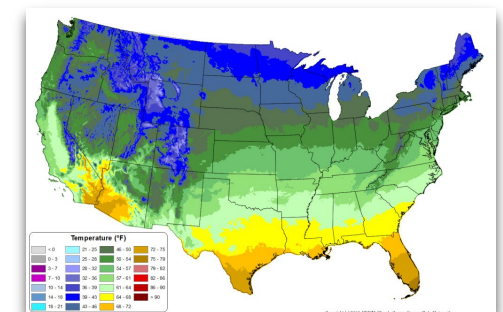
Soil Type



Precipitation



Temperature





700+  
Farmers

350+

Interest Forms covering  
nearly 500,000 acres

5X More Expressed  
Interest Than Funding  
Availability



Technical Team  
Conducting One on One  
Outreach Now

Goal to execute  
contracts in 2025





Questions?

