Biofuels Market Update

Outlook Conference for Agricultural Lenders

Grand Forks, Minot, Mandan, Fargo

November 2-5, 2026

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NDSU | EXTENSION AGRIBUSINESS

Two projects would add 320+ million gallons of western ND ethanol capacity, both rely on carbon capture and storage



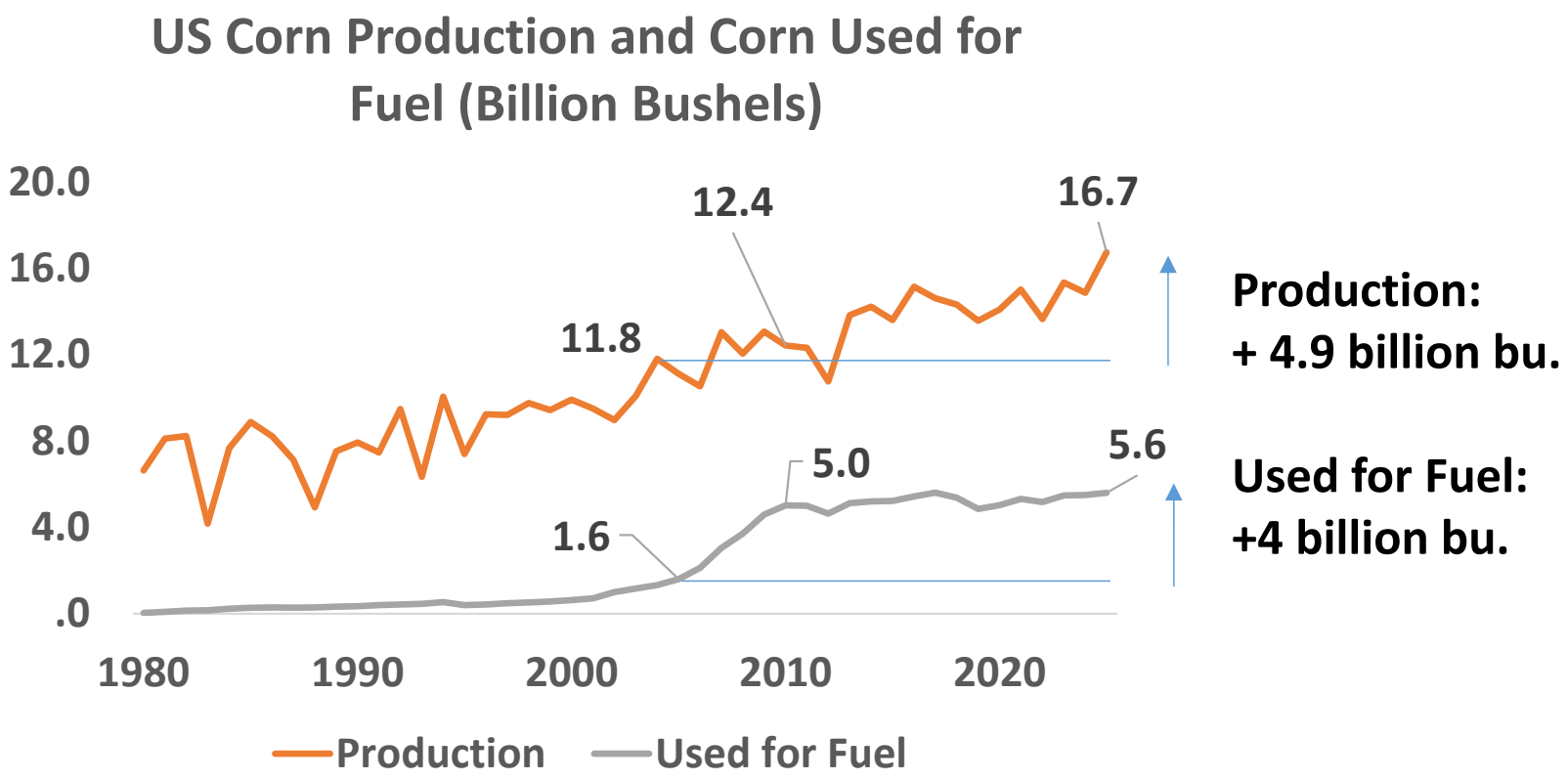
Glen Ullin: Roughrider Energy proposes 240 MMGPY plant, targeted for 2028

Includes carbon capture, with storage 15 miles north

Rail-based procurement means corn would be sourced from a wide area

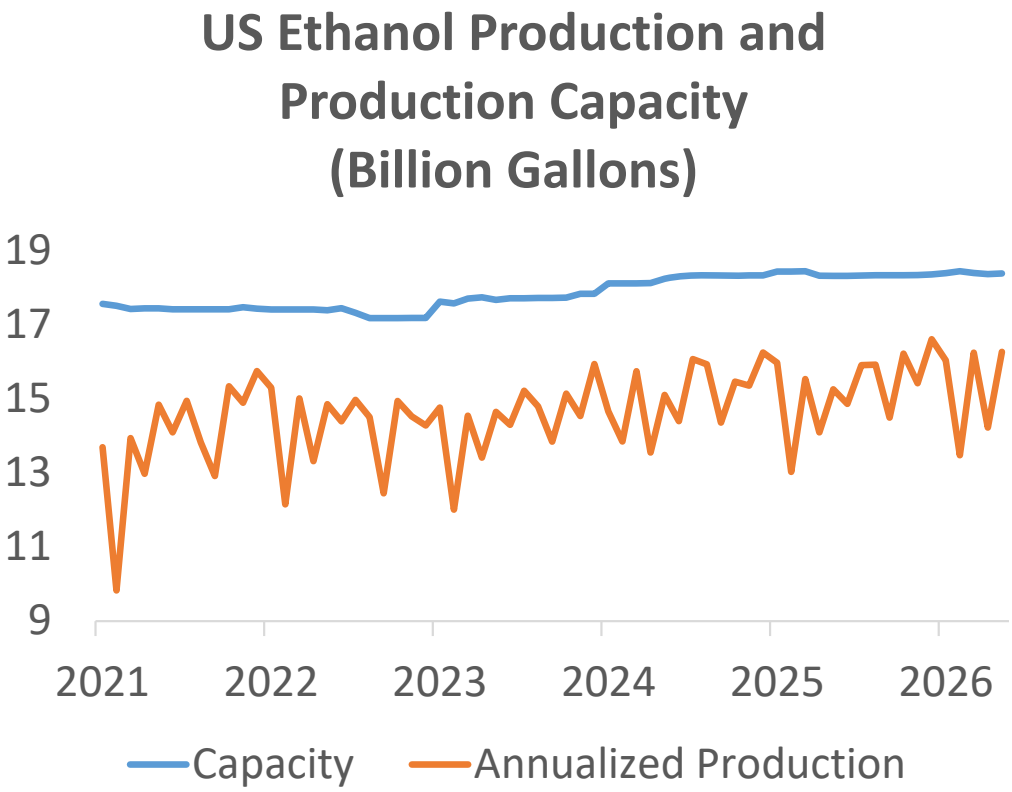
Gevo North Dakota (Richardton): expansion from 67 to 150 MMGPY

Corn production has outgrown the RFS



Data: USDA, WASDE, Economic Research Service
Chart: North Dakota State University

US ethanol production and capacity have never been higher



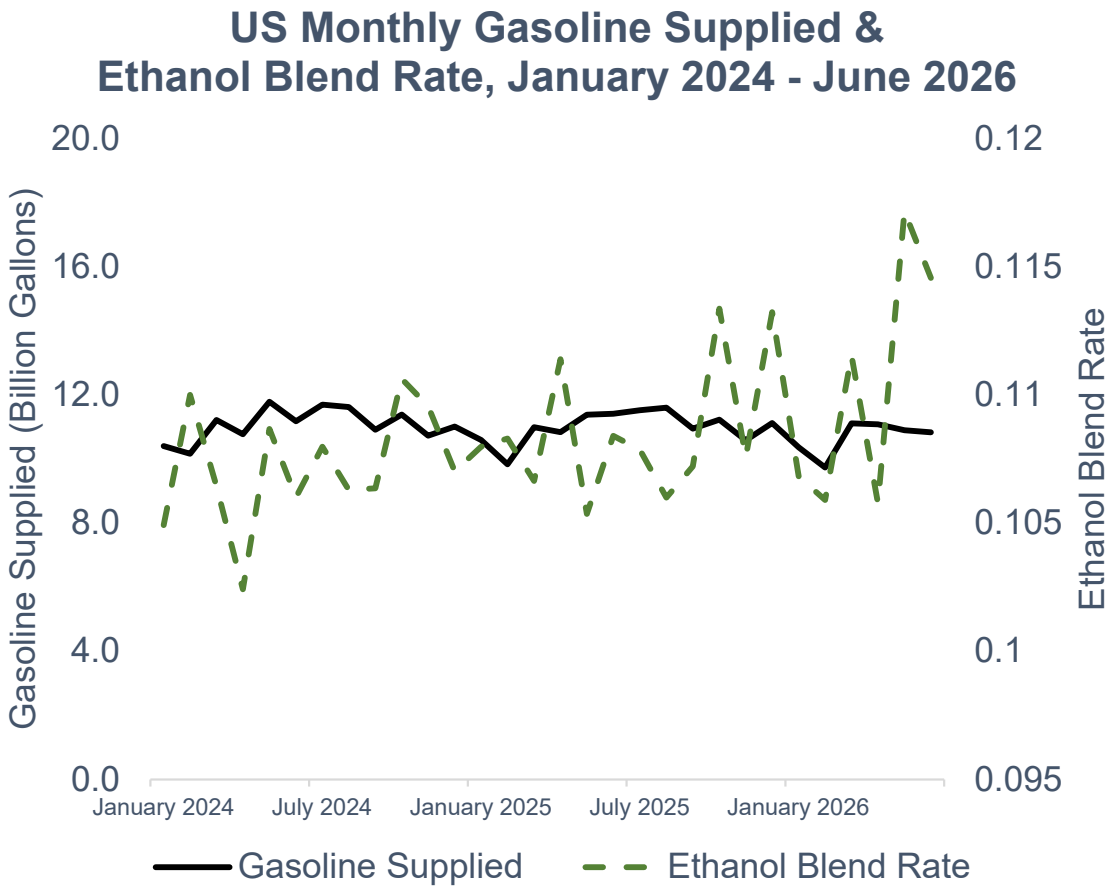
May ’26 Capacity: 18.4 billion gals
+1 billion from May ’21

May ’26 Production: 16.2 billion gals
+1.4 billion from May ’21

Weekly output has matched or beaten 2024 and 2025 most of the year

Data: Energy Information Administration

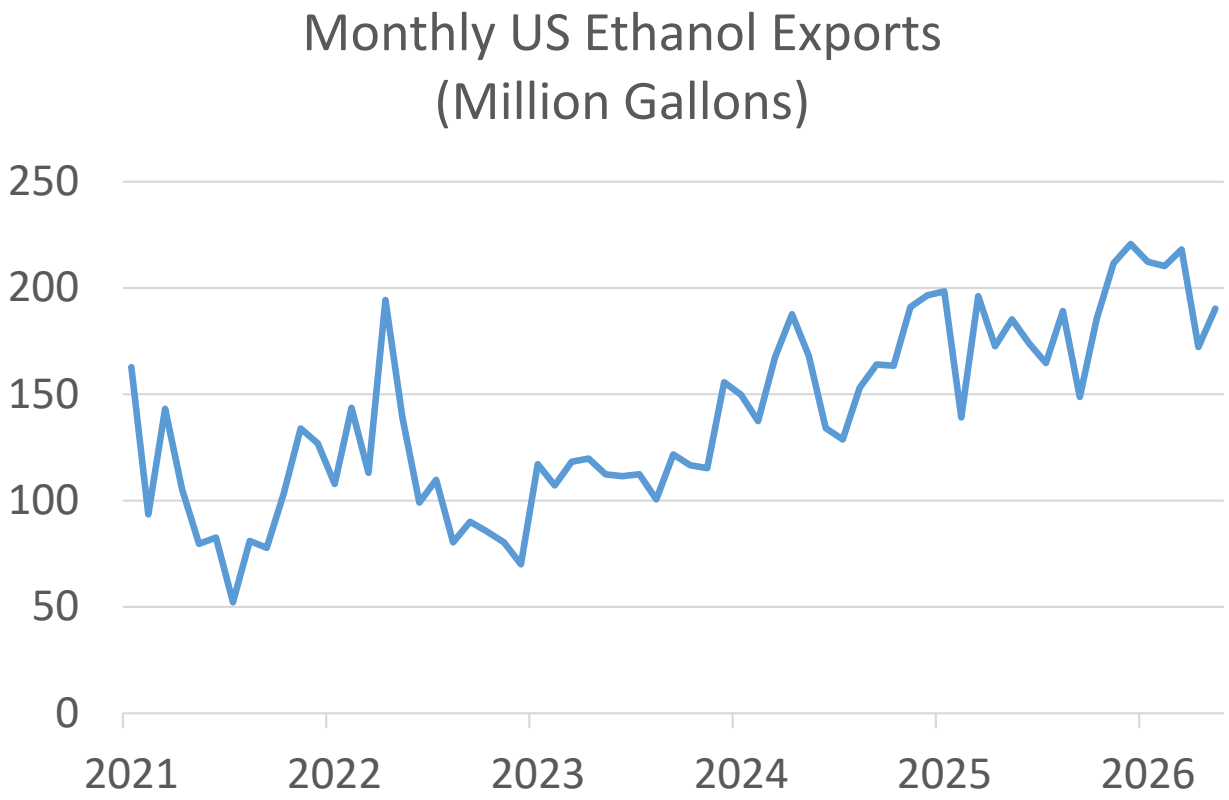
Flat gasoline demand means ethanol growth depends on higher blends or exports



Data: Energy Information Administration

- Gasoline use is steady at about 11 billion gallons a month
- The blend rate was about 11.5–11.7% in Q2 2026, above the 10% blend wall
- Year-round E15 in eight states. Permanent nationwide E15 discussed
- California passed E15 law; regulatory hurdles remain

Ethanol exports are at record highs; marine fuel is new market



2025 exports: 2.18 billion gal

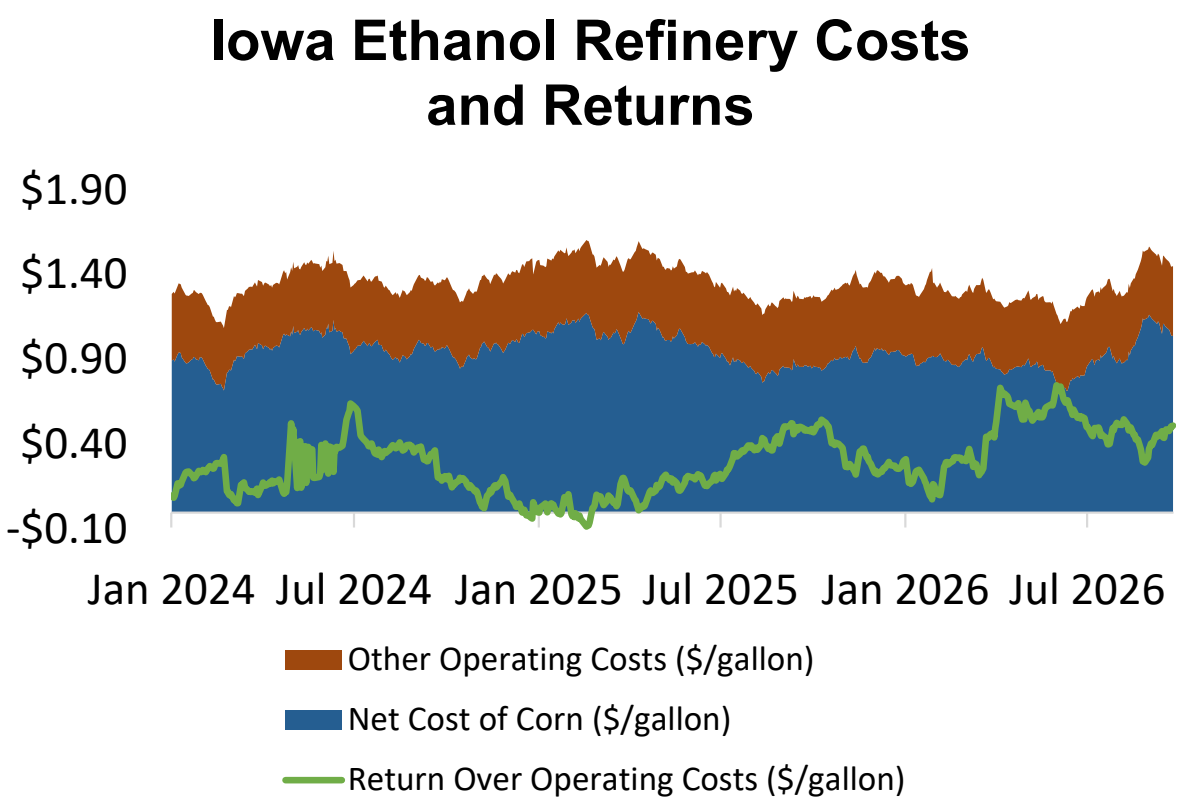
2026 exports running 12% ahead of 2025

1.7 billion gallons through week 40

Exports are a growth market

Data: Energy Information Administration

Ethanol plants continue to earn $0.50/gallon over operating costs, before tax or carbon credit sales



Data: USDA/Ag Marketing Service

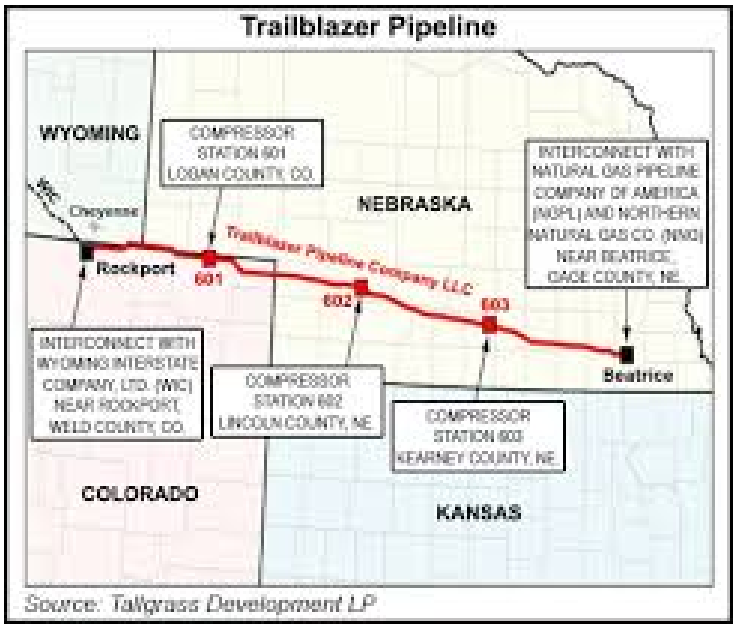
Margins were at or below breakeven in early 2025 and have stayed positive since

Net corn cost (corn cost less DDGS and corn oil co-product credits) has increased to about $1.10/gallon

Plants still cover variable costs with room to spare

(Iowa margins do not include 45Z)

45Z, carbon credit sales add revenue on top of operating margins; Gevo 2026 sales total $70 million, multiyear buyers



Plants that lower their carbon intensity (CI) score earn 45Z tax credits

Dropping indirect land use change from the CI score puts more plants in the money

Carbon capture and storage could add up to $0.60/gallon

Gevo ND: $70 million in 2026 45Z credits, plus voluntary carbon credit sales on multi-year contracts

45Z ends Dec. 31, 2029



By Todd Neeley , DTN Environmental Editor

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Summit Pipeline Moves Forward in Iowa

Summit Carbon Solutions Pipeline Gets New Path Forward After Iowa Permit Change

7/15/2026 | 10:47 AM CDT

EPA proposes full reallocation of 2025 SREs

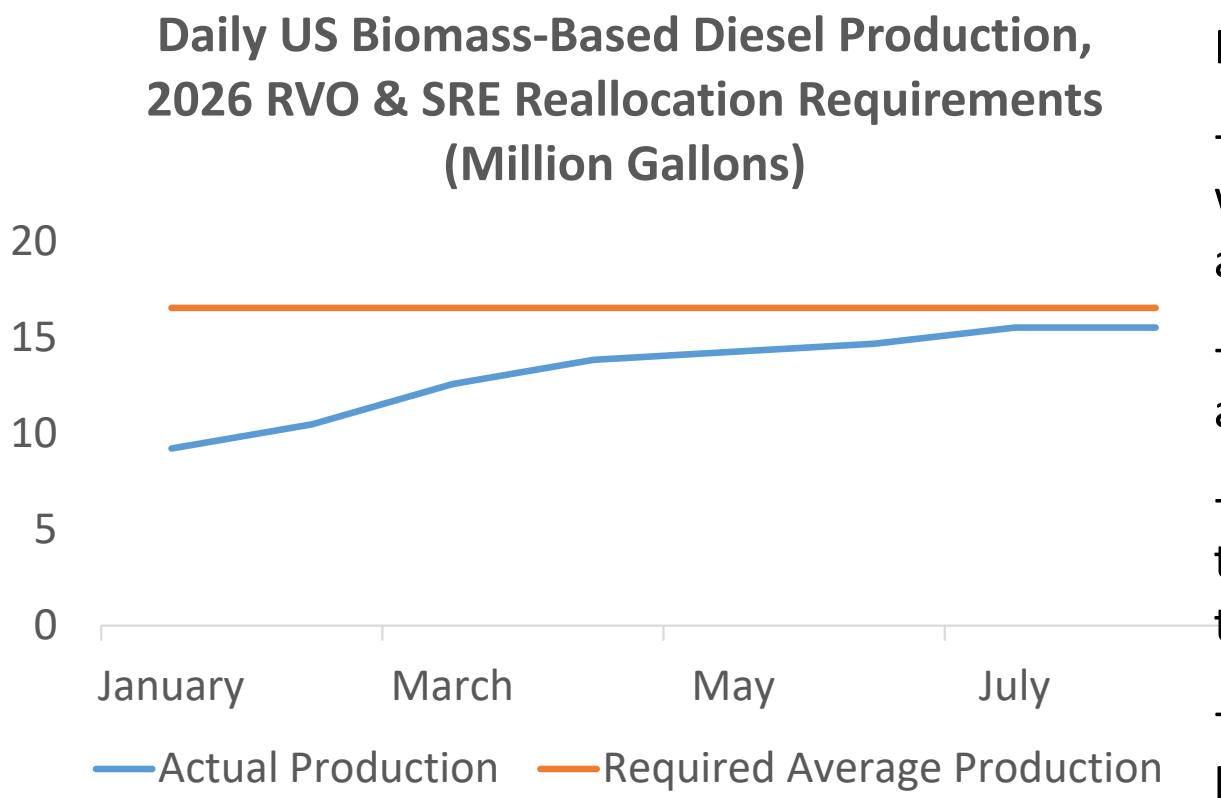


EPA exempted 1.76 billion RINs for 2025, 770 million more than planned

Proposal: add back all 770 million to 2026/2027 RVOs

Not final. Comments due Dec. 4

Biomass-based diesel production is not keeping up with 2026 mandate



- 2026–27 biomass-based diesel RVOs up about 50% over 2025
- 70% of 2023–25 exemptions were added back; EPA proposes adding the extra 770 million
- About 16 million gallons a day are needed
- Production has recovered from the 2025 drop, when 45Z paid less than the old biodiesel credit
- Banked RINs help, but the pace is putting pressure on feedstocks

RINs make up more than a third of renewable diesel's value stack

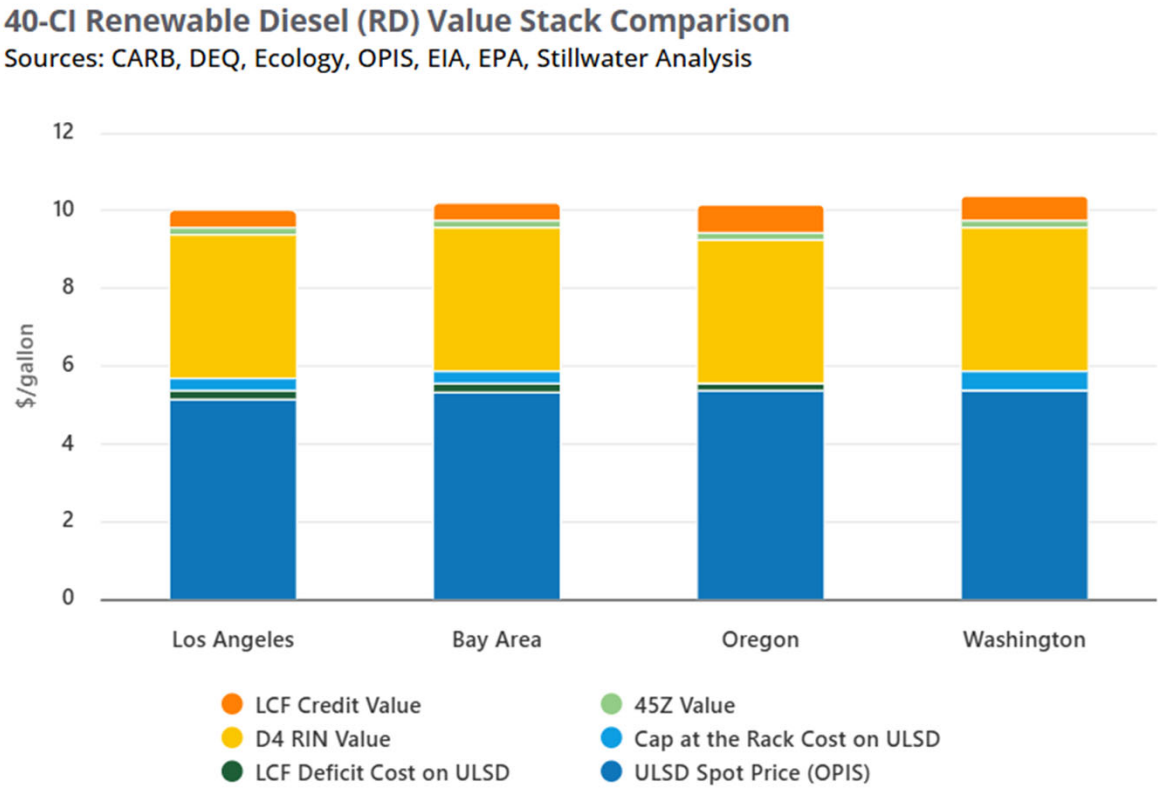
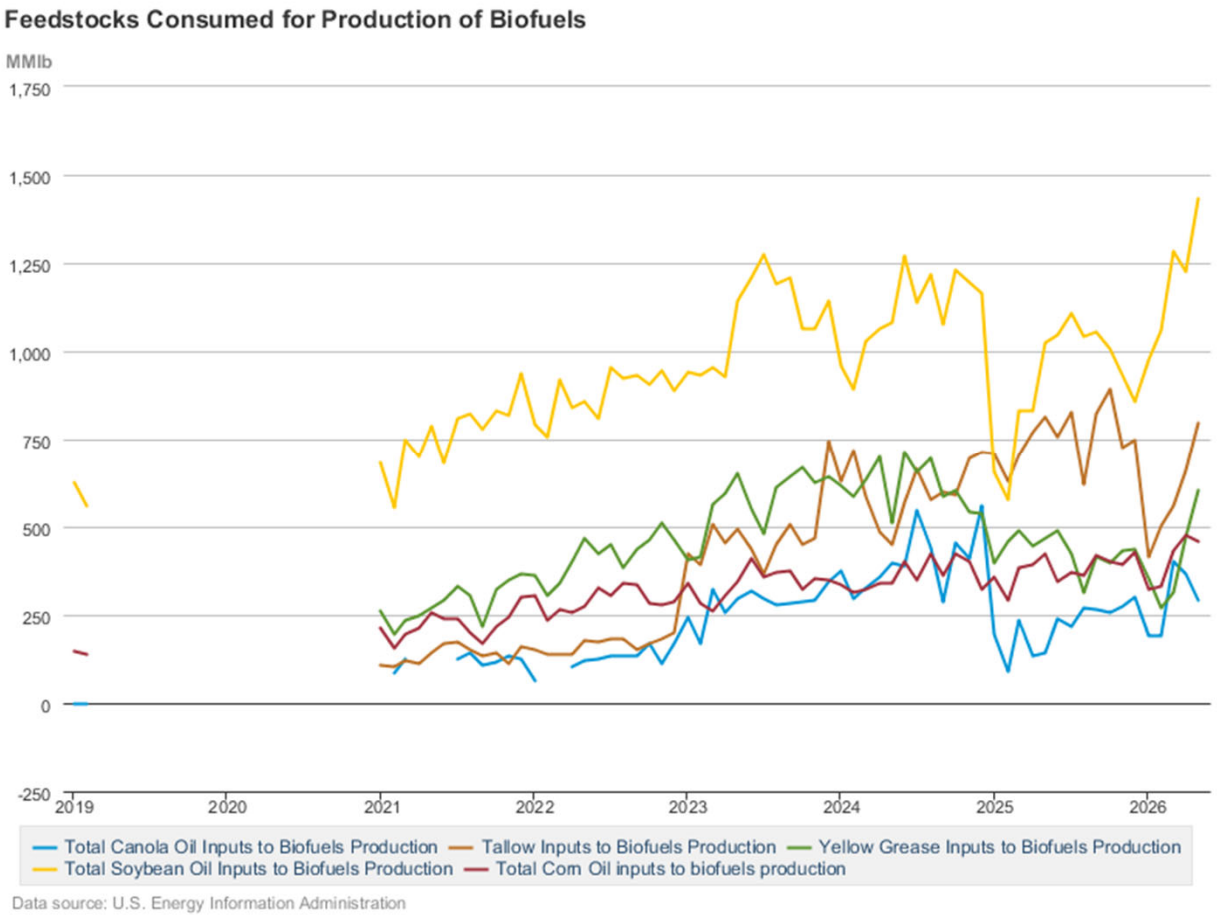


Chart: Stillwater Associates

- Renewable diesel is worth about $10/gallon on the West Coast
- Fossil diesel costs suppliers about $5.50–5.90/gallon
- The D4 RIN alone is worth about $3.70 of the value
- California renewable diesel prices have doubled since January

Soybean oil use for biofuel at record highs



- Soybean oil use is at a record, about 1.4 billion pounds a month
- 45Z, the RFS, and state low-carbon fuel programs support growth outside California
- California caps LCFS credits for soybean and canola oil biofuel at 20% starting in 2028
- More crush demand supports ND soybean and canola basis

Key dates

October 31: statutory deadline for 2028 RFS volumes

November: 45Z feedstock final rules expected

2027: Final reallocation rule. Decisions on 2026 SREs.

2028: Glen Ullin targeted start; half RINs for imported feedstocks/biofuels. California feedstock cap begins.

December 31, 2029: 45Z ends

Takeaways for lenders

Ethanol Plant Credit

- Ethanol margins are positive before 45Z
- 45Z, RINs, and tax/some carbon credits are policy-dependent
- New ND plants rely on carbon capture, permitting

Farm borrowers

- Stronger corn basis near new western ND plants
- Record soybean oil demand supports oilseed prices

Watch

- Final reallocation rule
- Imported feedstock/biofuel rules, especially for canola oil and renewable diesel
- 2026 exemptions
- 2028 volumes

Questions…

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