

U.S. Ethanol^{Corn} & Biodiesel^{Soybeans}

Trends in Market Prices & Profitability

KSU www.AgManager.info & WILL Radio (Illinois)

Monday, November 25, 2024

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Recent Bioenergy Market Headlines ^{DTN}

- a) **ZELDIN Opposed RFS as NY Congressman – Trump EPA Nominee Zeldin Opposed Renewable Fuel Standard as Congressman** ^{DTN, 11/12/2024}
- b) **Thune Selection as Senate Majority Leader Seen as Boon for Biofuels Industry** ^{DTN Ethanol Blog, 11/12/2024}
- c) **Biofuels, Ag Groups ask Congress for One-Year Extension of Biodiesel, Renewable Diesel Tax Credit** ^{DTN, 11/14/2024}
- d) **North Dakota Regulators Approve Carbon Pipeline - North Dakota Public Service Commission Grants Siting Permit on CO2 Pipeline** ^{DTN, 11/15/2024}
- e) **EIA: Domestic Ethanol Output, Blending Demand Down on Week** ^{DTN, 11/20/2024}



California approves tighter rules for low carbon fuels policy

By Reuters

November 9, 2024 12:28 AM CST · Updated 17 days ago



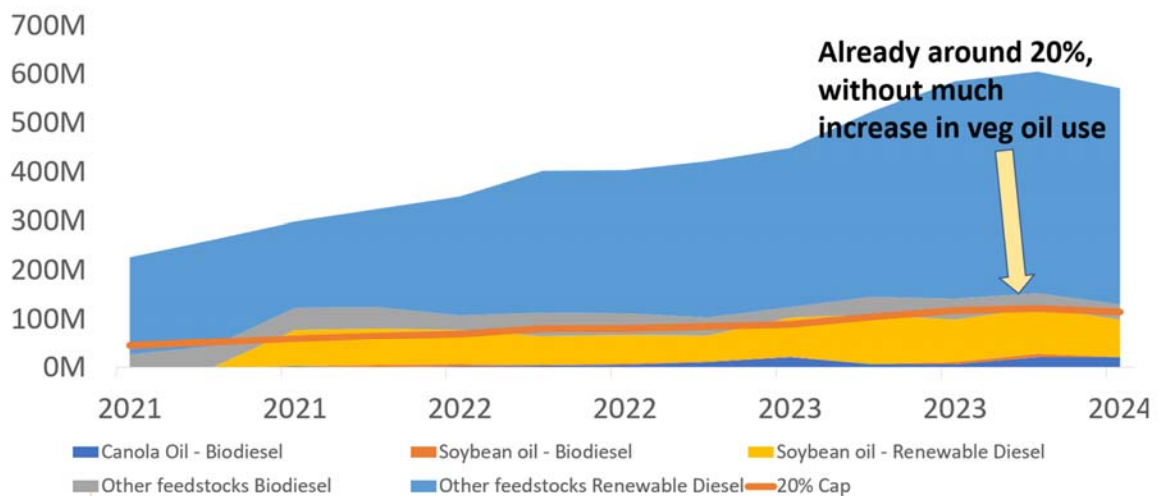
- Increases carbon intensity reduction targets from 20% to 30% by 2030 and from 50 to 90% by 2045
- Places 20% cap for canola, soybean, and sunflower oil use for biomass-based diesel
- Requires tracking feedstocks back to their point of origin

<https://www.reuters.com/sustainability/climate-energy/california-vote-stricter-rules-low-carbon-fuels-policy-2024-11-08/>



EXTENSION AGRIBUSINESS

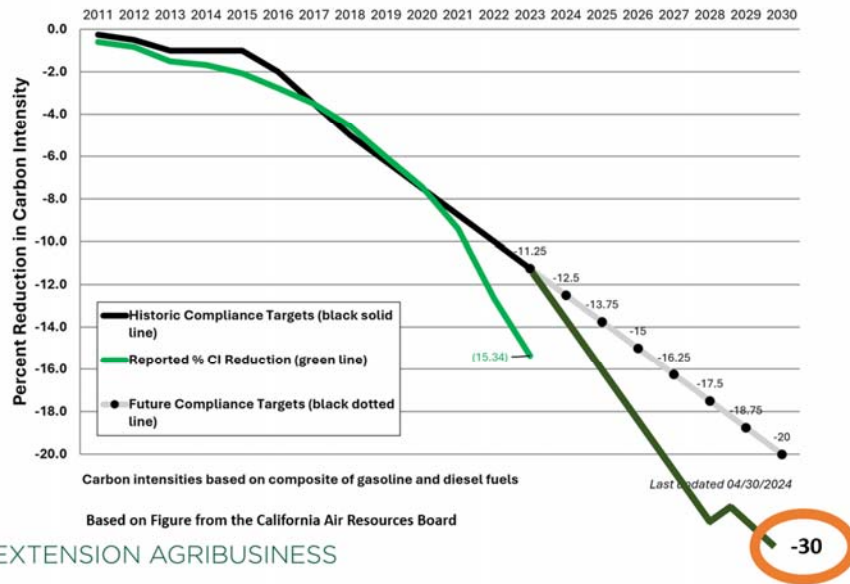
California Biomass-based Diesel Volumes (gallons)



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Data: California Air Resources Board

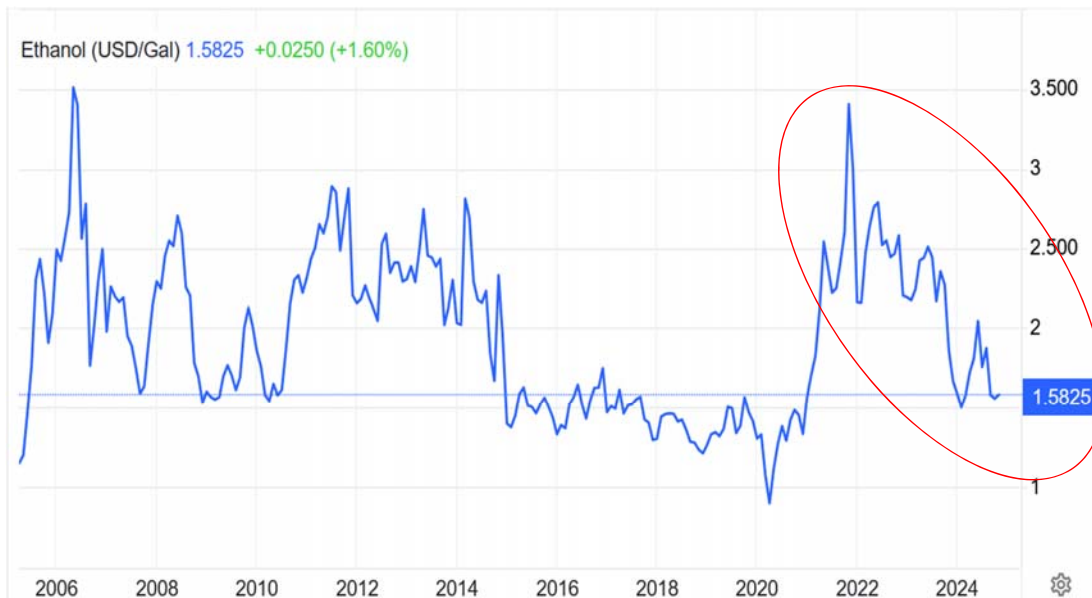
2011-2023 Performance of the Low Carbon Fuel Standard



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Ethanol Prices – Monthly, through November 22, 2024; \$/gallon

Source: Trading Economics, <https://tradingeconomics.com/commodity/ethanol>



Retail Diesel & Gasoline Prices

Weekly Continuous Chart: April 5, 1993 through November 18, 2024

Weekly Retail Gasoline and Diesel Prices



Data source: U.S. Energy Information Administration



<https://www.eia.gov/todayinenergy/prices.php>

Wholesale Spot Petroleum Prices, 11/21/24 Close

Product	Area	Price	Percent Change*
Crude Oil (\$/barrel)	WTI	70.39	+1.6 ↑
	Brent	75.09	+1.0 ↑
	Louisiana Light	72.09	+1.4 ↑
Gasoline (RBOB) (\$/gallon)	NY Harbor	2.11	0.0
	Gulf Coast	1.95	-0.2 ↓
	Los Angeles	2.19	+4.4 ↑
Heating Oil (\$/gallon)	NY Harbor	2.17	+1.9 ↑
	Gulf Coast	2.04	+2.1 ↑
3:2:1 Crack Spread (\$/barrel)	Gulf Coast (LLS)	12.85	-6.0 ↓
Low-Sulfur Diesel (\$/gallon)	NY Harbor	2.25	+1.4 ↑
	Gulf Coast	2.17	+0.9 ↑
	Los Angeles	2.27	+1.7 ↑
Propane (\$/gallon)	Mont Belvieu, TX	0.82	+1.6 ↑

Retail Petroleum Prices (AAA), 11/21/24 (\$/gallon)

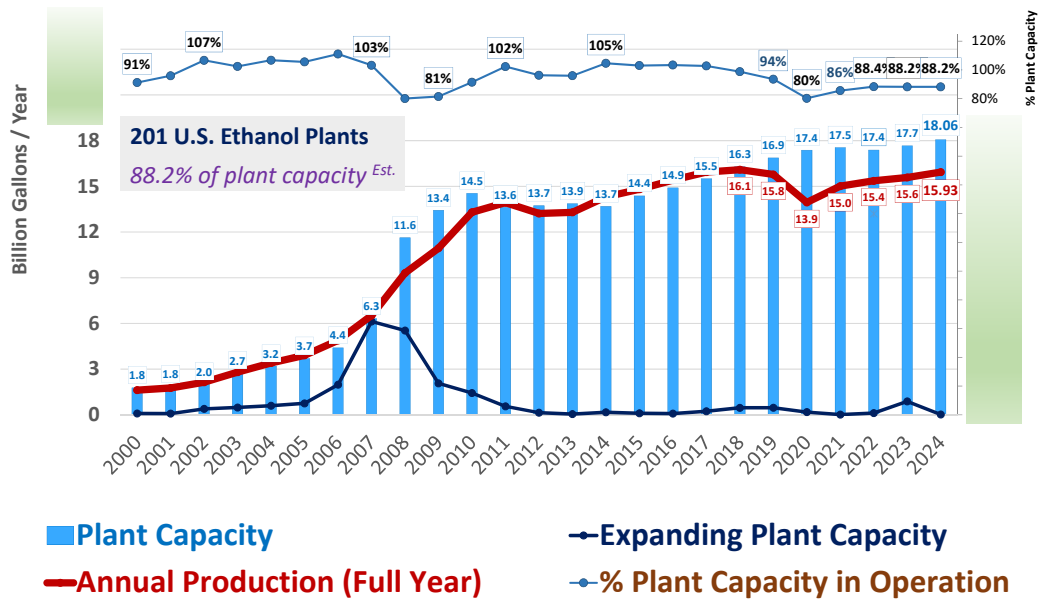
Regular Gasoline	U.S. Average	3.06	-0.2 ↓
Diesel	U.S. Average	3.54	-0.1 ↓

Select Spot Prices for Delivery Today

Region	Natural Gas (\$/million Btu)		Electricity (\$/MWh)		Spark Spread (\$/MWh)
	Price	Percent Change*	Price	Percent Change*	
New England	3.12	+9.7 ↑	48.19	-25.0 ↓	26.38
New York City	2.70	+18.0 ↑	47.38	+9.4 ↑	28.48
Mid-Atlantic	2.68	+14.1 ↑	43.46	+7.4 ↑	24.72
Midwest	2.68	+10.1 ↑	34.49	+36.6 ↑	15.75
Louisiana	2.84	+22.6 ↑	30.00	+20.0 ↑	10.11
Houston	2.43	+20.2 ↑	26.75	-6.1 ↓	9.77
Southwest	2.73	+7.2 ↑	35.75	+4.4 ↑	16.61
Southern CA	3.09	+8.7 ↑	35.05	+7.7 ↑	13.40
Northern CA	4.37	+7.3 ↑	60.61	-1.3 ↓	30.05
Northwest	2.57	+8.4 ↑	53.25	+7.6 ↑	35.23

U.S. Ethanol Capacity & Production

USDA ERS Biofuel Statistics – As of November 25, 2024



■ Plant Capacity —●— Expanding Plant Capacity
— Annual Production (Full Year) —●— % Plant Capacity in Operation

USDA National Daily Ethanol Report
 Agricultural Marketing Service
 Livestock, Poultry, and Grain Market News
 Email us with accessibility issues with this report.
 Report for 11/25/2024 – Final

November 25, 2024

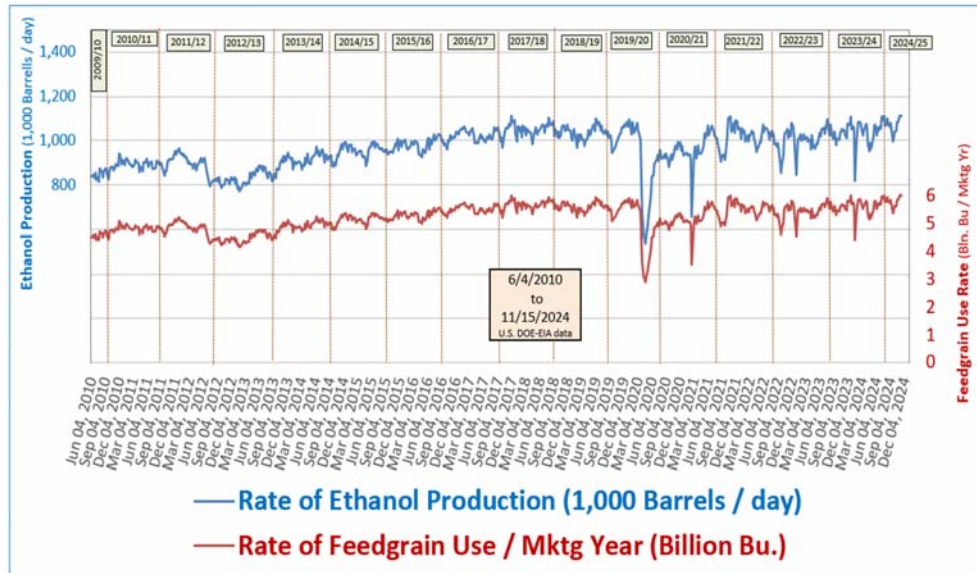
Future Settlements		Closing Settlement Prices as of 11/22/2024					
Exchange	Commodity						
CBOT	Corn (¢/bu)	425.50 (Dec 24)	435.25 (Mar 25)	442.50 (May 25)	446.00 (Jul 25)	432.75 (Sep 25)	436.25 (Dec 25)
CBOT	Ethanol (\$/gal)	2.1610 (Dec 24)	2.1610 (Jan 25)	2.1610 (Feb 25)	2.1610 (Mar 25)	2.1610 (Apr 25)	2.1610 (May 25)
NYMEX	Natural Gas (\$/MMBtu)	3.1290 (Dec 24)	3.2870 (Jan 25)	3.1420 (Feb 25)	2.8810 (Mar 25)	2.8520 (Apr 25)	2.9450 (May 25)
NYMEX	RBOB Gasoline (\$/gal)	2.0614 (Dec 24)	2.0149 (Jan 25)	2.0172 (Feb 25)	2.0342 (Mar 25)	2.2187 (Apr 25)	2.2204 (May 25)

Grain		US #2 Yellow Corn - Bulk								
Ethanol Plant										
State/Province/Region	Sale Type	Basis (¢/bu)	Basis Change	Price (\$/Bu)	Price Change	Average	Year Ago	Freight	Delivery	
Illinois	Bid	-18.00Z to 30.00Z	DN 6	4.0750-4.5550	DN 0.0725	4.3279	4.6125	DLVD - T	Current	
Indiana	Bid	0.00Z to 25.00Z	UP 7-UNCH	4.2550-4.5050	UP 0.0575-DN 0.0125	4.3472	4.3115	DLVD - T	Current	
Iowa East	Bid	-20.00Z to 7.00Z	UNCH	4.0550-4.3250	DN 0.0125	4.1875	4.7892	DLVD - T	Current	
Iowa West	Bid	-25.00Z to 20.00Z	DN 10-UNCH	4.0050-4.4550	DN 0.1125-DN 0.0125	4.2593	4.7155	DLVD - T	Current	
Kansas	Bid	-10.00Z to 45.00Z	UNCH	4.1550-4.7050	DN 0.0125	4.4550	4.9075	DLVD - T	Current	
Michigan	Bid	-55.00Z to -20.00Z	UNCH	3.7050-4.0550	DN 0.0125	3.8800	4.1700	DLVD - T	Current	
Minnesota	Bid	-40.00Z to 30.00Z	DN 8-UNCH	3.8550-4.5550	DN 0.0925-DN 0.0125	4.2593	4.5782	DLVD - T	Current	
Missouri	Bid	-27.00Z to -10.00Z	UNCH	3.9850-4.1550	DN 0.0125	4.0625	4.6075	DLVD - T	Current	
Nebraska	Bid	-25.00Z to 20.00Z	UNCH	4.0050-4.4550	DN 0.0125	4.2186	4.6596	DLVD - T	Current	
Ohio	Bid	0.00Z to 16.00Z	UNCH	4.2550-4.4150	DN 0.0125	4.3233	4.0858	DLVD - T	Current	
South Dakota	Bid	-57.00Z to -11.00Z	UP 3-DN 8	3.6850-4.1450	UP 0.0175-DN 0.0925	3.9258	4.2356	DLVD - T	Current	
Wisconsin	Bid	-45.00Z to -16.00Z	UNCH	3.8050-4.0950	DN 0.0125	3.9017	4.2325	DLVD - T	Current	

Source: USDA AMS Livestock, Poultry & Grain Market News
 Saint Joseph, MO | (816) 676-7000 | 24 Hour Market Report (573) 522-9244
www.ams.usda.gov/lpgmn
<https://mymarketnews.ams.usda.gov/> | <https://mymarketnews.ams.usda.gov/viewReport/3617>

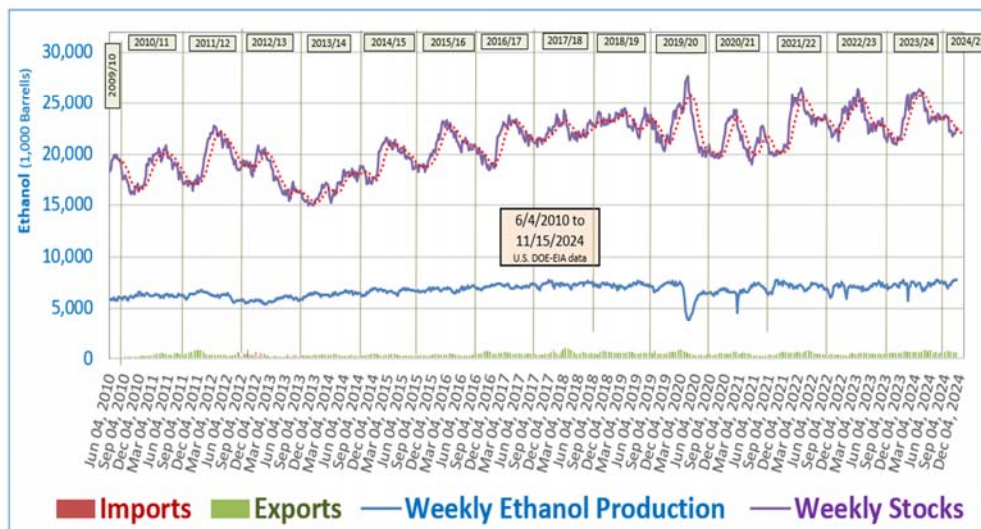
U.S. Ethanol Production & Corn Use Weekly

Based on DOE-EIA data on U.S. Ethanol Industry Trends as of November 15, 2024



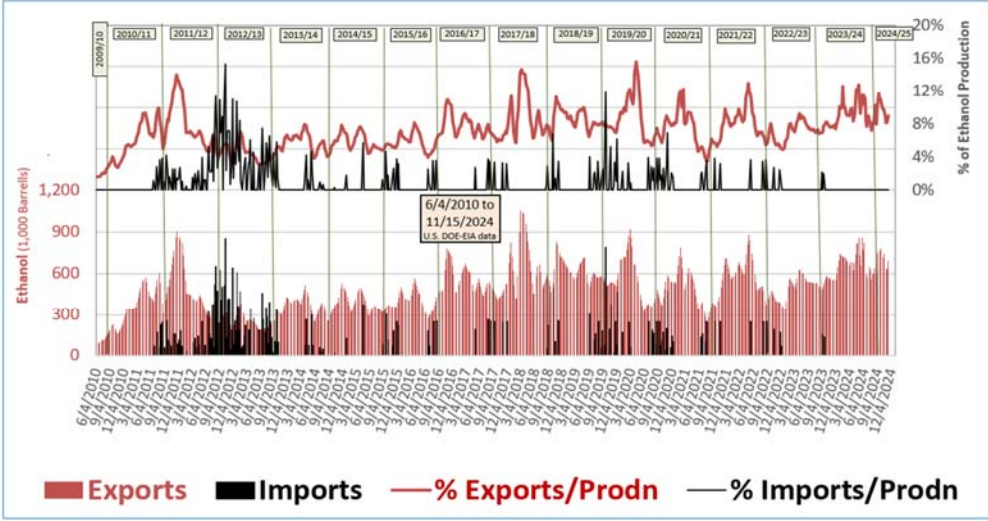
U.S. Ethanol Production & Stocks Weekly

Based on U.S. DOE – EIA on U.S. Ethanol Industry Trends as of November 15, 2024



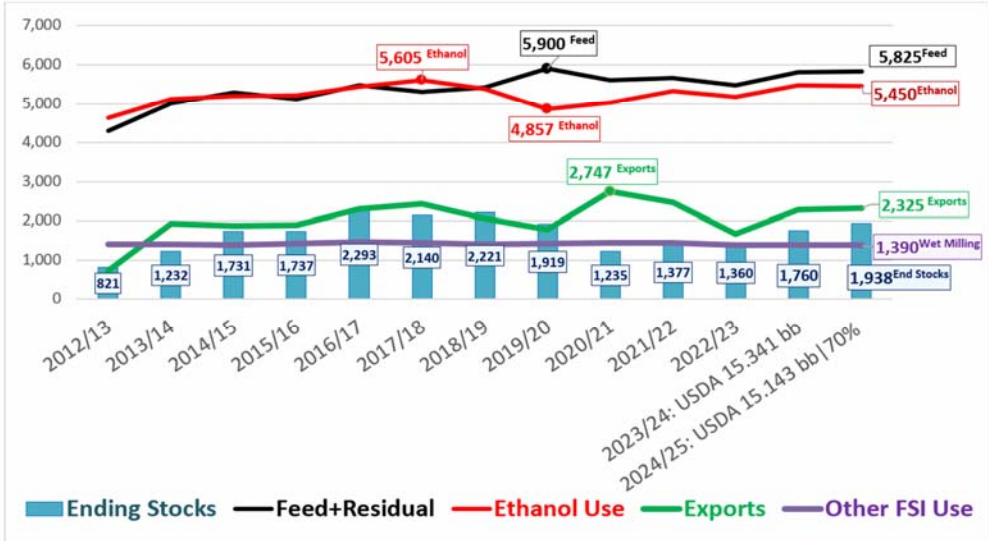
U.S. Ethanol Foreign Trade *Weekly*

Based on U.S. DOE – EIA on U.S. Ethanol Industry Trends as of November 15, 2024



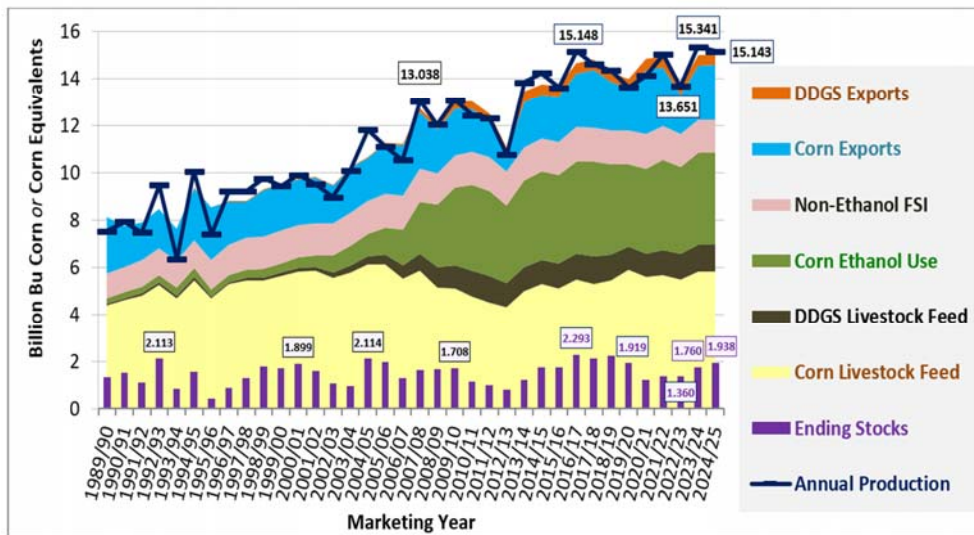
U.S. Corn Use & Ending Stocks

MY 2012/13 thru "New Crop" MY 2024/25 as of the 11/8/2024 WASDE Report + KSU estimates



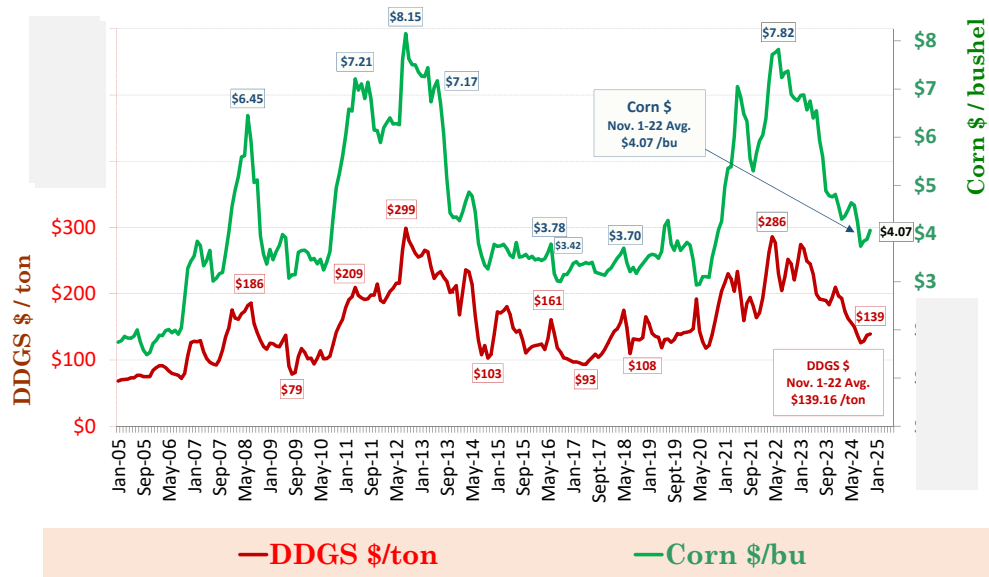
U.S. Corn Supply-Demand w. DDGS *Adj.*

MY 2012/13 thru "New Crop" MY 2024/25 as of the 11/8/2024 WASDE Report + KSU estimates



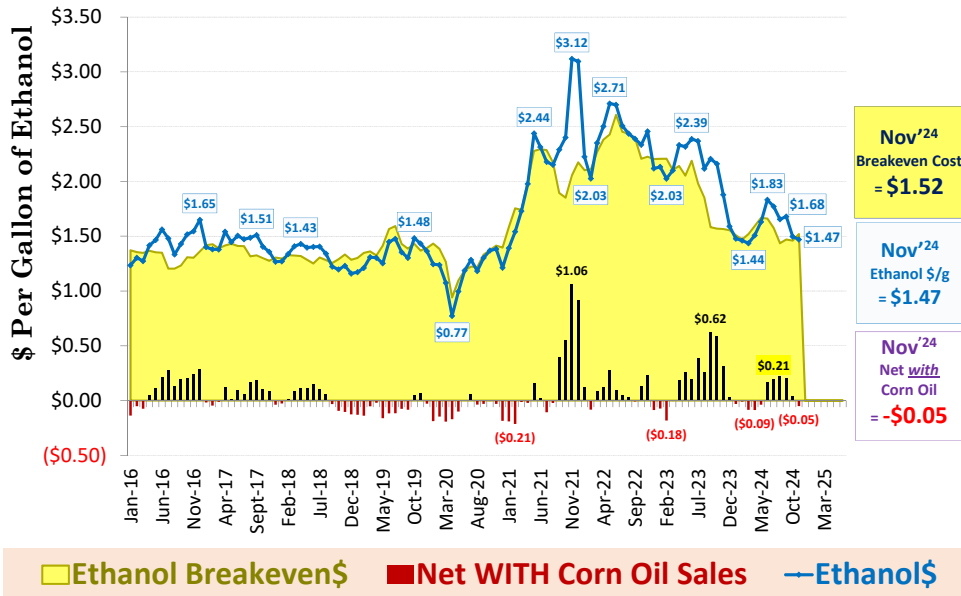
Ethanol DDGS & Corn Input Prices

ISU Ethanol Plant Model (January 2005 – November 22, 2024)



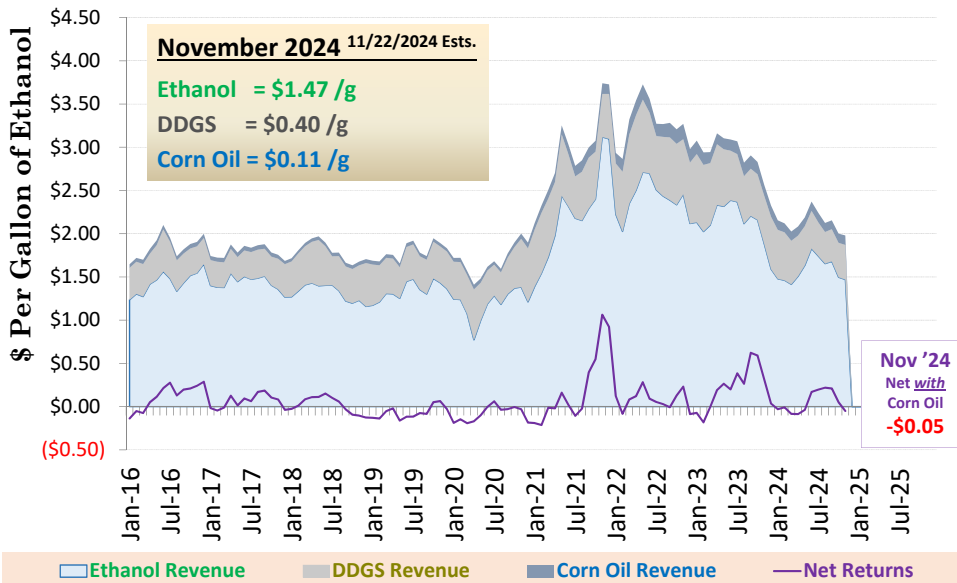
Ethanol Price, Cost & Profit/Loss

ISU Ethanol Plant Model (January 2007 – November 22, 2024)



Ethanol Revenues & Net Returns

ISU Ethanol Plant Model (January 2007 – November 22, 2024)



Ethanol Profitability Calculations *Iowa #s, 11/22/2024*

USDA AMS Bioenergy Report: National Weekly Grain Co-Products Report													Iowa State University Ethanol Profitability Model Estimates KSU Monthly Estimates	
USDA Slup: 3618														
Calculated on November 25, 2024														
Week / Date	Iowa Ethanol Plant \$	Iowa DDGS \$	Iowa Corn Oil \$	Corn x Ethanol Conversion	Corn x DDGS Conversion	Iowa Corn Input \$	EPV (Processing Value TM) \$/bushel	Corn EPV Calculated \$/bu	Ethanol \$/gallon	DDGS \$/gallon	Corn Oil \$/gallon	Total Revenue \$/gallon	Break Even \$ \$/gallon	Profit \$ \$/gallon
Sep-22	\$2.39	\$251.84	\$0.73	2.85		16.50	\$7.37	\$9.62	\$2.39	\$0.72	\$0.17	\$3.28	\$2.3969	(\$0.0075)
Oct-22	\$2.33	\$245.08	\$0.73	2.85		16.50	\$6.89	\$9.41	\$2.33	\$0.71	\$0.17	\$3.21	\$2.2071	\$0.1277
Nov-22	\$2.46	\$220.80	\$0.78	2.85		16.50	\$6.81	\$9.60	\$2.46	\$0.64	\$0.18	\$3.27	\$2.2260	\$0.2314
Dec-22	\$2.12	\$244.79	\$0.69	2.85		16.50	\$6.76	\$8.74	\$2.12	\$0.70	\$0.16	\$2.98	\$2.2043	(\$0.0859)
Jan-23	\$2.13	\$274.33	\$0.68	2.85		16.50	\$6.87	\$9.02	\$2.13	\$0.79	\$0.16	\$3.08	\$2.2100	(\$0.0700)
Feb-23	\$2.03	\$268.04	\$0.63	2.85		16.50	\$6.88	\$8.62	\$2.03	\$0.77	\$0.14	\$2.94	\$2.2100	(\$0.1800)
Mar-23	\$2.10	\$249.23	\$0.56	2.85		16.50	\$6.57	\$8.37	\$2.10	\$0.72	\$0.13	\$2.94	\$2.1000	\$0.0000
Apr-23	\$2.33	\$245.10	\$0.54	2.85		16.50	\$6.75	\$9.05	\$2.33	\$0.71	\$0.12	\$3.16	\$2.1400	\$0.1900
May-23	\$2.32	\$228.10	\$0.55	2.85		16.50	\$6.40	\$9.05	\$2.32	\$0.66	\$0.13	\$3.10	\$2.0500	\$0.2600
Jun-23	\$2.39	\$199.55	\$0.57	2.85		16.50	\$6.55	\$9.05	\$2.39	\$0.57	\$0.13	\$3.09	\$2.1900	\$0.2000
Jul-23	\$2.37	\$191.93	\$0.65	2.85		16.50	\$5.93	\$8.73	\$2.37	\$0.55	\$0.15	\$3.07	\$1.9800	\$0.3800
Aug-23	\$2.12	\$190.86	\$0.68	2.85		16.50	\$5.59	\$8.29	\$2.12	\$0.55	\$0.16	\$2.82	\$1.8500	\$0.2800
Sep-23	\$2.21	\$189.81	\$0.68	2.85		16.50	\$4.89	\$8.25	\$2.21	\$0.55	\$0.15	\$2.91	\$1.5800	\$0.6200
Oct-23	\$2.16	\$183.35	\$0.62	2.85		16.50	\$4.78	\$7.91	\$2.16	\$0.53	\$0.14	\$2.83	\$1.5700	\$0.5900
Nov-23	\$1.88	\$194.30	\$0.55	2.85		16.50	\$4.76	\$7.28	\$1.88	\$0.56	\$0.13	\$2.56	\$1.5700	\$0.3100
Dec-23	\$1.59	\$209.67	\$0.53	2.85		16.50	\$4.81	\$6.58	\$1.59	\$0.61	\$0.13	\$2.33	\$1.5500	\$0.0400
Jan-24	\$1.48	\$196.51	\$0.49	2.85		16.50	\$4.57	\$6.32	\$1.48	\$0.57	\$0.11	\$2.16	\$1.5100	(\$0.0300)
Feb-24	\$1.46	\$193.06	\$0.45	2.85		16.50	\$4.30	\$6.21	\$1.46	\$0.56	\$0.10	\$2.12	\$1.4700	(\$0.0100)
Mar-24	\$1.44	\$174.04	\$0.44	2.85		16.50	\$4.36	\$5.87	\$1.41	\$0.50	\$0.11	\$2.03	\$1.5200	(\$0.0800)
Apr-24	\$1.51	\$182.51	\$0.43	2.85		16.50	\$4.49	\$5.90	\$1.51	\$0.47	\$0.11	\$2.09	\$1.5900	(\$0.0900)
May-24	\$1.63	\$156.41	\$0.41	2.85		16.50	\$4.64	\$6.18	\$1.63	\$0.45	\$0.10	\$2.19	\$1.6400	(\$0.0100)
Jun-24	\$1.83	\$150.03	\$0.44	2.85		16.50	\$4.59	\$6.72	\$1.83	\$0.43	\$0.11	\$2.37	\$1.6400	\$0.2000
Jul-24	\$1.77	\$137.03	\$0.45	2.85		16.50	\$4.24	\$6.35	\$1.74	\$0.39	\$0.11	\$2.24	\$1.5800	\$0.1900
Aug-24	\$1.66	\$126.08	\$0.43	2.85		16.50	\$3.96	\$6.01	\$1.66	\$0.36	\$0.10	\$2.12	\$1.5200	\$0.1300
Sep-24	\$1.68	\$128.51	\$0.42	2.85		16.50	\$4.11	\$6.10	\$1.68	\$0.37	\$0.10	\$2.15	\$1.5700	\$0.1100
Oct-24	\$1.50	\$137.47	\$0.43	2.85		16.50	\$3.88	\$5.65	\$1.50	\$0.40	\$0.11	\$2.00	\$1.4600	\$0.0400
Nov-24	\$1.47	\$139.16	\$0.44	2.85		16.50	\$4.07	\$5.54	\$1.47	\$0.40	\$0.11	\$1.98	\$1.5200	(\$0.0500)

CBOT Soybean Oil Futures

Weekly Continuous Chart: October 2019 thru November 25, 2024

ZL - Soybean Oil (Globex) - Weekly Chart

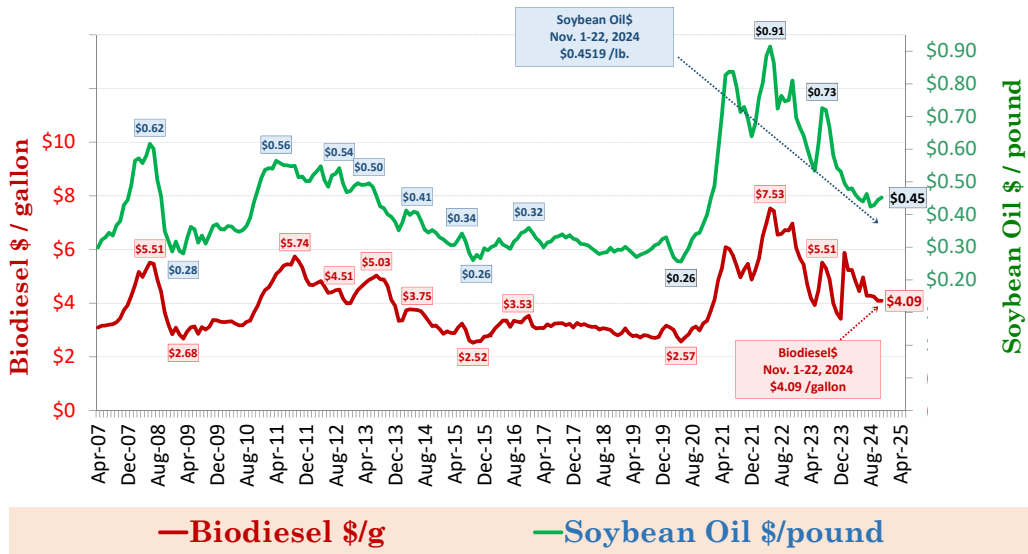
Change: -1.01

11/25/2024 O: 41.96 H: 42.45 L: 40.64 C: 40.95 Vol: 147105 OI: 574429



Biodiesel & Soybean Oil Prices

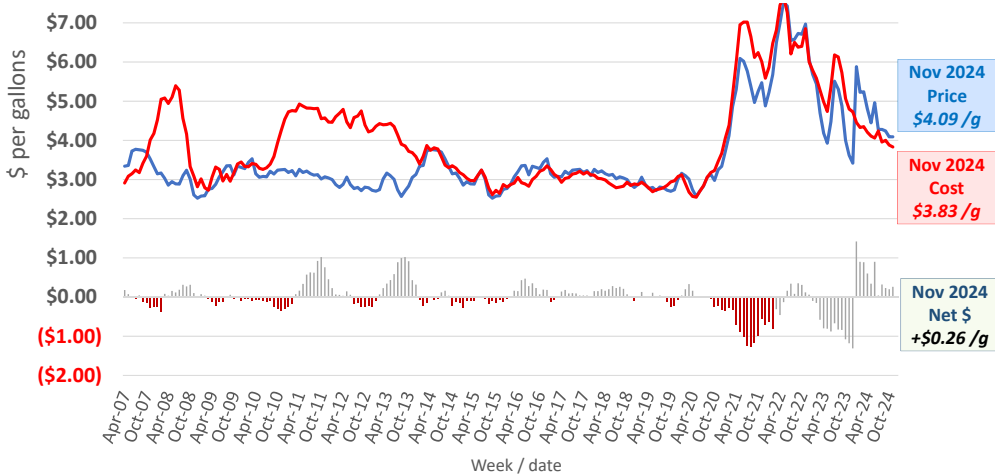
ISU Conventional Biodiesel Plant Model (April 2007 – November 22, 2024)



—Biodiesel \$/g —Soybean Oil \$/pound

Biodiesel \$, Costs & Profits

ISU Conventional Biodiesel Plant Model (April 2007 – November 22, 2024)



■ Profit-Loss \$/gal — Biodiesel \$/gal — Biodiesel Breakeven \$/gal

Questions?

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