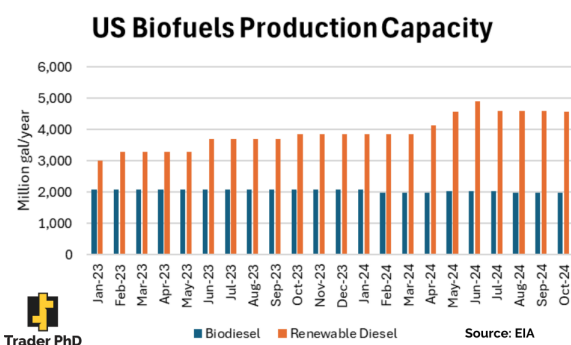




January 15, 2025

Biofuel Production Capacity

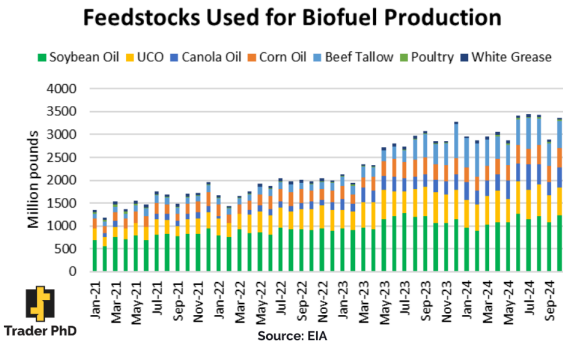
U.S. capacity for renewable diesel and other biofuels, excluding biodiesel and ethanol, stabilized in October following months of declines. Capacity totaled 4.58 billion gallons, unchanged from the previous month, according to data from the Energy Information Administration. Capacity fell sharply in July due to poor margins challenging biofuel producers. Total capacity remained elevated compared to previous months and years. Biodiesel production capacity remained unchanged during the month at 1.995 billion gallons. Ethanol capacity rose to 18.310 billion gallons, the highest since June 2024.



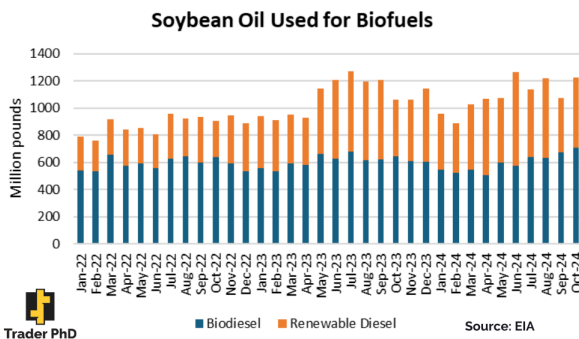
Reports of producers unhappy with current renewable diesel margins could challenge capacity, as some companies shut down or idle plants.

Feedstock Usage

Feedstocks used for biofuel production in October totaled 3.368 billion pounds, up 17% from the previous month, according to EIA data. Feedstock usage increased across all major categories, including canola oil, corn oil, soybean oil, UCO, and beef tallow.



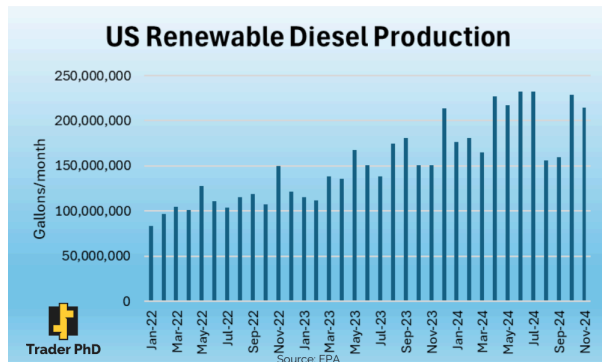
Soybean oil used for biofuel consumption rose 14% from the previous month to 1.227 billion pounds, the highest volume since June 2024. The share of soybean oil used in renewable diesel production rose to 42%. Additionally, soy oil accounted for 36% of total feedstock usage in U.S. renewable fuel production, maintaining an overall downtrend since reaching a peak in 2022.



Feedstocks dominate renewable fuel costs, accounting for the largest share of production expenses. That makes biofuel producers extra particular in feedstock sources to maximize margins as best they can. Crude soybean oil is the cheapest compared to its feedstock competitors following the recent rally in vegetable oil markets.

Biomass-Based Diesel

Biomass-based renewable diesel production fell 6.4% in November to 214.5 million gallons, according to data from the Environmental Protection Agency. Higher output came as renewable diesel production margins rose to an 11-month high in November. Lower supply growth in the third quarter of 2024 allowed for better returns. Margins falling back toward multi-year lows heading into the new year will likely pressure future production.

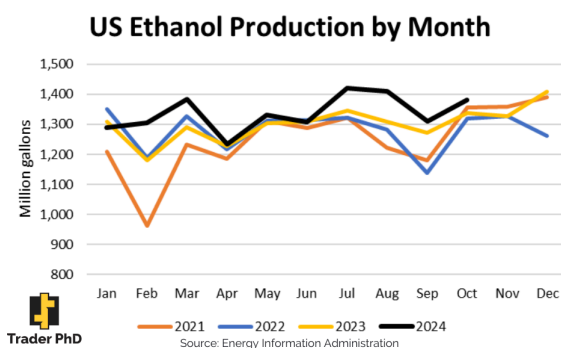


Renewable jet fuel production fell 46% in November, following a 50% decline during the previous month. Output totaled 2.39 million gallons, the lowest volume since March 2024. Year-to-date production of renewable jet fuel is up 202% from the same period last year. The push for decarbonization in the aviation sector remains supportive of sustainable jet fuel growth. The drop-in alternative to petroleum-based jet fuel has seen substantial growth since the renewable diesel boom, primarily in 2024, as airlines increasingly partnered with green energy companies.

Biodiesel production fell 10% to 133 million gallons after reaching a 14-month high in October. Production trends have been relatively flat over the past few years due to increased investments in renewable diesel. Poor margins will remain a challenge after the recent rally in soybean oil prices, which is pushing some biodiesel producers out of the spot market.

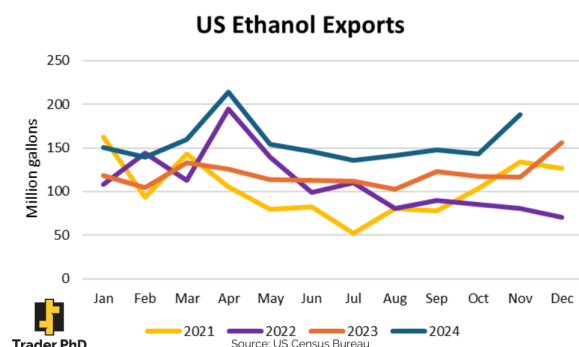
Ethanol

U.S. ethanol production rose 5.4% in October to 1.381 billion gallons. Output was up 3.1% from October 2023. Ethanol production continued to operate near all-time highs despite falling margins. Processors continued to be optimistic about domestic and international demand despite some uncertainty. Year-to-date production reached 13.37 billion gallons, up 3.8% from last year.



U.S. ethanol exports continued to surge in November amid strong international demand. The latest data from the U.S. Census Bureau showed that shipments totaled 188 million gallons in November.

Total shipments for the calendar year have reached 1.72 billion gallons, up 35% from the same period last year. Exports also surpassed the previous annual record of 1.6 billion gallons set in 2018.

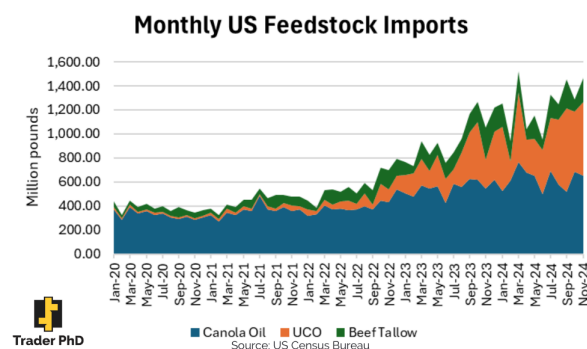


Canada remained the top importer for the 44th consecutive month, with exports rising 13% to 57 million gallons in November. India was the No. 2 destination, with exports to the country reaching a 10-month high of 24 million gallons. Other key markets included the United Kingdom, Colombia, and the Philippines.

Carbon emissions policies in countries like Canada have boosted demand for U.S. ethanol. Green policies in the European Union have led to increased exports. Central and South America have also been major growth areas for the U.S. ethanol market.

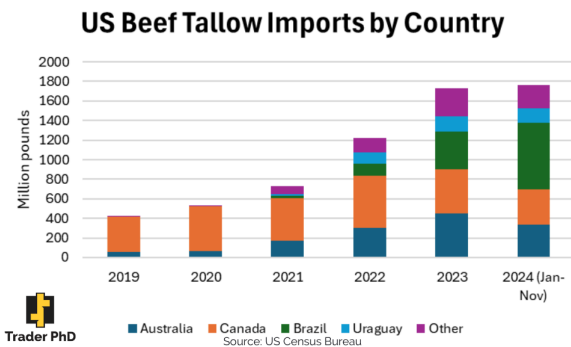
Biofuel Feedstock Imports

U.S. feedstock imports of canola oil, UCO, and beef tallow rose 13.7% in November to 1.463 billion pounds, the third-largest volume on record, according to U.S. Census data. Canola oil imports were down 4.4% on the month. However, that was offset by a 22% and 90% increase in imports of UCO and tallow.



Beef tallow imports totaled 197 million pounds. The increase was led by shipments from Brazil, which were the second-largest on record. Year-to-date tallow imports reached 1.76 billion pounds, up 15% from the same period in 2023. Brazil has been the primary growth factor, as the country maintained its seat as the third-largest cattle producer in the world. A breakdown by

country shows a decline in shipments from Australia, Canada, and Uruguay compared to a year ago.



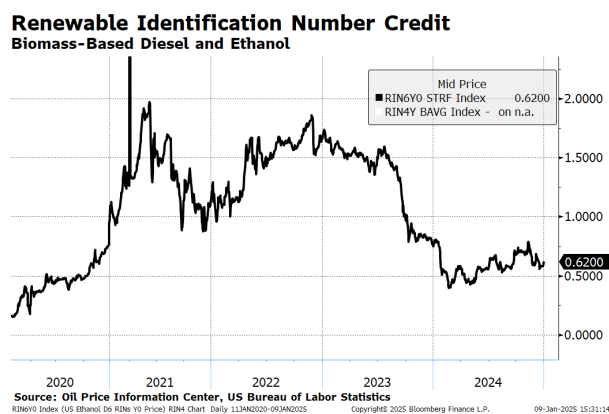
RIN Prices

The Environmental Protection Agency defines Renewable Identification Numbers (RINs) as the “currency” of the Renewable Fuel Standard (RFS) program, and credits are used for compliance to meet renewable volume obligations.

D4 RIN = Biomass-based diesel

D6 RIN = Ethanol

D6 RINs set the price floor for D4 RINs because the RFS program counts R4 RINs toward the total biofuel requirement that drives D6 RIN prices. Since 2023, D4 RINs have mostly been trading near the price floor set by D6 RINs because D4 RIN generation has far exceeded the rates necessary to meet the D4 and D5 blending obligations.



RIN prices for ethanol and biomass-based diesel finished December unchanged compared to November. The price of tradeable biofuel credits increased by 17% during the third quarter. quarter as tighter supplies supported credit prices.

Additional Comments

On Jan. 10, the U.S. Treasury Department issued a notice that it intends to release guidance on the 45Z biofuel tax credit. The notice allows biofuel producers to take the guidance and use it, but the rule still lacks details about taking advantage of the full credit. More rules are needed for implementing climate-smart agricultural practices to lower carbon emissions and factor into carbon intensity scores that outline what producers receive for using different feedstocks.

The Treasury Department signaled that UCO imports could receive larger scrutiny in tax credit eligibility. U.S. industry groups have been fighting for months to have the government look into the verification process due to the concern about palm oil being considered UCO.