

Chart of the Week #2023-28
The Renewable Diesel Margin
– Post-2023 RFS RVO Set Rule

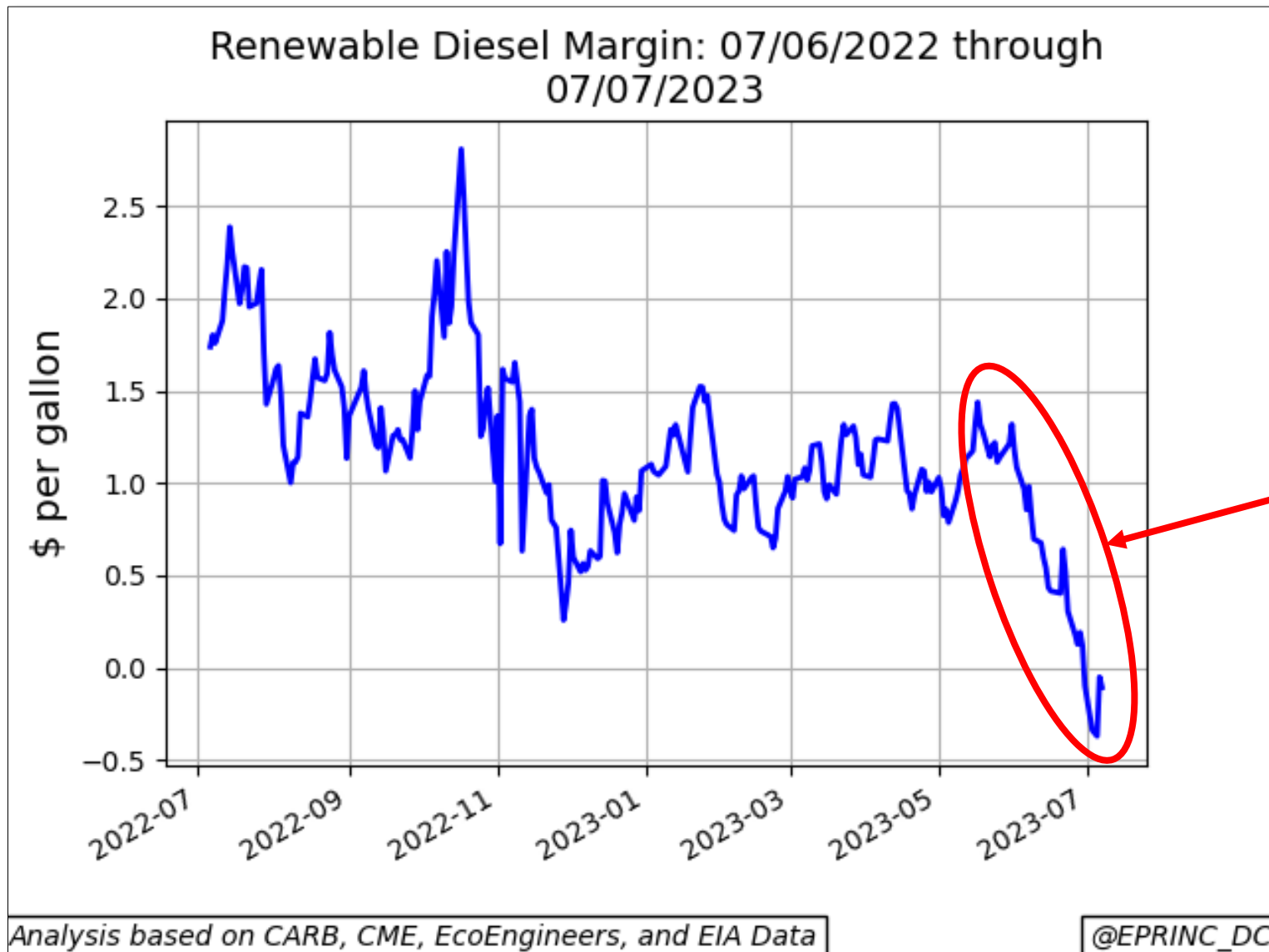
Max Pyziur
July 20, 2023
Washington, DC

The Renewable Diesel Margin – Post-2023 RVO Set Rule

RVO Percentages June 21 2023					
	Cellulosic Biofuel	Biomass- Based Diesel	Advanced Biofuel	Renewable Fuel	Type
2023	0.41%	2.54%	3.33%	11.92%	Proposed
2024	0.82%	2.60%	3.80%	12.55%	Proposed
2025	1.23%	2.67%	4.28%	13.05%	Proposed
2023	0.48%	2.58%	3.39%	11.96%	Final
2024	0.63%	2.82%	3.79%	12.50%	Final
2025	0.81%	3.15%	4.31%	13.13%	Final
Difference: "Final" – "Proposed"					
2023	0.07%	0.04%	0.06%	0.04%	
2024	-0.19%	0.22%	-0.01%	-0.05%	
2025	-0.42%	0.48%	0.03%	0.08%	
Analysis based on EPA Data				EPRINC	

Biodiesel refiners were looking for a bump in the 2023 Biomass Diesel RVO Percentages.

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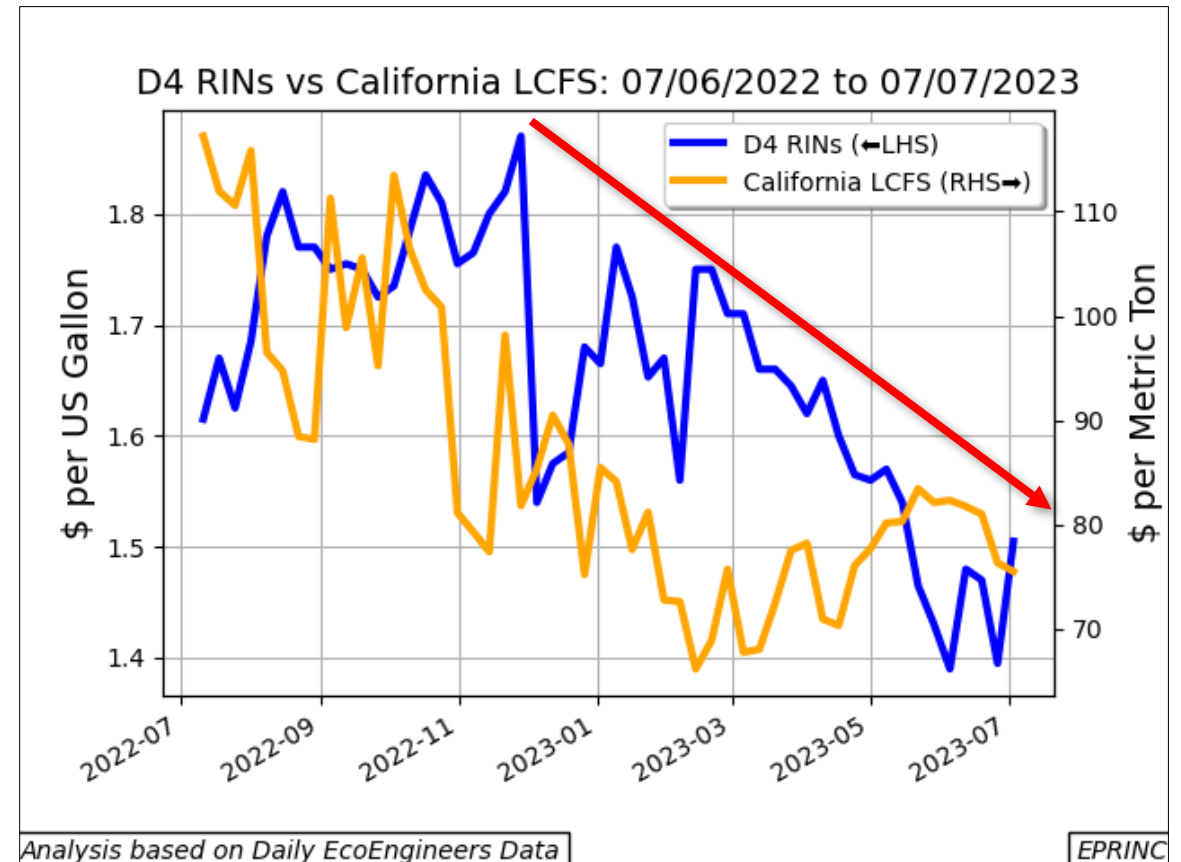
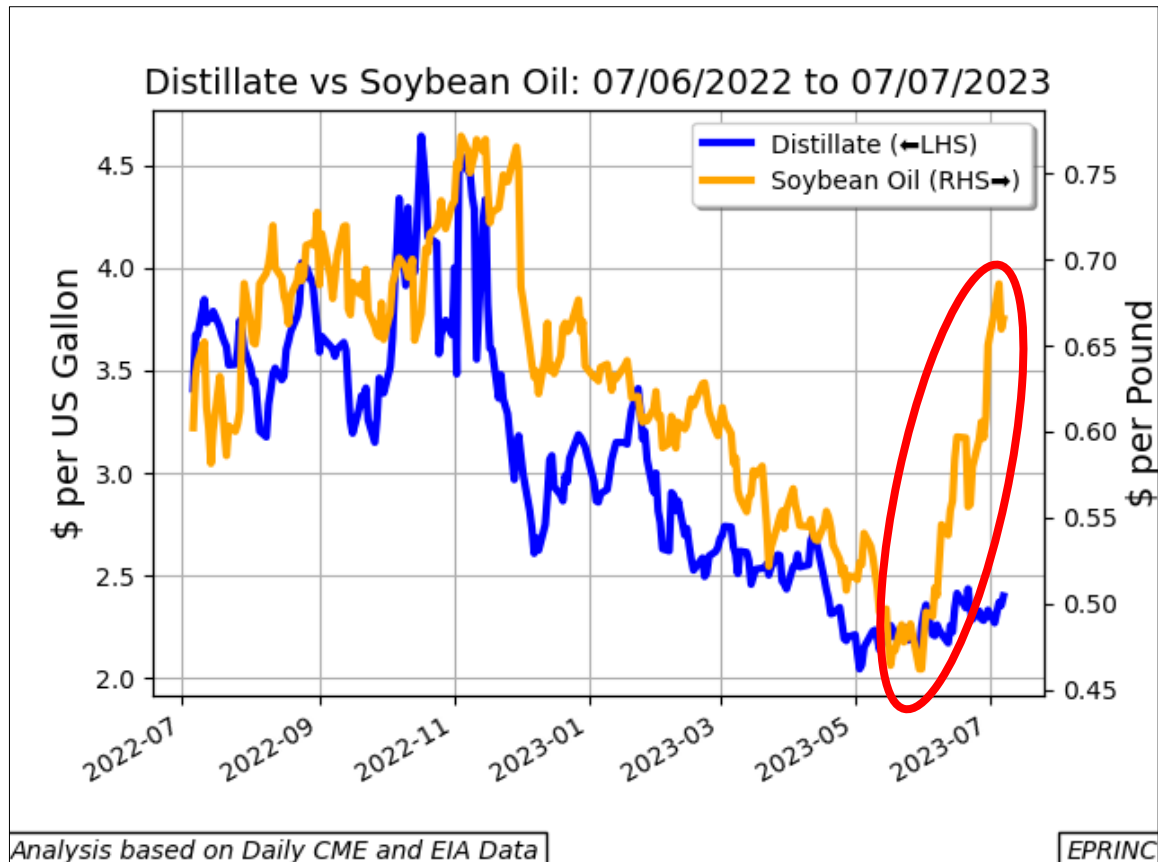
Following the June 21 2023 EPA Final RFS RVO Set Rule announcement, the Renewable Diesel Margin collapsed.

The Renewable Diesel Margin – Post-2023 RVO Set Rule

Inputs: Commodity and Credit Prices

Soybean oil is a key input to renewable diesel production. Recent soybean oil prices have surged on tight supply/demand balances and uncertainty regarding the availability of Ukrainian shipments.

Renewable diesel production is seen as a valuable generator of D4 biomass diesel RINs and California's LCFS credits. D4 prices have dropped because of EPA's unanticipated on low biomass diesel RVOs.



The Renewable Diesel Margin – Post-2023 RVO Set Rule

Calculating The Renewable Diesel Margin

- The formula for the renewable diesel margin is:
- $\text{NYMEX ULSD} + (1.7 * \text{Biodiesel RIN}) + (0.00707 * \text{LCFS Credit}) - (8.5 * \text{CBOT Soybean Oil})$ where:
 - New York Ultra Low Sulfur Diesel (ULSD) price, \$ per gallon
 - D4 Biodiesel RINs \$ per RIN (D4 RINs are converted at a rate of 1.7 D6 ethanol RINs)
 - Low Carbon Fuel Standard (LCFS) credit, \$ per metric ton (with a carbon intensity of 54, renewable diesel earns 0.00707 of an LCFS credit per gallon)
 - Chicago soybean oil price, \$ per pound (8.5 pounds of soybean oil are required to produce one gallon of renewable diesel)
- This slide deck is available at: <https://eprinc.org/chart-of-the-week/>
- For more information on this chart, please contact Max Pyziur (maxp@eprinc.org).