

Runaway RIN Costs Fail to Advance RFS Objectives and Put Merchant Refiners at Risk

- The skyrocketing costs of Renewable Fuel Standard (RFS) compliance credits, called Renewable Identification Numbers (RINs), are threatening to put independent, American refiners out of business as they struggle in the aftermath of the COVID19 epidemic.
- This will result in lost fuel supplies, making us more reliant of foreign fuel imports, and thousands of lost union jobs; thwarting our economic recovery in the process.
- High RIN prices are not even resulting in enough biofuel consumption to meet the RFS requirements. The U.S. Energy Information Administration (EIA) noted 800 million fewer RINs were generated last year than are needed to meet the RFS mandate, despite skyrocketing RIN prices.
- EPA can address this problem in the near term through the RFS Renewable Volume Obligation (RVO) rule by:
 - Lowering last year's standard by at least 800 million gallons, which is equivalent to the shortfall in credits (RINs) generated.
 - Since refiners do not have to hand in credits for last year's standard until January of 2022, this action will still provide relief.
 - Set this year's standard and next year's standard at the level of actual ethanol consumption as predicted by the Energy Information Administration.
 - These actions will help prevent a scarcity of RINs and bring costs down significantly, without impacting the amount of ethanol consumed domestically.
- Over the long term EPA needs to develop a RIN cost containment mechanism that ensures independent refiners can remain competitive, protecting domestic fuel supplies and union jobs in the process.

The adverse impact of COVID19, has resulted in a loss of over one million barrels per day of domestic refining capacity. Skyrocketing RIN prices threaten more closures as refiners still struggle to recover.

- Eight refineries fully or partially closed or announced closure last year alone, with nine in the last two years, resulting in over one million barrels per day of lost refining capacity.

Company	Location	Refining Barrels Per Day (BPD)
Phillips 66	Rodeo, CA	140,000
Phillips 66	Santa Maria, CA	44,500
Marathon	Martinez, CA	161,000
Marathon	Gallup, NM	26,000
Marathon	Dickinson, ND	19,000
HollyFrontier	Cheyenne, WY	52,000
PES	Philadelphia, PA	335,000
Shell	Covent, LA	240,000
PBF	Paulsboro, NJ	85,000
	TOTALS	1,102,500

- These closures result in over 30,000 direct and indirect refining job losses.
- When fuel demand returns, the gap left from these closures will be filled with foreign imports.
- The adverse impact of skyrocketing RINs puts additional refining capacity at risk.

Extensive financial sector analysis indicates RINs cost disproportionately impacts merchant refiners. The Renewable Fuels Association has also acknowledged this reality.

- Wells Fargo Equity Research: "It is well known merchant refiners struggle to recover elevated RINs costs while others benefit, particularly blenders and retail."¹

¹ Wells Fargo Equity Research. "Independent Refiners: Eliminate Ethanol RINs, an Idea Whose Time Has

- ScotiaBank Equity Research noted that “margin capture” (e.g. the ability of refiners to actually capture portions of the crack spread, which is the key profitability metric in refining) is “negatively impacted” by high RINs.²
 - The firm also conducted a regression analysis indicating merchant refiners are not fully recovering RIN costs.
- A recent Wall Street Journal story notes: “The jump in crack spreads isn’t all feeding into refiners’ bottom lines. To varying degrees, companies are contending with a leap in the cost of renewable identification numbers, which are credits that refiners buy if they don’t meet mandates for blending biofuels into transportation fuels. That is one reason why refining stocks haven’t all rallied in line with crack spreads, said Dhruv Kharbanda, an analyst at Tudor, Pickering, Holt & Co.”³
- The inequity between merchant refiners and integrated refiners with blending capacity is a historic characteristic of the program. Testifying before Congress in 2016, the Renewable Fuels Association (RFA) indicated that RINs were, “A Cost for Some, A Profit for Others,” and noted, “a refiner who has purchased RINs on the open market cannot markup the selling price of its gasoline to recoup RIN expenses if it wishes to remain competitive with other refiners who profited from the sale of detached RINs.”⁴
- At current prices, RINs represent a greater than \$30 billion market that forces merchant refiners to massively subsidize integrated refiners and large scale blenders. Merchant refiners are spending more on RINs than all other costs, except for crude oil purchases, combined.

Government Data Indicates Biofuel Consumption is NOT Keeping Up with the Mandate, Risking Consumer Fuel Shortages

- The U.S. Energy Information Administration (EIA) noted 800 million fewer RINs were generated in 2020 than are required to meet the mandate, even after taking into account that the standard adjusts for decreases in gasoline demand:
 - “As consumption of gasoline and diesel fuel fell in 2020, the total volumetric RFS requirements fell by an estimated 1.4 billion gallons (7%), while actual biofuel RIN generation according to official EPA data fell short of this estimated adjusted level by more than 0.8 billion gallons (Figure 4)”⁵
- EPA RIN generation data indicates the nation is only on track to generate 13.9 billion ethanol RINs, but applying last year’s standard to projected transportation fuel demand (after backing out renewables) indicates refiners will need 15.1 billion.
- Applying the 2020 standard to 2021, given EPA RIN generation data and EIA fuel demand projections, will likely result in another 1.3 billion plus deficit in RINs generation.
- EIA Short Term Energy Outlook (STEO) data indicates that transportation fuel demand, after backing out renewables, will total about 175,808.65 million gallons in 2021.⁶ Multiplying those numbers by the 2020 RVO percentages to determine the 2021 requirement in a flat RVO scenario, and then comparing the requirement to annualized EPA RIN generation data⁷, yields the following (noted in millions of RINs):

Come.” June 13, 2021. Available at: <https://www.fuelingusjobs.com/library/public/Study/Wells-Fargo-Rpt-Full-End-Ethanol-RINs-34-.pdf>

² ScotiaBank Equity Research Daily Edge. “RIN Is Rising, 1Q21 Could Be More Challenged than What Meets the Eye.” March 3, 2021.

³ Wallace, Joe. “Summer Road Trips, Falling Crude Prices Pump Up Refiners’ Profits.

Refiners are benefiting from surging gasoline demand, but investors remain wary because of rising costs for meeting environmental rules.” *Wall Street Journal*. August 18, 2021. Available at: <https://www.wsj.com/articles/summer-road-trips-falling-crude-prices-pump-up-refiners-profits-11629278227>

⁴ RFA Congressional Testimony: <https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/Testimony-Dinneen-EP-RFS-Hrg-062216.pdf>

⁵ EIA. “Ethanol and biomass-based diesel RIN prices approaching all-time highs.” *This Week In Petroleum*. February 18, 2021. Available at: https://www.eia.gov/petroleum/weekly/archive/2021/210218/includes/analysis_print.php

⁶ EIA Short Term Energy Outlook. Gasoline and ethanol demand on table 4a, biodiesel consumption on Table 8a, and diesel fuel consumption available at: <https://www.eia.gov/opendata/qb.php?category=1039898&ssid=STEO.DSTCPUS.A>

⁷ EPA Moderated Transaction System (EMTS) data available at: <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/public-data-renewable-fuel-standard>

Category	2020 RVO %	Projected	Totals Gen to Date (Jan-July)	21 Annualized	Difference
Overall Renewable	0.1156	20,323.48	11,064.01	18,966.88	-1,356.60
De Facto D6		15,172.29	8,105.07	13,894.41	-1,277.88

- If such a deficit becomes a reality this year, it would represent the third straight year of drawdowns in the RIN bank, as EPA noted there was a 400 million RIN bank drawdown in 2019, which represented a 35 percent decrease in banked RINs at the time.⁸
- Persistent RIN generation deficits highlight the fact that an overly aggressive RVO is not advancing the program's objectives, while putting the nation on pace to literally run out of RINs if percentage requirements are not reduced.
 - In such a situation, ALL refiners could essentially be forced via the RFS to curtail production or export more than they naturally would, assuming they can find a sufficient export market.

Failing to Address Runaway RIN Prices Risks Higher Consumer Fuel Costs

- An RVO that risks prohibiting refiners to produce enough fuel to meet demand risks potential supply shortages, which historically have resulted in higher consumer fuel costs.
- Refinery closures that could result from exorbitant RIN costs will also create fuel supply challenges.
- In assessing reason for high gas prices and fuel supply challenges in the West over the summer, EIA noted, "Although many factors contribute to regional differences in retail gasoline prices, refinery closures in the West Coast and Rocky Mountain regions in the past year may be contributing to low refinery output of gasoline and the resulting low inventories, which contributes to higher prices."⁹
- One of the refineries that closed was HollyFrontier's Cheyenne Refinery, which previously represented 7 percent of the region's refining capacity. The company noted costs attributable to the RFS as a reason for closure.¹⁰

⁸ 84 Fed. Reg. at 36,767

⁹ EIA. "Low gasoline inventories and reduced refinery capacity raise U.S. retail gasoline prices in the West." *This Week In Petroleum*. August 4, 2020. Available at: https://www.eia.gov/petroleum/weekly/archive/2021/210804/includes/analysis_print.php

¹⁰ <https://www.hollyfrontier.com/investor-relations/press-releases/Press-Release-Details/2020/HollyFrontier-Announces-Expansion-of-Renewables-Business/default.aspx>