



June 24, 2024  
Administrator Michael Regan  
U.S. Environmental Protection Agency  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, N.W.  
Mail Code: 1101A  
Washington, D.C. 20460

**Re: Petition for Rulemaking to Adjust the Biomass-Based Diesel, Advanced, and Total Renewable Fuel Volumes under the Renewable Fuel Standard for 2024 and 2025**

Dear Administrator Regan:

Pursuant to 5 U.S.C. 553(e), Clean Fuels Alliance America<sup>1</sup> hereby petitions EPA to adjust its biomass-based diesel volumes for 2024 and 2025 to reflect current economic, technical, and environmental realities, and to increase the advanced and total volumes by a proportionate amount.

In the “Set Rule” for 2023–2025, EPA for the first time set the Renewable Fuel Standard (RFS) volumes prospectively for a multi-year period. Unfortunately, EPA’s multi-year projections did not sufficiently consider ongoing and planned industry expansions, resulting in low volumes that fail to meet the RFS program’s objectives to increase the volume of renewable fuel that is blended into the nation’s transportation fuel supply. Indeed, EPA set the volumes—particularly the volumes for biomass-based diesel (BBD) and advanced biofuel—significantly below actual renewable fuel production during the first months of the compliance year, ignoring available data from the EPA Moderated Transaction System (EMTS) and other federal agencies. Those low volumes have discouraged biofuel production and minimized GHG reductions and other benefits of the RFS. EPA even acknowledged that 5.1 billion gallons of renewable diesel capacity has been announced or was already under construction, yet the RVOs for BBD and advanced are not even close to the projected capacity.<sup>2</sup> In February 2023, EIA projected that domestic renewable diesel capacity could more than double through 2025 to 5.9 billion gallons.<sup>3</sup>

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<sup>1</sup> Clean Fuels Alliance America (Clean Fuels) is the U.S. trade association representing the entire biodiesel, renewable diesel, and sustainable aviation fuel supply chain, including producers, feedstock suppliers and fuel distributors. Made from an increasingly diverse mix of resources such as recycled cooking oil, soybean oil, and animal fats, the clean fuels industry is a proven, integral part of America’s clean energy future. We serve as the clean fuel industry’s primary organization for technical, environmental, and quality assurance programs and are the strongest voice for its advocacy, communications, and market development.

<sup>2</sup> 87 Fed. Reg. 80,597.

<sup>3</sup> U.S. Energy Information Administration. Today in Energy: Domestic renewable diesel capacity could more than double through 2025. (February 2, 2023). <https://www.eia.gov/todayinenergy/detail.php?id=55399>

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Multiple developments since the promulgation of the Set Rule have made it abundantly clear that the BBD and advanced volumes for 2023 through 2025 were too low. To begin with, numerous oil and gas companies have converted entire petroleum refining facilities to produce renewable diesel. The production of BBD in 2023 was also far higher than what EPA projected in the Set Rule, causing obligated parties to accumulate excess RINs to use in future years. And EPA’s concerns about “feedstock switching” have not materialized. Instead, feedstock imports—which EPA did not consider in the Set Rule—have demonstrated that significantly more BBD could be produced without shifting oils away from food products or other uses.

But EPA’s low RFS volumes have held back the promising potential of those developments. RIN prices have fallen 45% since the Set Rule was finalized, driving down margins for BBD producers and reducing or eliminating their ability to generate more BBD. As a result, BBD producers have shuttered production facilities and scuttled or pared back planned expansions. Obligated parties have halted investments in BBD production too, including abandoning plans to convert facilities to renewable diesel production and even converting some facilities back to refining petroleum.

Without an adjustment, EPA will fail to maximize the benefits of the RFS. EPA will ensure the nation’s fuel mix will shift back towards petroleum, missing out on an opportunity to reduce GHG emissions and promote green jobs. Significant carbon reductions will fail to be realized. Failing to adjust the BBD and advanced volumes to an appropriate level also will minimize the industry’s availability to produce SAF—a product that is essential to decarbonizing the aviation industry.

During the Set rulemaking process, Clean Fuels’ request to increase D4 BBD volumes by 500 million gallons year over year and increase D5 advanced by 1 billion RINs year over year was, in retrospect, conservative. We warned EPA that a “no growth” scenario as was proposed would have devastating consequences on the investments being made to meet the GHG reduction goals of the country. Unfortunately, we are now experiencing those consequences today. Clean Fuels therefore respectfully petitions EPA to increase its 2024 BBD volume to 5.1 billion gallons which is the 2023 actual BBD production volume plus 500 million gallons and the 2025 BBD volume to 5.6 billion which is an additional 500 million gallons. We also request proportional increases in the D5 advanced and total volumes for 2024 and 2025. EPA should initiate that rulemaking process as soon as possible in order to promulgate a final rule with sufficient lead time before the compliance deadline for 2024.

## **I. Recent Developments**

### **Production**

Prior to the Set Rule, clean fuel producers generated more than 3 billion gallons of biomass-based diesel for the U.S. market in 2021 and 2022, enough to meet 6% of U.S. on-road diesel demand. In 2023, the global market generated more than 15 million gallons of sustainable aviation fuel (SAF) – more than half of which was produced in the United States.

However, the industry’s efforts to grow in 2023 and beyond was directly ignored by EPA, and in a break with precedent, the agency failed to account for actual renewable fuel production during the first months of the compliance year.

The U.S. Energy Information Administration (EIA) reported that the RVOs for biomass-based diesel and advanced biofuel were set significantly lower than production trends. In fact, EPA underestimated production of all renewable fuels across the board as well as availability of Renewable Identification Numbers (RINs) for all RFS compliance categories.<sup>4</sup>

EPA’s data from EMTS shows that qualifying biomass-based diesel production increased by more than 30% — or 400 million gallons – in the first five months of 2023, compared to the same period in 2022. The U.S. Energy Information Administration’s (EIA) Short Term Energy Outlook (STEO) for June 2023 projected increases in U.S. production of biodiesel and renewable diesel of more than 800 million gallons in 2023 and 900 million gallons in 2024.

<b>Biomass-Based Diesel (millions)</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>EPA Final Volumes</b>	2,760	2,820	3,040	3,350
<b>U.S. Annual Production</b>	3,084	4,035		

Moreover, domestic production capacity continued to expand as companies finished construction of additional new capacity, they invested in prior to the Set Rule proposal. These companies choose to invest in clean fuels and build new capacity to meet growing demand. As Americans increasingly focus on environmental benefits, – U.S. businesses are creating and meeting environmental, social, governance (ESG) goals, corporations have made public commitments to reduce GHG emissions, the Administration has made goals for the SAF Grand Challenge, states are passing low carbon fuel standards, and there is a growing demand in new markets including rail and marine to reduce their GHG emissions using clean fuels.

Additionally, many producers in 2023 had contracts and commitments well into 4Q23 and beyond, which demonstrates why EPA did not see an immediate drop off in production – preserving the clean fuels industry’s ability to produce greater volumes in the immediate future.

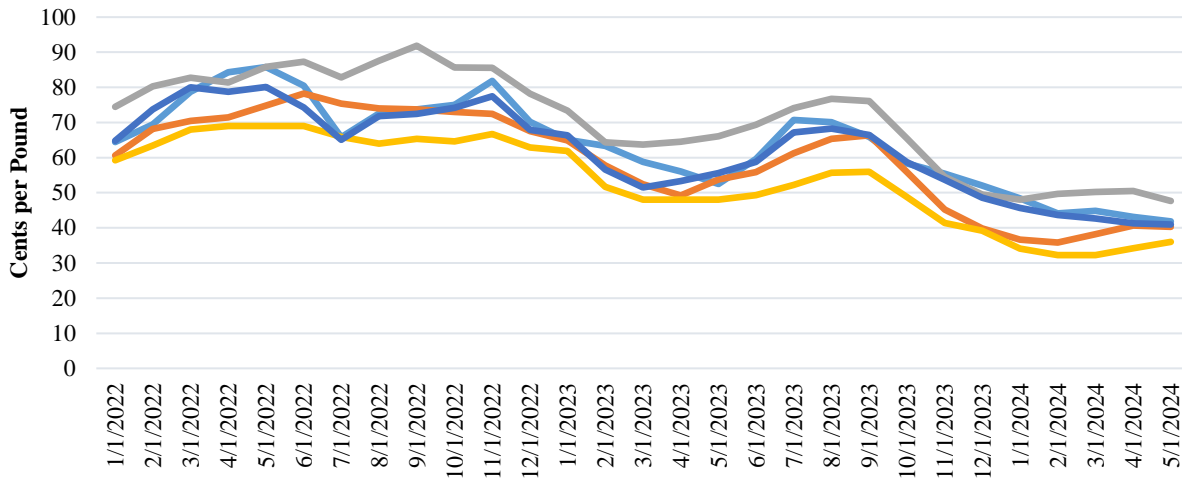
### **Feedstock**

A review of US feedstock pricing post finalization of Set demonstrates an oversupply of feedstock available for U.S. biodiesel and renewable diesel production relative to market demand. Soybean oil and distillers corn oil (DCO) cash prices have dropped 40% from July 2023 to May 2024. Choice white grease (CWG) and technical grade tallow have also dropped almost 40% during the same time frame. Used cooking oil cash prices dropped 35% from July 2023 to May 2024 [see graph below]. All values are geographically for central Illinois.

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<sup>4</sup> Market prices for Renewable Fuel Standard credits are falling - U.S. Energy Information Administration (EIA), Oct. 24, 2023, available at <https://www.eia.gov/todayinenergy/detail.php?id=60742>

## Feedstock Values (Jan 2022 to May 2024)



Source: FAST Markets, The Jacobsen

- Soybean Oil (crude/de-gummed)
- Choice White Grease
- Technical Tallow
- Used Cooking Oil
- Distillers Corn Oil

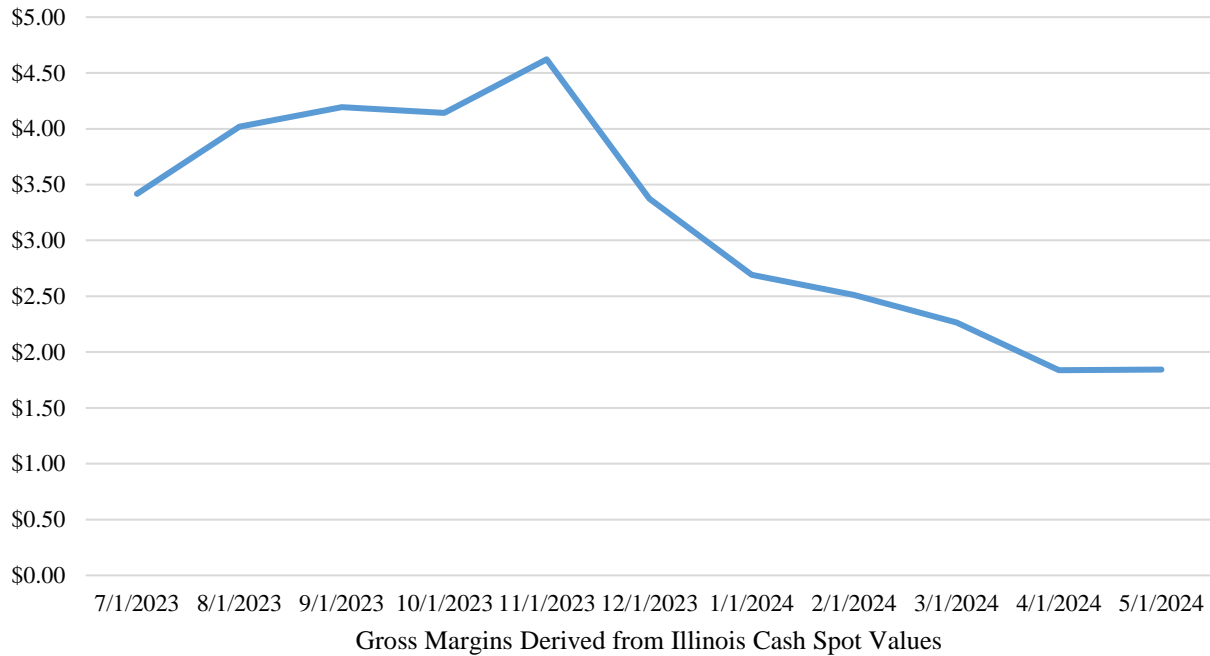
USDA data provides additional insights into the drop in soybean oil values. According to USDA, ending stocks for U.S. soybeans will increase from 264 million bushels for the 2022/23 marketing year to forecasted ending stocks of 455 million bushels for the 2024/25 marketing year which ends in August 2025.<sup>5</sup> This represents an increase of more than 70% and represents more than 285 million gallons of additional biodiesel production from the soybean oil present in the additional bushels in ending stocks from August 2023. US production of soybean oil during this same time frame is estimated to increase from 26.227 billion pounds in MY2022/23 to a forecasted volume of 28.515 billion pounds in MY2024/25.<sup>6</sup> During this same period, USDA estimates “food and other” uses will remain relatively flat. Soybean oil exports are also expected to increase. All data supports the need for additional demand drivers for U.S. agricultural use.

The Set Rule acknowledged investment by the oilseed processing community in both expansion projects and new construction. According to the National Oilseed Processors Association (NOPA), the industry is investing more than \$6 billion at more than 20 facilities in 10 Midwestern states to increase U.S. oilseed crushing capacity by more than 30% through 2026. However, these projects are in jeopardy because of the Set Rule and its impact on demand. Although only one project has publicly announced that project development plans would be put on hold, many new projects are currently experiencing decreased margins. Gross margins (based on cash prices in Illinois) have decreased significantly since the beginning of the year.

<sup>5</sup> USDA Economic Research Service. Oil Crops Outlook: May 2024. <https://www.ers.usda.gov/webdocs/outlooks/109147/oiltables.xlsx?v=5641.1>

<sup>6</sup> USDA Economic Research Service. Oil Crops Outlook: May 2024. <https://www.ers.usda.gov/webdocs/outlooks/109147/oiltables.xlsx?v=5641.1>

### Cash Gross Processing Margin



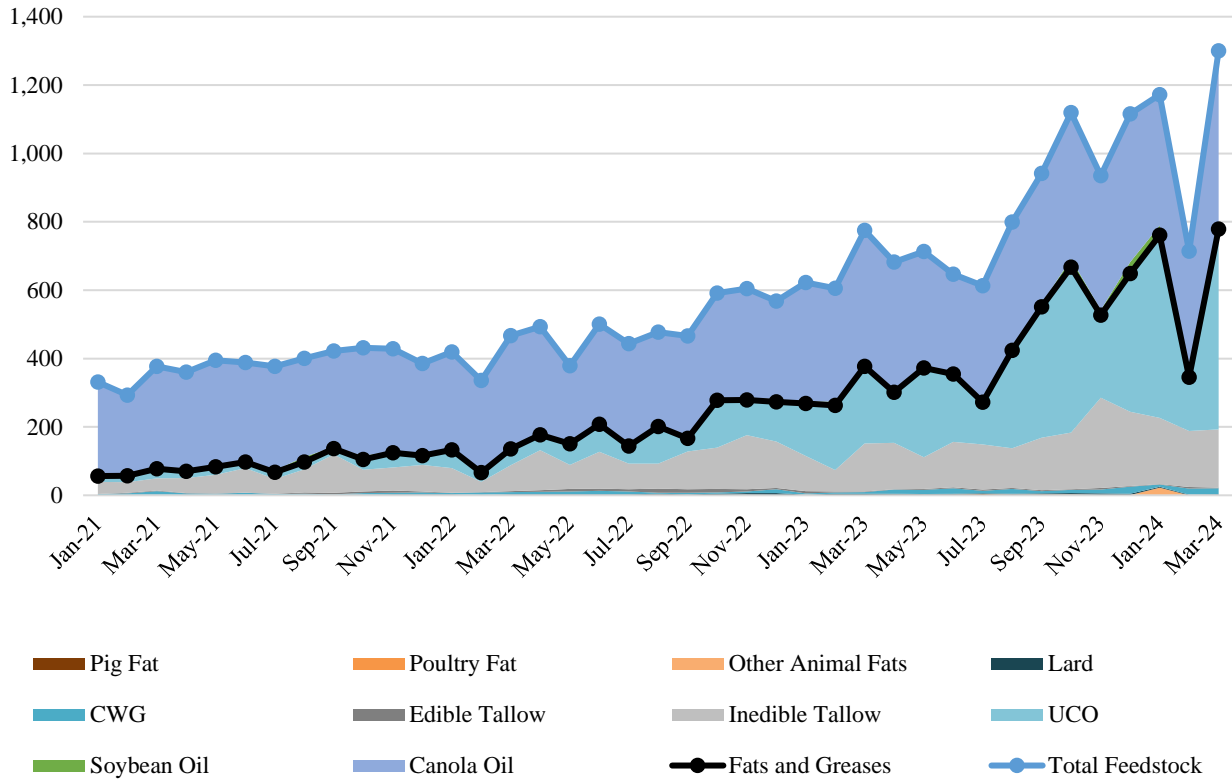
Data available does not suggest rationing of U.S. feedstock supplies, but a lack of demand relative to investments made.

However, several new soybean crush plants have or will start up this year that will supply soybean oil to the renewable diesel market. Despite the current RVO, U.S. soybean crush capacity has risen by 7% and is anticipated to increase by another 23% in the next three years.

### Feedstock Imports

As noted in the prior section, EPA did account for a percentage of planned expansions in the U.S. oilseed processing sector when finalizing Set. However, the final rule did not account for increases of feedstock imports beyond canola oil from Canada. Market conditions have proven to be very different than import assumptions made by EPA. In a June 2024 USDA Foreign Agricultural Service publication, it was noted that U.S. import values of animal fats and vegetable oils more than doubled from 2020 to 2023. Much of this increase can be attributed to increased imports of animal fats and used cooking oil (UCO); of which UCO imports more than tripled in 2023. The figure below demonstrates increased availability of feedstock supplies for U.S. biodiesel and renewable diesel producers.

**Feedstock Imports  
million lbs**



**Biodiesel and Renewable Diesel Production and Capacity**

The clearest outcome demonstrating the impacts of the low volumes in the Set Rule has been the relationship of our growth in capacity yet the decrease in production of biodiesel (BD) and renewable diesel (RD). The clean fuels industry is ready to produce more, however, the nature of the RIN market, and the direct relationship it has to the volumes EPA sets, actually determines how much fuel is being produced. While EPA views the RFS as a floor – in reality, it acts as a ceiling.

<b>Biodiesel (BD) and Renewable Diesel (RD) Capacity &amp; Production</b>	<b>Gallons</b>
<b>BD/RD Capacity before Set Rule</b>	5.78 BGY
<b>BD/RD Capacity today</b>	5.84 BGY
<b>BD/RD Production before Set Rule</b>	4.66 BGY
<b>BD/RD Production - 1Q24 Annualized</b>	4.56 BGY

## RIN Market

Soon after the finalization of the Set Rule, the value of RINs fell precipitously.<sup>7</sup> RIN values continue to fall today and the situation is forcing domestic fuel production facilities to close.<sup>8,9</sup> To date, RIN prices have fallen 45% in 2024, continuing a downward trajectory from 2023.

The fall in RIN prices occurred for a multitude of reasons, but the simplest is supply and demand. The RVO, as a mandate, represents a floor for the demand for their respective biofuels in the market, however in the case of biomass-based diesel, the RVOs also represent a ceiling on demand, as biomass-based diesel production is more expensive than petroleum diesel production. Since the market noted that the D4 RINs generated (supply) greatly exceeded the RVOs (demand), prices dropped. With the oversupply being seen as overwhelming to the market, prices dropped significantly.

When the Set Rule was released in June 2023, market participants quickly noted that the RVO for D4 biomass-based diesel (BBD) was set well below what the market would produce in 2023. The main question was whether the D4 oversupply would fill in the gaps in the D5 advanced biofuel and D6 conventional biofuel pools, since D4 is nested inside both of those pools. When looking solely at the Set Rule RVOs, D4 generation greatly exceeded the D4 RVO and oversupplied the D5 and D6 pools as well, which led market participants to reduce those respective RIN prices, with D4 RIN prices dropping significantly from a monthly average of \$1.55/RIN in July 2023 to monthly average prices of around .50 cents/RIN from February to May 2024.<sup>10</sup> In 2023, D4 generation was 7.97 billion, which significantly exceeded the Set Rule of 4.51 billion RINs.

Once again, EIA has found that the STEO biofuel forecasts suggest that the RIN supply will continue to exceed its targets in 2024 and 2025. If RIN generation exceeds 2024 and 2025 RVOs, RIN prices could decrease even further.<sup>11</sup> EIA is also forecasting slightly slower growth in renewable diesel production in 2024 and 2025 than in 2023, as production margins will decrease because of the lower RIN prices. The lower margins will likely not only reduce plant utilization but lead to continued delays or cancellations of announced capacity additions.<sup>12</sup>

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<sup>7</sup> S&P Global, “U.S. RINs complex collapses in 2023/24, driven by oversupplied biomass-based diesel market,” Feb. 1, 2024. Available at <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/agriculture/020124-us-rins-complex-collapses-in-2023-driven-by-oversupplied-biomass-based-diesel-market>

<sup>8</sup> Biomass-based diesel and ethanol compliance credit prices decline 45% from start of year - U.S. Energy Information Administration (EIA), Feb. 27, 2024, available at <https://www.eia.gov/todayinenergy/detail.php?id=61463>

<sup>9</sup> Donnelle Eller, Chevron closes Western Iowa, Wisconsin biodiesel plants amid harsh market, blames Biden EPA,” March 1, 2024 available at <https://www.barrons.com/articles/chevron-clean-energy-stock-plants-closures-148f1a77>  
Avi Salzman, “Chevron Plant Closures Show Clean Fuel’s Tough Economics,” March 6, 2024 available at <https://www.barrons.com/articles/chevron-clean-energy-stock-plants-closures-148f1a77>

<sup>10</sup> Prices from Argus

<sup>11</sup> U.S. Energy Information Administration. Biomass-based diesel and ethanol compliance credit prices decline 45% from start of year. February 27, 2024. <https://www.eia.gov/todayinenergy/detail.php?id=61463>

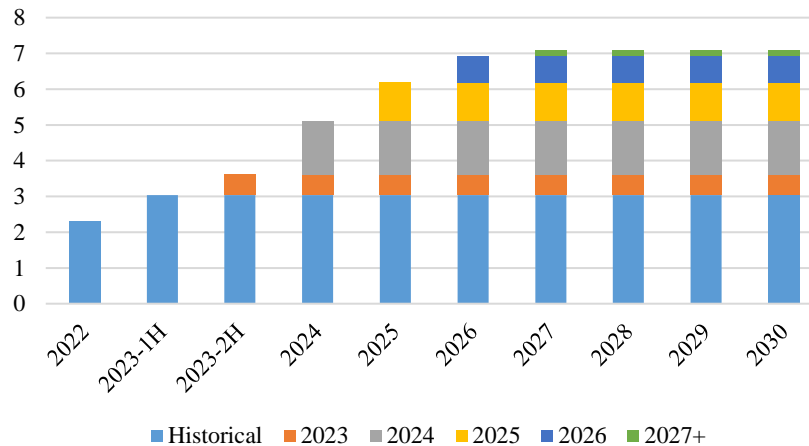
<sup>12</sup> U.S. Energy Information Administration. Biomass-based diesel and ethanol compliance credit prices decline 45% from start of year. February 27, 2024. <https://www.eia.gov/todayinenergy/detail.php?id=61463>

## Market Loss

Since the finalization of the Set Rule, significant shocks have occurred across the biomass-based diesel industry. Many planned and announced renewable diesel and sustainable aviation fuel projects have significantly changed their plans, while existing biodiesel facilities have either idled or closed. With reference to biodiesel facilities, 116 MMGY has been idled and 12 MMGY has been permanently closed. Chevron REG closed their Ralston, IA and Madison WI biodiesel production plants due to poor market conditions stemming from the RFS. On the renewable diesel side, due to bad economics and low RIN values, Vertex announced that it would be converting its renewable diesel facility in Mobile, AL back to petroleum operations at the end of 2024, which is a loss of 150 MMGY of renewable diesel production capacity. Obligated parties, many of which have entered the renewable diesel space, are also being hurt by the RIN market. HF Sinclair Corporation reported in their 2024 Q1 Earnings call that weakened RINs and LCFS credit prices resulted in a 16% decline in their renewable diesel indicators compared with the fourth quarter of 2023. PBF also referenced reduced RINs and the CA LCFS credit prices – however – they noted that they are in a clear advantage compared to other marginal players who will continue to feel greater pressure as both the RIN market and the LCFS market continue a downward path.

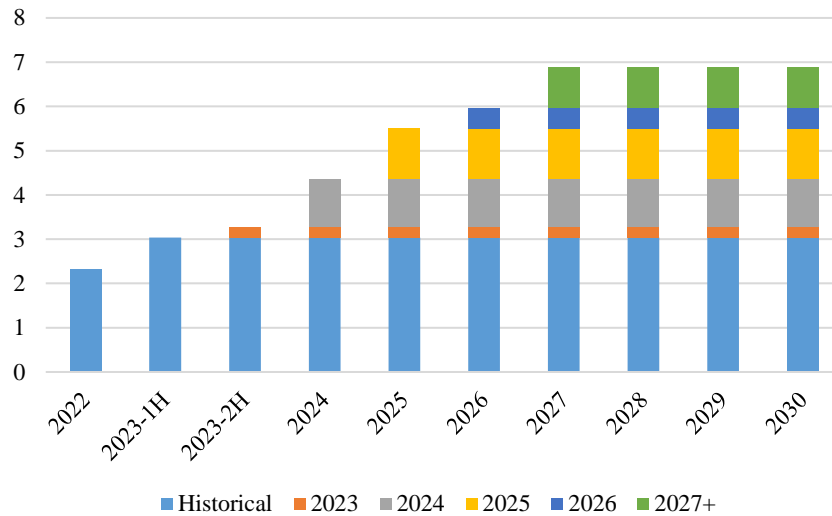
In addition to plants reducing capacity, idling and shutting down – project timelines for new plants scheduled to come have also been greatly impacted by the low RVOs. Comparing project announcements prior to the Set Rule to today, approximately 1.4 billion gallons per year of renewable diesel capacity announcements have been pushed back from their original timelines, while approximately 800 MMGY of SAF production has been delayed. The renewable diesel projects that have been scaled back are significant, with nearly 350 MMGY of capacity either reduced or canceled.

### Renewable Diesel Announced Projects BGY, Prior to Set Rule





## Renewable Diesel Announced Projects BGY, Current



## II. Necessity of Higher Biomass-Based Diesel Volumes for 2024 and 2025

### Economic Impact

As noted in our comments to on the proposed Set Rule, Clean Fuels published a study, “Economic Impact of Biodiesel on the U.S. Economy 2022,” conducted by LMC International, now Global Data. The study finds that for every 100-million-gallon production increase, the biodiesel and renewable diesel industry supports 3,185 additional American jobs and \$1.09 billion in economic activity. The low RVO highlights the difference between available capacity and actual production to be 1.28 billion gallons. This difference equates to an opportunity cost of 40,768 jobs and almost \$14 billion in economic activity. Increasing the RVO would quickly provide a boost to the U.S. rural economy where many of these facilities and their supply chain partners are located.

### GHG Emissions

The biodiesel and renewable diesel industry has the potential to sustainably double the market to 6 billion gallons annually by 2030, eliminating at least 35 million metric tons of CO<sub>2</sub> equivalent greenhouse gas emissions annually with our members leading the U.S. companies investing in new biodiesel, renewable diesel and SAF capacity. These fuels are among the cleanest and lowest-carbon fuels available today to help reduce greenhouse gas (GHG) emissions now and are available to meet President Biden’s near- and long-term climate goals, particularly in the hard to decarbonize sectors.<sup>13</sup> To date, the utilization of low carbon liquid fuels like biodiesel and renewable diesel reduces greenhouse gas emissions by more than 70% on average, directly and immediately reducing GHG emissions from the vehicles that use our fuels.

<sup>13</sup> Executive Office of the President. Executive Order 14008: Tackling the Climate Crisis at Home and Abroad, 86 FR 7619 (February 1, 2021), available at <https://www.federalregister.gov/d/2021-02177>

However, if the RVO was aligned with today's production capacity, EPA could avoid an additional 11 MMTCO<sub>2</sub>e relative to today's actual production volumes.

<b>Biodiesel (RD) and Renewable Diesel (RD) GHG Reduction Impacts from RFS Set Rule</b>		<b>Emissions Avoided (MMTCO<sub>2</sub>e)</b>
<b>BD/RD capacity before Set</b>	5.78 BGY	49.7
<b>BD/RD capacity today</b>	5.84 BGY	50.2
<b>BD/RD production before Set</b>		
	4.66 BGY	40.1
<b>BD/RD Production - 1Q24 Annualized</b>	4.56 BGY	39.2

### **Sustainable Aviation Fuel**

In the proposed rule, EPA asked what role the RFS program can play to further the development of sustainable aviation fuel (SAF). Clean Fuels shared what the volumes must be for biomass-based diesel (BBD) and the advanced biofuel category to ensure a robust biodiesel industry, while also supporting the growing renewable diesel and SAF industries. Since EPA failed to factor the growing renewable diesel and SAF industry into the RVO, EPA created a self-fulfilling prophecy whereby investments in SAF and renewable diesel are being reevaluated and delayed.

The low RVO not only negatively impacted the market that was on track to grow clean fuels but also hurt our ability to reduce additional GHG emissions by replacing existing GHG emissions reductions rather than grow them.

### **Rail**

In addition to on-road uses, biodiesel and renewable diesel remain the most pragmatic and scalable solution available to railroads to reduce their GHG emissions. As a result, railroads have made a commitment to cut their GHG emissions by decreasing their use of petroleum-based diesel and increasing their use of biodiesel and renewable diesel. BNSF, CSX, CPKC, Norfolk Southern, Union Pacific have all made commitments to increase their biofuel blends. Unfortunately, with biodiesel production down, rail may not have the clean fuels available to meet their GHG reductions goals, while the U.S. will also lose out on additional GHG emissions reductions.

### **III. Conclusion**

For the foregoing reasons, EPA should increase its 2024 BBD volume to 5.1 billion gallons and the 2025 BBD volume to 5.6 billion gallons. EPA should also make proportional increases to the advanced biofuel and total renewable fuel volumes.

To maximize the benefits of those adjustments, EPA should promulgate a proposed rule with those adjustments as soon as possible and publish a final rule with significant lead time before the end of the compliance period for 2024.

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If you have any questions regarding the issues raised in this petition, please do not hesitate to contact Kurt Kovarik at (202) 737-8801.

Respectfully Submitted,

A handwritten signature in black ink that reads "Kurt A. Kovarik". The signature is written in a cursive style with a large initial 'K' and a distinct 'A'.

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Kurt Kovarik  
Vice President, Federal Affairs  
Clean Fuels Alliance America