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Document Title:	Joseph Degenfelder Comments – My 8-4-2 1letter with Andy Miller's re EIA's Projection for Renewable Diesel Production in 2024
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*Comment Received From: Joseph Degenfelder
Submitted On: 8/10/2021
Docket Number: 18-ALT-01*

**Addition to my July 6, 2020 letter with Andy Miller's re EIA's
Projection for Renewable Diesel Production in 2024**

Additional submitted attachment is included below.

August 4, 2021

Mr. C.A. (Andy) Miller
Associate Director for Climate
Air, Climate and Energy Research Program
US EPA Office of Research and Development
Research Triangle Park, NC 27560

Dear Andy:

The U.S. Energy Information Agency released a report on July 21 predicting a large increase in production of renewable diesel by conversion of oil refineries. For California production the examples are Marathon Petroleum's refinery in Martinez, and Phillips 66 refinery in Rodeo. The remainder conversions will likely be built on the Gulf Coast to capitalize on existing refinery infrastructure.

The predicted production capacity by 2024 will be rated at 330,000 barrels per day, increasing from and estimated 38,000 barrels per day in 2021, an increase over 800 per cent. This increase is impossible given a projected shortfall of feedstocks.

As current example the price of soybean oil has doubled in the last year. The source of fats from domestic hog and chicken production is already utilized; as lead example Valero's arrangement with Tyson Foods for its St Charles, LA biorefinery, plus conversion of its Port Arthur refinery in 2023. The highest volume seed oil, palm oil, is currently imported in the use at 280,00 barrels per day as foodstuff; given its high unsaturated fat content. Palm oil is not an approved supply.

A special note is camelina oil which in a 2010-2011 program was converted to renewable SPK jet fuel at 46,00 gallons in 2010 for testing by U.S. Air Force and Naval Air. This program was expanded to 400,000 gallons in 2011, at a price \$30/gallon, far above commercial sustainability. Current programs for camelina oil as feedstock in California and Oregon are tiny, with low yields on marginal land.

This information is supplied under our continuing industry input for the EPA's December 2021 Triennial Report to the U.S. Congress, as mandated under the Energy Independence and Security Act of 2007. Given these supply constraints, a reduction of EIA's growth of 800+ percent, to 200 per cent by 2024, is my real-world estimate.

Sincerely,

(signed)

Joseph R. Degenfelder

CEO, Atlantic Greenfuels, LLC
Cleveland, OH 44122

EIA predicts steep growth in US renewable diesel capacity

By Erin Voegele, Biodiesel Magazine, July 22, 2021

SOURCE: U.S. Energy Information Administration

The U.S. Energy Information Administration released data on July 21 forecasting that U.S. renewable diesel production capacity will reach 5.1 billion gallons per year (330,000 barrels per day) by 2024, up from an estimated 600 MMgy (38,000 barrels per day) in 2020. The agency said growing targets for state and federal renewable fuel programs and incentives for renewable diesel production are driving the expected expansion.

According to the EIA, much of the expected capacity increase will come from retrofitting idle petroleum refineries. The agency offers Marathon Petroleum's refinery in Martinez, California, and the Phillips 66 refinery in Rodeo, California, as two examples of oil refineries that are currently converting to renewable diesel production.

Currently, nearly all U.S. imports of renewable diesel enter the country in the West Coast where the fuel is used to meet Low Carbon Fuel Standard targets in California. Most existing U.S. renewable diesel capacity, however, is located in on the Gulf Coast near existing oil refineries. Moving forward, the EIA predicts the majority of new U.S. renewable diesel capacity will be built on the West Coast to serve nearby low carbon fuel markets, while the remainder will likely be built on the Gulf Coast to capitalize on existing refinery infrastructure.

Based on its capacity estimates, the EIA said it predicts renewable diesel production capacity could represent 20 percent of total diesel production on the West Coast by 2024 and 4 percent of total estimated diesel production capacity on the Gulf Coast. Across the entire U.S., renewable diesel capacity would account for 5 percent of total diesel production capacity in 2024.

Additional information is available on the EIA's This Week in Petroleum report, released July 21.