

The views expressed in these posts are those of the authors and are current only through the date stated. These views are subject to change at any time based upon market or other conditions, and Eaton Vance disclaims any responsibility to update such views. These views may not be relied upon as investment advice and, because investment decisions for Eaton Vance are based on many factors, may not be relied upon as an indication of trading intent on behalf of any Eaton Vance fund. The discussion herein is general in nature and is provided for informational purposes only. There is no guarantee as to its accuracy or completeness.

[Responsible Investing](#)

[Is renewable diesel improving refining's ESG outlook? Not fast enough](#)

By: John Miller | & Cheryl Wilson | December 18, 2020

Washington - Interest in renewable diesel (RD), a lower emissions-intensity fuel created from processing waste fats and vegetable oils, has soared in 2020. Traditional oil refiners, observing the resiliency of RD pricing and margins¹ through the storm of the COVID-19 pandemic have highlighted the fuel as a "win-win" financial and energy transition leveraged investment. Is RD improving refiners' ESG outlook? In short, not fast enough.

To date, Calvert's analysis indicates that projected RD capital spending remains just a small fraction of total downstream capital investment.² This is particularly true for new entrants into the RD market. For refiners to meaningfully shift the needle on their current ESG outlook, a deeper commitment to alternative fuels must be pursued in conjunction with an articulated timeline toward a wind-down of fossil refining operations.

What is renewable diesel?

RD represents an evolutionary improvement over traditional ethanol and biofuels. Not only is RD's life cycle carbon intensity 65% lower than diesel fuel, RD is a "drop-in" quality fuel, meaning that it does not require blending with an oil-based fuel to power a conventional engine. When RD is produced from collected waste fat or used cooking oil feedstock, the fuel also reports positive leverage to circular economy themes.³

Demand for RD is currently driven by regulatory requirements seeking to decarbonize transportation networks. California's Low Carbon Fuel Standard, the U.S. Renewable Fuel Standard and EU-member state mandates remain the core market drivers for RD. Long term, RD offers a proven solution to decarbonize transportation elements that are difficult to electrify, such as heavy trucks and airplanes. Globally, the transport sector produces more than 20% of energy-related carbon dioxide emissions, with road applications responsible for 72% of that total and aviation at just over 10%.⁴

Aviation, in particular, could be a strong source of medium- and long-term demand. Alternative jet fuel can be produced alongside renewable diesel using similar feedstocks and processes. Aviation industry participants often cite limited supply and cost as a barrier to scaling up the use of alternate jet fuel, but the industry is coming under mounting pressure to reduce carbon dioxide emissions and alternative jet fuel is the primary option. RD producers could play a role in supporting future demand growth for these fuels by ramping up a consistent supply for airline customers.

ESG outlook for downstream energy

Calvert's ESG investment outlook for refiners remains challenged. Refiners are emissions-intensive, high-impact operations. Traditional oil refining generates sizeable direct Scope 1 emissions through the distillation, cracking and reforming process, along with large indirect Scope 2 emissions associated with electricity demand. On top of this footprint, final consumption of a refiner's product slate adds an even greater Scope 3 emissions element. Equally relevant, as the long-term demand outlook for carbon-intensive fuels is increasingly challenged through the energy transition, the entire fossil fuel-focused downstream business model is at risk of first overcapacity and eventually, impairment and stranding.

While terminal, storage and logistics networks are similar between RD and traditional oil products, the key feedstock treatment and refining production process utilized between the fuels is significantly different. As a result, growth capital investment dollars allocated to traditional oil refining are dollars not addressable to RD or other alternatives.

Bottom line: Energy transition-aligned ESG investment approaches may include RD exposure as one element of a broad economywide decarbonization effort. We believe it is possible for a traditional oil-focused refiner to strategically pivot to RD, and be rewarded by the market for that move. However, half-steps on RD combined with further investments in oil refining are unlikely to trigger a similar investor response.

1. The U.S. represents the most transparent market for RD pricing, estimated by the sum of the \$1.00/gallon Blenders Tax Credit, Renewable Identification Number 4 credits (\$0.40 - \$0.88/gallon) and the California Low Carbon Fuel Standard Credit of \$1.69 to \$2.00/gallon, equaling an indicative RD pricing range of \$3.09 to \$3.88/gallon. Prices for U.S. on highway diesel in 2020 have averaged \$2.20/gallon.

2. Downstream energy sector activities include refining and petrochemical operations, which convert oil and gas into end-use fuels, plastics and fertilizers, along with manufactured industrial chemicals. In addition to the refining/petrochemical complex, the downstream space includes marketing, sales and trading, and retail distribution.

3. The circular economy is defined by growth decoupled from the utilization of finite natural resources, its three primary principles are centered on "design out waste and pollution, keep products and material in use [and] regenerate natural systems." "What is a Circular Economy?" Ellen MacArthur Foundation. Palm and soybean RD feedstock carries biodiversity and food supply risks equivalent to ethanol and biodiesel.

4. IPCC, "AR5 Climate Change 2014: Mitigation of Climate Change. Chapter 8: Transport."



John Miller
VP and ESG Senior Research
Analyst
Calvert Research and
Management



Cheryl Wilson
VP and ESG Senior Research
Analyst
Calvert Research and
Management

"For refiners to meaningfully shift the needle on their current ESG outlook, a deeper commitment to alternative fuels must be pursued in conjunction with an articulated timeline toward a wind-down of fossil refining operations."



Eaton Vance is part of Morgan Stanley Investment Management, the asset management division of Morgan Stanley

This site (www.eatonvance.co.uk) is operated by Eaton Vance Management (International) Limited ("We"). We are a limited company, registered in England and Wales under company number 4228294 and have our registered office at 125 Old Broad Street, London, EC2N1AR. Our VAT number is 762717416.

Eaton Vance Management (International) Limited is authorised and regulated by the Financial Conduct Authority ("FCA") and is entered on the FCA's register with register number 208634.

The value of your investment can go up or down so you may get back less than your initial investment. Past performance is not a guide to future returns.

The information on this webpage is not intended for U.S. residents. To visit our U.S. website [please click here](#).

Eaton Vance Management (Registration No. 1121388) and Parametric Portfolio Associates (Registration No. 1217626) are the registered trade marks of Eaton Vance.