

Article Review “Facing wave of closures, oil refiners turn to biofuels”

If you have been following the refining or fuel markets lately, you will have noticed that biofuels have been getting a ton of attention lately, with billions of dollars allocated to capital projects over the last 24-months. There are several reasons for the sudden surge in demand. First, states like California have been increasing their regulatory pressure and requiring oil refiners to blend a higher proportion of their diesel with renewable products. Second, technological advancements have paved the way for a serious replacement product to petroleum-based diesel. Once refined, renewable diesel (“RD”) is molecularly identical to petroleum-based products and can act as a full replacement, making it superior to its predecessor biodiesel, which needs to be blended prior to use. Additionally, RD doesn’t have the same performance issues in cold weather as biodiesel, making it a viable and attractive product for the Northwest US and Canadian markets.

The profitability of RD hinges largely on government regulations and subsidies – both at the federal and state level. These programs primarily include, the Federal Renewable Fuel Standard program (RFS/RINs), California’s Low Carbon Fuel Standard (LCFS), and the Blenders Tax Credit (BTC). Both the RFS and LCFS act as a “cap-and-trade” program for refiners, where the price for each credit fluctuates based on market demand. US consumption of renewable diesel was up nearly 50% y/y in 2019, with a majority used in California.

Several major oil refiners, including BP, Total, Phillips 66, Valero, Marathon and Holly Frontier have announced new RD plants or are converting existing petroleum diesel refineries into RD. Additionally, dozens of other smaller, independent plants are scheduled to come online within the next 12-to-36 months. The reason for the influx is obvious – project economics are very attractive, with returns in excess of 30-40%, largely fueled by the government incentive programs. Compared to typical midstream and refining rates of return of 7-12%, RD offers a massive growth opportunity for the industry.

Furthermore, the RFS and LCFS programs require that these refiners buy a certain level of renewable fuels to mix with their petroleum diesel. As the costs and tax credits associated with these fuels rise, it represents an increasing cost item for the refiner to buy the product. By building their own facility, not only do they have the opportunity to eliminate the need to purchase from third-parties, they can also sell their excess production and realize some of the attractive economics. Finally, RD provides a relatively easy expansion into renewable product offerings and helps improve ESG standings amongst operators.

The Riverstone Credit team has analyzed a handful of RD projects and has identified several key risks as well as opportunities for the future. As it stands today, California is the only true LCFS market. Proposed and/or under construction facilities could deliver an eight-fold increase in domestic production capacity during the next five years, potentially leading to oversupply. According to analysis by Barclays, by 2024, if all proposed plants were to come online, RD would need to capture nearly all of California’s total diesel market (and/or make significant inroads in other states) in order to avoid having significant excess capacity. While several states (predominately in the Northwest) and Canada have made serious headway, COVID-19 and budget constraints have delayed or reduced several programs. As other markets eventually develop, we would expect the opportunity set to increase and allow small-to-medium sized players to capture a larger piece of the economic pie.

Moreover, the biggest hurdle for any RD project is access to affordable and reliable feedstock. Currently, there is not enough economic feedstock generated to meet the demand of the announced projects. Independent refiners, without direct access to feedstock, will almost certainly have their margins significantly dragged down by feedstock costs as new plants come into service. Ultimately, we believe many of these projects will be cancelled due to the logistical complexities and significant cost of sourcing appropriate feedstocks. While the short-term outlook appears challenging, there is some opportunity to look out for. Biodiesel production relies upon many of the same feedstocks as RD. As biodiesel plants are retired or forced out of the market, feedstock availability may increase opening the door for new entrants.

RCP is currently in the diligence phase for a new RD facility in the Northwest US. The facility is expected to start production in the Q2 2022 and will produce ~3,000 bbl/day of RD and renewable naphtha. The products produced will both qualify for the highlighted tax credits and the facility will utilize new technology allowing it to refine a wider variety of dirtier feedstocks, which will generate a higher credit under the LCFS program.

We continue to look for attractive RD projects that meet our investment criteria both domestically and internationally, and will update our investors if and when new attractive opportunities present themselves. As always, please don't hesitate to reach out with any questions.