FUTURE OF FUELS

RFA Outlook for Crude Oil, Refined Products, Biofuels, and EVs

RFA REFINED FUELS ANALYTICS | RBN Energy LLC

- Global net capacity additions are expected to be at decades-low levels over the next five years due to a dearth of new projects and refinery shutdowns.
- At the same time, demand for petroleum and liquid fuels is expected to surpass government targets and forecasts. This will lead to improved and sustainable margins after 2025.
- The energy transition will impact gasoline demand much more than middle distillates or petchem feedstocks as alternatives, especially EVs, are more readily substitutable in gasoline applications.
- Near-term discounts for sour and heavy crudes, significant profit sources for complex U.S. refiners, will stay limited for a few years but grow longer term due to various shifts in supply and demand factors. Trump tariff policy regarding Canada and Mexico is an X factor in the short term.
- As domestic demand decreases, the U.S. refining industry will grapple to relocate its production, with USGC refiners regionally advantaged due to their established export market access.
- Falling U.S. demand will also trigger altered domestic trade flows and post-2030 refinery closures outside the USGC. This will keep regional supply/demand in balance and even short at times for middle distillates, with surviving refiners enjoying relatively attractive margins.
- Significant capacity expansion and slowing demand growth will cause U.S. RD and SAF production to surpass domestic demand, turning the nation into a net exporter, particularly of SAF.

Trump Policies Add to Uncertainties for Refining Industry

The 10% tariffs the Trump administration just proposed/paused on our two biggest crude oil and refined products trading partners adds one more uncertainty to an already turbulent market environment. Of course, even if those tariffs never get activated (very likely in our opinion), the U.S. refinery industry will still have to contend with numerous economic, government policy and other factors, both domestically and internationally. These influences can have positive or negative impacts. Developments like refinery closures and expansions, along with the transition to lower-carbon energy sources, also play significant roles. While it may be impossible for industry operators to fully predict the twists and turns that lie ahead in the refined-product arena, staying abreast of current developments and gaining a thorough understanding of the elements influencing the crude oil and fuel markets, as well as their interconnections and impacts on supply, demand and prices, is of paramount importance.

Slowing Capacity Additions Lead to Better Margins Post-2025

Refining margins in 2024 came down from post-lockdown highs in 2022 and still-high levels 2023 as a result of slowing demand and significant capacity additions over the past couple of years, mainly from projects delayed during the COVID lockdowns. While we expect margins to stay relatively compressed in 2025, we see better times ahead. Although there is still a reasonable amount of new capacity coming online in 2025, a lot of that will be canceled out by planned shutdowns. The project environment will slow significantly after this year, resulting in an improved supply/demand environment.

Complex Refiners in for Better Times in the Long Term

Discounts for sour and heavy crudes, an important source of profitability for complex U.S. refiners, will remain relatively narrow for a few years but begin a slow widening trend in 2026. The completion of the Trans Mountain Expansion in 2024 has recently served to prop up the price of WCS at the USGC as more of those barrels are diverted to Pacific Coast markets, but the shutdown of the LyondellBasell refinery in Q1 2025 removes well over 200 Mb/d of demand and cancels out part of that impact. Our expectations for the widening trend come from our forecast for global heavy crude production growth, slowing and then peaking growth of light crude, and limited new refinery deep-conversion projects.

Refiners Look Internationally With U.S. Demand Dwindling

As domestic demand declines, the U.S. refining industry will face challenges finding new homes for its production. The ability to meet these challenges will differ regionally, with USGC refiners advantaged due to their proven ability to successfully access attractive export markets. The demand declines will result in changing trade flows and refinery closures in other regions, with most of these happening after 2030. Surviving refiners will maintain attractive margins as regional supply/demand remains balanced, or in some cases short middle distillates.

RD and SAF Production Will Outpace Domestic Demand

U.S. RD and SAF capacity and production has increased significantly over the past three years, but growth has/will be restrained by EPA-set RVOs and alternatives like biomethane and electricity. We expect the U.S. to flip from being an importer to an exporter of renewable fuels in 2025 and remain so for the foreseeable future. This dynamic will be stimulated by the Clean Fuels Production Tax Credit and untaxed European demand. Risks to U.S. biofuels exports include possible import tariffs and foreign capacity additions. Hard-hit biodiesel production economics will, however, limit the downside for RD and SAF margins.

The Future of Crude Oil and Refined Products

To provide clarity on this ever-evolving market, RBN's Refined Fuels Analytics division (RFA) has released its fifth Future of Fuels study. This insightful publication is dedicated to offering an exhaustive understanding of the diverse factors influencing crude oil and fuel markets and their interconnectedness. Exuding clarity amid future uncertainties, this latest study from RFA delves into the outlook for both crude oil and the refined products industry. Future of Fuels dispenses comprehensive analysis and projections surrounding critical elements shaping the dynamics of the petroleum market, including price and its interrelationships, supply and demand of petroleum, the role of alternative fuels, and refining capacity and utilization.

The fifth edition of Future of Fuels is now available and has an optional add-on private virtual presentation of our findings by RFA senior analysts scheduled on a first-come, first-served basis. Subsequent issues of this product, which will include fresh updates of all the market analysis and forecasts within Future of Fuels, will be issued on a biannual basis in February and July each year. For more information, contact your RBN representative or fill out the form below. For more information, visit www.rbnenergy.com/products/Future-of-Fuels or contact TJ Braziel at tjbraziel@rbnenergy.com.

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[(1)]Regions include Canada, Mexico, Other Latin America, Europe, Africa, CIS, Middle East, China, Japan, India, and Other Asia/Pacific

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About RFA: *www.rbnenergy.com/refined-fuels-analytics*

FUTURE OF FUELS REPORT

8 Spreadsheets 80+ Data Tables

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