

Weber Refinery Report



July 2021



In this month's Charles R. Weber refinery report, we provide readers with the latest developments in the refinery sector as they relate to the seaborne refined product trade and refined product tanker shipping. The report mixes up-to-date news with detailed information about global refinery capacity and seaborne trade in order to understand how seaborne trade patterns and product tanker profitability will develop, in both the short and medium term.



Africa leads the way in the addition of refinery VDU capacity by 2025 - Jul 2021 - According to GlobalData, Africa is expected to register the highest additions of refinery vacuum distillation unit (VDU) capacity globally during 2021 to 2025, contributing approx. 33% of the total additions.

It is revealed that Africa is targeted to add a total VDU capacity of 936kbd (46.8Mnta) by 2025, of which 917Kbd (45.85Mnta) would come from new build refineries, with the remainder from refineries expansion.

In Africa, Nigeria leads new build VDU capacity, accounting for approx. one-half of total additions by 2025 – the planned Lagos refinery will add 312kbd (15.6Mnta) in 2022. In Egypt, the Mostorod II refinery expansion project is expected to add 19kbd (0.95Mnta) of capacity in 2022.

The second highest contributor to VDU capacity additions is Asia, accounting for approx. 29% of total additions by 2025, in particular the planned Gulei refinery in China with 154kbd (7.7Mnta) expected to become operational in 2022.

The Middle East follows next, contributing an estimated 20% of capacity additions, with Iraq accounting for the majority with 300kbd (15Mnta) expected from five new builds and one expansion project by 2025.

Shenghong plans test runs in 3Q21 at new oil refinery - Jun 2021 - Shenghong Petrochemical plans to start test runs of a crude unit at the 320kbd (16Mnta) Lianyungang refinery in August or September. Commercial operations are likely to begin in 1Q22.

Colombia oil refinery delayed - Jun 2021 - Start-up of Refinería Sebastopol in Colombia has been delayed due to COVID-19 and social unrest. Construction is now slated to begin in 2H21, pending a tender for an engineering, procurement and construction (EPC) contract. Commercial operations are expected four years after the start of construction work.

Latest

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John M Kulukundis at: jmk@crweber.com

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Grandpuits SAF plant to be operational in 2024 - Jun 2021 - TotalEnergies has awarded a contract to Maire Tecnimont to execute front-end engineering design (FEED) for a new biorefinery to be built as part of the repurposing of its 101kbd (5.05Mnta) Grandpuits refinery at Seine-et-Marne in France into a zero-crude site. Production of sustainable aviation fuel (SAF) is targeted for 2024.

1 NNPC to acquire 20% stake in private oil refineries - Jun 2021 - Nigeria's President, Muhammadu Buhari, has set a new directive that authorises Nigerian National Petroleum (NNPC) to acquire a 20% stake in any private oil refinery producing at least 50kbd (2.5Mnta).

The directive has been drawn up in a bid to attract investment and safeguard the nation's energy security, as well as enable private refineries to easily secure crude from the market. NNPC's first acquisition will be a 20% stake in the \$19.5 Bn 650kbd (32.5Mnta) Dangote refinery in Lagos.

1 Gazprom Neft awards EP contract for new unit at Moscow refinery - Jun 2021 - Gazprom Neft has awarded a preliminary contract to Técnicas Reunidas to provide engineering and procurement (EP), and project management services for the construction of a grassroots delayed coking unit to be built within a new deep refining complex planned as part of the modernisation and upgrade of its 240kbd (12Mnta) Moscow refinery.

1 Talara refinery modernisation progressing - Jun 2021 - Petroperu is moving forward with the completion of a \$3.5 Bn modernisation project at its 65kbd (3.25Mnta) Talara refinery.

Australia approves refinery fuel security legislation - Jun 2021 - The Australian parliament has passed the Fuel Security Bill 2021 that will provide approx. \$1.8 Bn in funding to keep the country's two remaining oil refineries, the 109kbd (5.45Mnta) Lytton and 128kbd (6.4Mnta) Geelong plants, operational for at least the next six years. Payments will start to be made to refiners from 1 July.

The legislation also provides A\$51mn in funding to establish a minimum stockholding obligation (MSO) for gasoline, diesel and jet fuel, to take effect in July 2022, with a 40% increase in diesel stock levels planned from mid-2024.

1 Carnarvon forms bio refinery joint venture - Jul 2021 - Carnarvon Petroleum has formed a 50:50 joint venture with Frontier Impact to construct a \$100 M bio-refinery in Perth, Australia. Production of renewable diesel from plant biomass is targeted for late 2022.

Product tanker activity on the increase - Jul 2021 - Our latest AIS-based analysis, indicates a significant rise in product tanker activity in multiple countries around the globe. In 1H21, US activity was up 4.4% Yoy despite a sluggish start to the year. The corresponding figures for Saudi Arabia and India were 3.7% Yoy and 13.1% Yoy. Even China saw a 2.2% Yoy increase in activity during 1H21.

2 Shell to sell Schwedt refinery stake - Jul 2021 - Royal Dutch Shell is to sell its 37.5% stake in the Schwedt refinery in Germany to Alcmene, as part of the company's energy transition strategy. The deal is expected to be completed in 2H21, pending approval from authorities and its partners, Rosneft and ENI.

Meanwhile, Shell plans to keep its 227Kbd (11.4Mnta) Norco refinery in Louisiana, ensuring that it has one operating refinery in the US.

The Norco refinery is being retained due to its role supplying the company's chemical plants. In addition to producing gasoline, diesel and jet fuel, the plant produces ethylene and propylene that are utilised by the adjoining Shell Norco chemical plant and nearby Shell Geismar plant.

Shell's sales of its Anacortes refinery in Washington, Deer Park refinery in Texas, and Mobile chemical refinery in Alabama are to close in 4Q21.

1 IOC awards EPCC contract for new unit at Barauni refinery - Jul 2021 - Indian Oil (IOC) has awarded a contract to Maire Tecnimont to provide engineering, procurement, construction and commissioning (EPCC) services for a new unit to be installed at its 120kbd (6Mnta) Barauni refinery.

The crude processing capacity expansion project, which also involves revamping and upgrading current units at the refinery, remains on schedule for commissioning by April 2023.

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Notes: Mnta = million tonnes per annum, Kbd = 1000 barrels per day, Mnbnd = million barrels per day.

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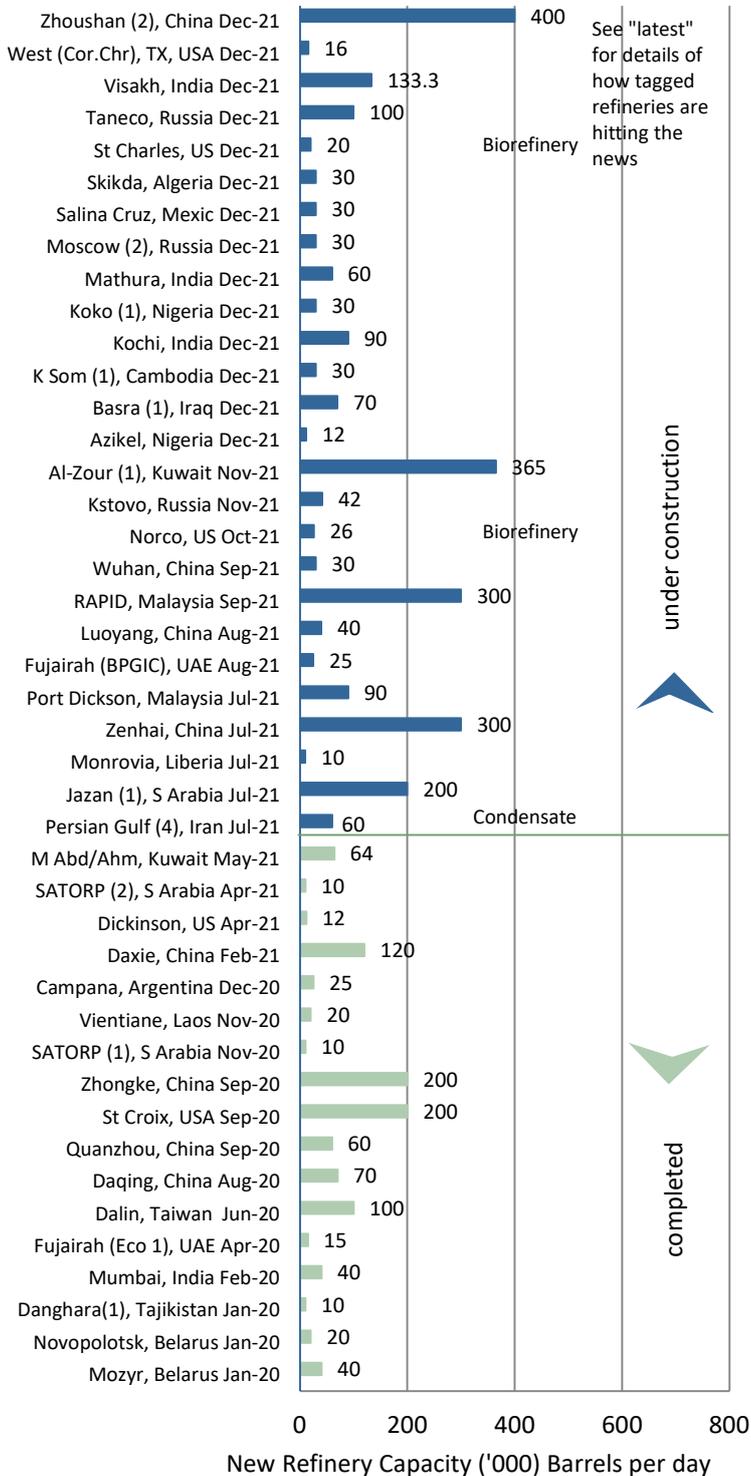
John M Kulukundis at: jmk@crweber.com

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Timeline

Recent and Planned Refinery Additions



We estimate that net global refinery capacity additions amounted to 0.85Mnbd in 2020, while closures (either permanent or temporary) since March 2020 and the onset of the COVID-19 crisis have totalled 3.8Mnbd. There is 2.8Mnbd of new capacity scheduled for completion in 2021, but we expect commissioning of a sizeable amount of this capacity to be delayed.

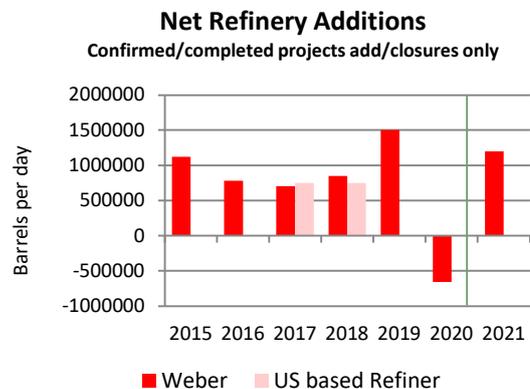
Net refinery additions of 1.5Mnbd were recorded in 2019. This built on increases of 0.8Mnbd in 2018, 0.7Mnbd in 2017, 0.8Mnbd in 2016, 1.1Mnbd in 2015, 0.9Mnbd in 2014, 1.3Mnbd in 2013 and 1.1Mnbd in 2012 (the latter two numbers are based on BP data).

Of the projects slated for completion in 2021, China leads the way with 0.9Mnbd, followed by Kuwait 0.5Mnbd, Malaysia 0.4Mnbd and India 0.3Mnbd. There are a further 10 countries having >10Kbd under construction.

16 new refinery additions (each adding >=10Kbd) in 2014, 24 in 2015, 20 in 2016, 15 in 2017, 17 in 2018 and 10 in 2019.

In 2014-15, closures accounted for more than 1Mnbd of capacity. The rate of closures declined to 0.5Mnbd in 2016, 0.9Mnbd in 2017 and 0.2Mnbd in 2018/19 combined. We saw around 1.4Mnbd of planned or completed capacity closure or conversion in North America alone from late 2019 to end 2020.

The refinery timeline chart (left) is derived from Weber's own detailed tracking of new refinery projects. The chart below compares our summary forecast for refinery additions 2015-2020 with that provided by a large US based refiner. This comparative forecast factors in project delays beyond those reported by the refiners themselves.



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