

Weber Refinery Report



May 2020



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.



COVID-19, the gradual emergence from lockdown -

May 2020 - Last month's stories were almost exclusively about reducing refinery production or closing production completely. However, this month, as the world gradually starts to emerge from lock down, there are an increasing number of stories of companies looking to slowly restore refinery production.

In the US, where refinery throughputs have fallen below 70% from 92.5% at the end of December 2019, Valero is talking about a gradual increase in output, while China is starting to revive crude oil imports from the US.

Indications of the impact of COVID-19 on seaborne refined products trades are also starting to be revealed. Tracking data shows that Product tanker traffic at Chinese ports fell by 15% YoY in February. There were further YoY falls of 13% and 7% in March and April. However, a modest 6% bounce back has been reported at the start of May. Average port durations, which had increased by 25%, are also starting to return to normal levels.

In Saudi Arabia, Product tanker port traffic was down YoY by an average of 25% for the first four months of the year. In the US, Product tanker traffic didn't start shrinking until March (down 7% YoY), then slumped by 21% YoY in April. In contrast to China, average US port times decreased by an average of 19% YoY in the first four months of the year.



China's Shandong province to expand crude storage capacity by end-2020 -

May 2020 - Shandong province, home to nearly 80% of China's small independent refiners, is set to expand its 300MnBbls crude storage capacity by 64.54MnBbls (10.26MnCum) by the end of this year for storing crudes.

Two of the new storage tanks have already started operations – Sinopec's 1.6MnCum tanks at Dongjiakou port and Baogang International's 1.16MnCum tanks at Dongying port. The remaining 7.5MnCum are targeted to be online as early as July, mostly concentrated in the Dongjiakou port area.



Indian Oil plans refinery operation capacity scale up -

May 2020 - Indian Oil has restarted several process units at its refineries that were down due to the lockdown as demand for petroleum products gradually picks up. Refineries are currently operating at approx. 60% with plans to scale up to 80% by the end of May.

Latest

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 **Idled Bakersfield refinery to become renewable fuels plant** - May 2020 - Global Clean Energy Holdings (GCEH) has acquired and plans the immediate conversion of the idled 70kbd (3.5Mnta) Bakersfield refinery in California into a renewable diesel production plant.

The former crude oil refinery, due for start-up in late 2021, will be retooled to produce low-carbon renewable fuels that comply with the California Low-Carbon Fuels Standard from organic feedstocks such as used cooking oil, soybean oil, and distillers' corn oil, among others.

 **1 Numaligarh Refinery awards contract for expansion project** - May 2020 - Numaligarh Refinery has awarded a contract to Thyssenkrupp to provide engineering, procurement and construction management (EPCM) services for the expansion of its 60kbd (3Mnta) refinery in the Golaghat district of Assam, India, which will increase capacity to 180kbd (9Mnta) and scheduled to be completed by 2024.

 **1 Mid-May China receives first US crude cargo in six months** - May 2020 - Mid-May, China's independent refineries received their first US crude oil cargo since December 2019 in line with its trade pact to buy an additional \$18.5 Bn of energy goods from the US on top of 2017 volumes. Volumes will gradually go up in June and July. Back in April, the state oil company, Sinopec received its first US crude oil cargo since September.

 **1 Irving Oil gets approval to source Alberta oil via the Panama Canal** - May 2020 - Irving Oil has finally been able to secure federal approval for a new route to connect the oilsands to its refinery on the East Coast. But to circumvent provincial and environmental opposition faced during efforts to build the pipeline oil will be shipped on foreign tankers from British Columbia to its refinery in Saint John, New Brunswick, via the Panama Canal.

 **2 Valero refineries to gradually increase output in 2Q20** - Apr 2020 - Valero Energy, which had reduced production at several refineries in late March and early April as demand fell in response to the coronavirus crisis, now plans to operate its 15 refineries up to 73% of the combined total throughput of 3.1Mnbd (155Mnta) in 2Q20.

The company has begun to see an increase in demand as states in the US Gulf Coast and Midwest begin to lift stay-at-home orders.

 **3 Moda completes 10MnBbl crude oil storage expansion** - Apr 2020 - Moda Midstream has placed into service the final 495kBbl tank of its 10MnBbl crude oil expansion at the Moda Ingleside Energy Center (MIEC) in Ingleside and the Moda Taft Terminal in Taft, in Texas, raising total storage capacity to approx 12MnBbls.

Construction has now begun on a new 3.5MnBbl expansion at MIEC, which should come into service later in 2020, and result in a capacity in excess of 15.5MnBbl. Moda also has permits to build additional crude oil storage capacity at both MIEC and the Taft Terminal and is discussing further expansions with customers.

 **Maintenance under way at Litvínov complex** - May 2020 - Unipetrol is progressing with its regularly scheduled 4-year major turnaround at its 108kbd (5.4Mnta) Litvínov refinery and petrochemical complex in the Czech Republic, though with a modified version to ensure safety and health of workers at the site during the ongoing coronavirus crisis.

 **1 China and Iran assist PDVSA quest to repair Paraguana refinery** - May 2020 - The Iranian and Chinese governments are working closely with PDVSA to restart the 940kbd (47Mnta) Paraguana refinery complex (CRP) and replenish an almost exhausted fuel supply, and have sent over catalyst, refinery parts and technicians to the plant.

 **Shell to temporarily halt Tabangao refinery operations** - May 2020 - Pilipinas Shell is to temporarily shutter its 110kbd (5.5Mnta) Tabangao refinery in Batangas City, Philippines, for one month in order to conserve cash as fuel demand continues to be reduced as the country's enhanced community quarantine to fight the spread of coronavirus remains in place.

During the closure the refinery will execute proactive maintenance activities, as well as be used, along with its North Mindanao Import Facility (NMIF) in Cagayan de Oro City, as product import terminals to ensure supply of fuels remains uninterrupted.

 **2 Jingmen new catalytic cracker to start-up end May** - Apr 2020 - Sinopec's Jingmen refining and petrochemical complex in central Hubei province, China is scheduled to start-up its newly built 56kbd (2.8Mnta) heavy oil catalytic cracker on 30 May.

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



**Latest
continued...**

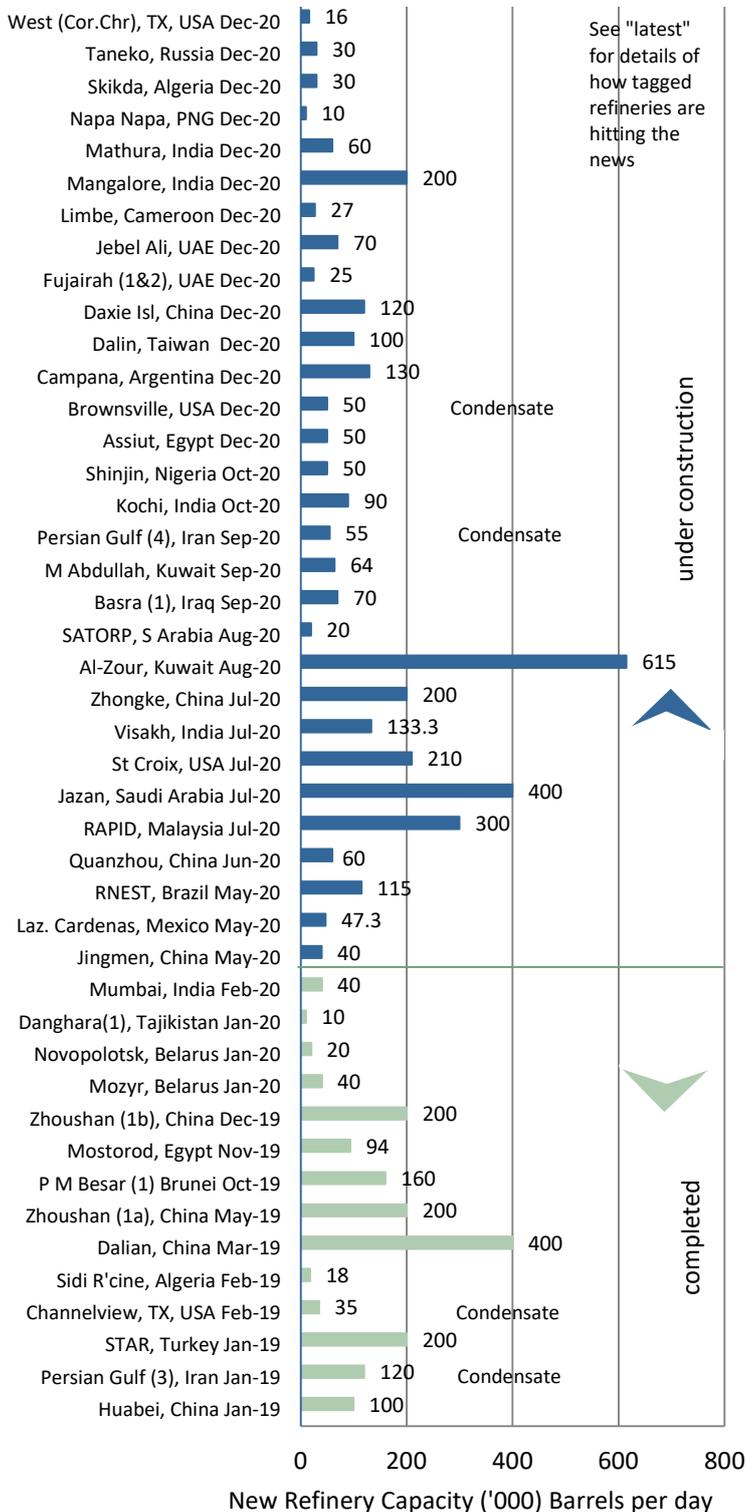
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Timeline

Recent and Planned Refinery Additions



We estimate that net global refinery capacity increased by 1.5Mnbd 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).

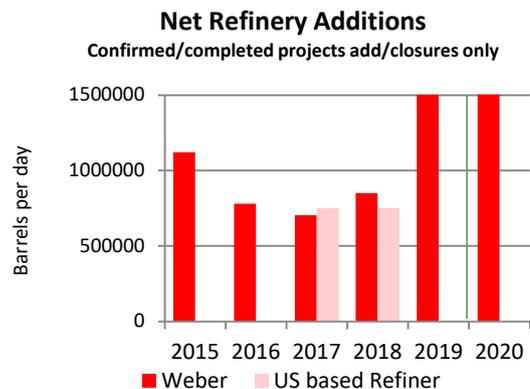
In 2020, almost 4Mnbd of new capacity (50 refineries) is currently under construction, although we anticipate capacity additions of between 1.8-2.0Mnbd. Kuwait (0.7Mnbd) and China (0.6Mnbd) are expected to lead the way, with a further 11 countries having >100Kbd under construction.

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.

Further expansion in domestic crude oil production will mean that the US remains a major driver of seaborne product trade in 2020. However, it can expect ever-intensifying competition from China, which returned product export gains of 8.3% in 2019 compared with a contraction of 3.6% in US exports.

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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