

# Weber Refinery Report



December 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.*



## **Vaccine approval boosts confidence, but tangible benefits for the troubled refinery sector are some way off - Dec 2020**

- In its November OMR, the IEA downgraded its forecast contraction in 2020 global oil demand by 0.4Mnbd to 8.8Mnbd. While it expects demand to rise by 5.8Mnbd in 2021, the predicted revival will be delayed until mid-year as the benefits from the vaccination programmes from around the world start to kick in.

The recovery timeline probably fits expectations that the refinery industry has held for many months, and it remains difficult to look beyond the current desperately weak market.

We estimate that refinery closures since the start of the pandemic now exceed 3Mnbd, while the IEA estimates that a further 20Mnbd of capacity is currently idled. Meanwhile, stocks have started to slowly disipate, but are still uncomfortably close to May's record highs.

Closures in 2020 have been fairly evenly distributed between North America, Europe and Asia/Australasia. In Europe and North America, new project proposals, such as there are, tend to feature renewables or biodiesel. China remains the focus of most of the conventional capacity to be added this year, accounting for at least 40% of the additions.



## **China's crude storage building boom to continue - Dec 2020**

- The Chinese Government has been progressing with large scale increases in storage as part of a strategic plan, accelerated by the recent low oil prices.

Sinopec has various projects underway: volume increases at its Dongjiakou port and storage facility in Luoyang, central China, which will increase crude storage by 64MnBbbls (3.2Bntonnes). Plans at Luoyang are to double to 10MnBbbls (500Mtonnes) capacity by mid-2021. Also, Hengli Petrochemical in Dalian is to increase its overall storage by 22.6MnBbbls (1.13Bntonnes).

However, it is private, rather than state, Chinese refiners, storage firms and port operators that are expected to lead the way in the construction of commercial crude oil tank farms in 2021.

An estimated 164MnBbbls (25.4MnCum) of tank space is expected to be added between 4Q20 and the end of 2022, with approx. 100MnBbbls from private investors likely to be ready for use in 2021.

Latest

*If you have questions or comments, please contact Charles R. Weber Research.*

**John M Kulukundis** at: [jmk@crweber.com](mailto:jmk@crweber.com)

[www.crweber.com](http://www.crweber.com)

**New China-backed refinery starts operations in Laos** - Dec 2020 - Laos, the only landlocked country in Southeast Asia, has started operations at its first-ever refinery, with a capacity of 20kbd (1Mnta). Lao Petroleum and Chemical (Laopec; majority-owned by Chinese investors) plans to add an additional 40kbd (2Mnta) to the Vientiane refinery in two further phases.

Laopec's project, a Lao-China Dongyan Petrochemical joint venture, has been a long time coming, due to financing issue delays. Laos has previously depended on imports to meet its petroleum demand, mainly from China, Vietnam and Thailand.

**Enref refinery shuts following a fire** - Dec 2020 - Engen Petroleum has shut down its 120kbd (6Mnta) Enref refinery in Wentworth, south of Durban, South Africa, as it investigates the cause of a fire, but has assured officials there is no risk of secondary fires or fuel shortages as a result of the closure.

A timeline for when the refinery might restart has not yet been disclosed. The plant may close its doors in 2023 and possibly be converted into a fuel storage facility for imported product.

**Total to halt operations at Donges refinery due to pandemic impact** - Nov 2020 - Total is planning to suspend operations at its 220kbd (11Mnta) Donges refinery in Western France from the end of November, for at least four months, due to the significant financial impact of the pandemic.

**Phillips 66's Humber refinery advances renewables projects** - Dec 2020 - Phillips 66 has received a major piece of equipment, a 15m tall, 80-tonne processing module, for a project to increase production of renewable fuels at its 221kbd (11.05Mnta) Humber refinery at South Killingholme, UK.

The module, which includes two reactors, will convert used cooking oil to expand the refinery's renewable diesel production capacity from 1kbd (0.05Mnta) to 3kbd (0.15Mnta) by January 2021.

**Idled Kentucky refinery may be converted to a biodiesel plant** - Nov 2020 - Continental Refining (CRC) is evaluating a \$25 Mn plan to convert its now idled 5.5kbd (0.275Mnta) Somerset crude oil refinery in Kentucky into a biodiesel production site. The site has been idled since 2018 and a decision to redevelop the plant was made in July 2020.

The project would involve acquiring, relocating and installing a soybean-crushing, biodiesel refining and blending facility equipped to process 3Mn bushels/year of locally sourced soybean production into biofuels and other soy-based products to produce up to 5Mn gal/year of renewable-based, ultralow-sulphur diesel.

**Xinhai wins backing to add 160kbd refining capacity** - Nov 2020 - Independent refiner Hebei Xinhai has won local government support to expand its crude processing capacity from 120kbd (6Mnta) to 280kbd (14Mnta). Construction is due to start soon, with completion by late 2021. Xinhai's plans add to the 1Mnbd of other refining capacity expansions in China that are due to come on line by the end of 2021.

**Port Harcourt Refinery to commence with Phase 2 works in 1Q21** - Dec 2020 - The Nigerian National Petroleum Corporation (NNPC) is set to commence Phase 2 of the rehabilitation of the Port Harcourt Refinery in 1Q21. NNPC is working towards ensuring that four refineries are up and running by 2023.

**Neste to restructure refining business and shutter Naantali refinery** - Dec 2020 - Neste has approved plans to restructure its refining operations in Finland, that will include permanently shuttering its 58kbd (2.9Mnta) Naantali refinery by the end of March 2021 and transform it exclusively into a harbour and distribution terminal. The 206kbd (10.3Mnta) Porvoo will be upgraded to co-process renewable and circular raw materials

**Petrobras proceeds with refinery sell-off plans** - Dec 2020 - Petrobras has received binding proposals for four refineries: Landulpho Alves (RLAM) in Bahia; Isaac Sabbá Refinery (REMAN) in Amazonas; Lubricants and Oil Derivatives of the Northeast (LUBNOR) in Ceará; and the Shale Industrialisation Unit (SIX) in Paraná.

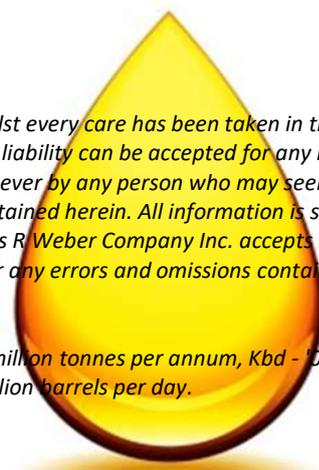
The refiner also expects to receive proposals for the Presidente Getúlio Vargas (REPAR) refinery in Paraná and the Alberto Pasqualini (REFAP) facility in Rio Grande do Sul on 10 December. Binding proposals for the Abreu e Lima (RNEST) refinery in Pernambuco and Gabriel Passos (REGAP) refinery in Minas Gerais are expected in 1Q21.

No bidders' names were divulged. Once the planned divestment process is complete, Petrobras would retain six refineries, of which five are located in south-east Brazil.

**Petronas nears restart at Malaysia's Pengerang refinery** - Dec 2020 - Petronas is on course to start its 300kbd (15Mnta) Pengerang refinery in Malaysia, in 1Q21, which has been delayed since March following a fire.

*Disclaimer: Whilst every care has been taken in the production of this study, no liability can be accepted for any loss incurred in any way whatsoever by any person who may seek to rely on the information contained herein. All information is supplied in good faith and Charles R Weber Company Inc. accepts no responsibility for any errors and omissions contained within this study.*

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



Latest  
continued...

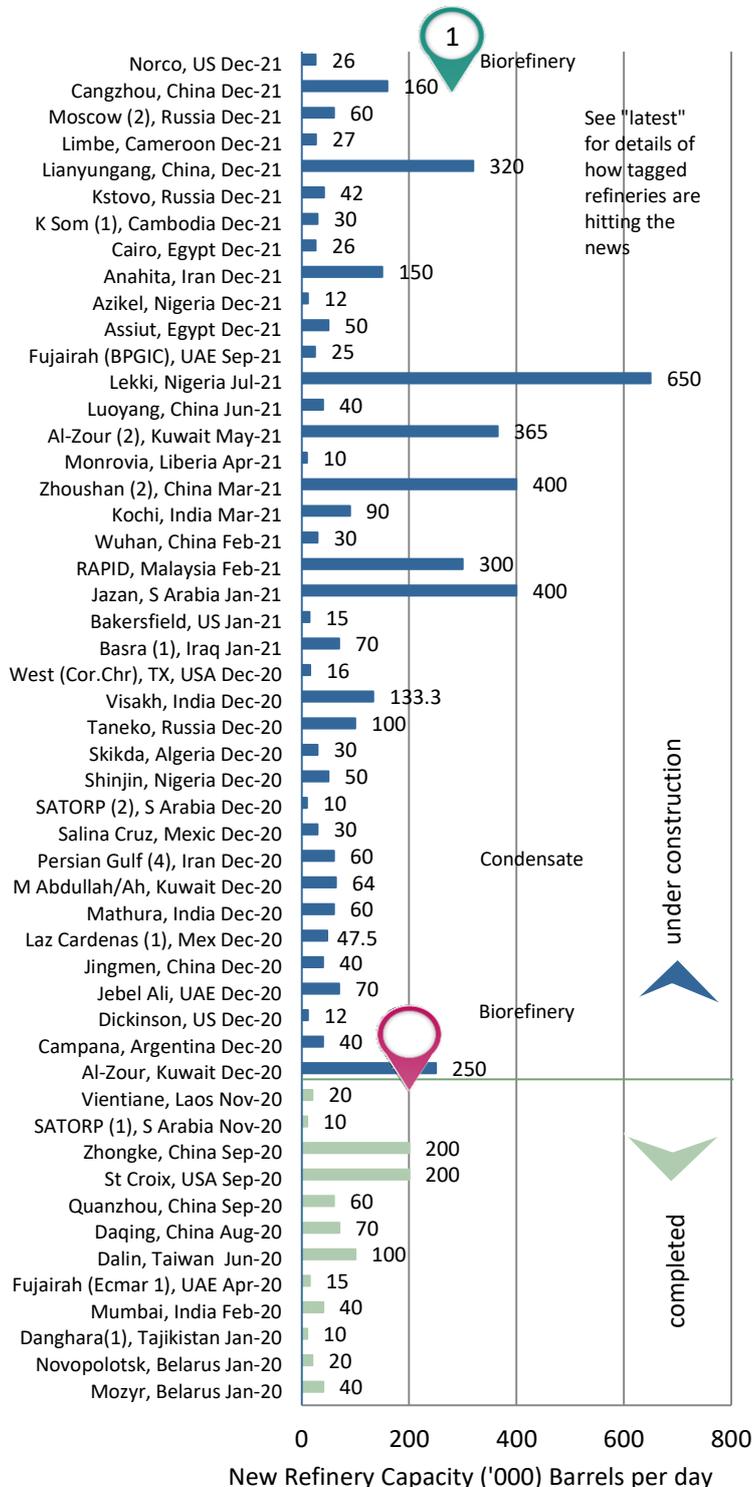
If you have questions or comments, please contact Charles R. Weber Research.

John M Kulukundis at: [jmk@crweber.com](mailto:jmk@crweber.com)

[www.crweber.com](http://www.crweber.com)

# 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).

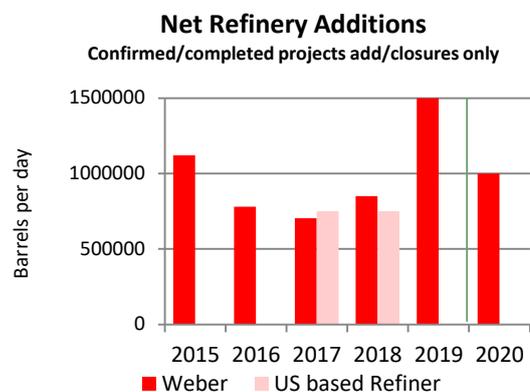
In 2020, we anticipate capacity additions of less than 1Mnbd, down from 2Mnbd at the start of the year, as a number of projects are expected to slip into 2021. China (0.4Mnbd) is expected to lead the way, with a further 16 countries having >10Kbd under construction.

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. However, rumours are now swirling about multiple closure plans around the globe in a market severely squeezed by the pandemic. We have seen around 1.4Mnbd of planned or completed capacity closure or conversion in North America alone since end 2019.

The US remains a major driver of seaborne product trade in 2020. However, falling demand in its key South American market due to the pandemic, coupled with new Chinese capacity coming on stream, means that US product exports are on course to contract by 10% in 2020 Yoy, after falling 4.6% Yoy in 2019.

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.



If you have questions or comments, please contact Charles R. Weber Research.

John M Kulukundis at: [jmk@crweber.com](mailto:jmk@crweber.com)

[www.crweber.com](http://www.crweber.com)