

Weber Refinery Report



May 2017



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.



Nigeria's plans to revitalise its refining sector

gather pace - Apr 2017 - The Nigerian refinery sector is not in good shape. It has just three operational refineries which ran at just 8.55% of capacity during the period January 2015 to September 2016, according to an analysis of data from the National Nigerian Petroleum Corp (NNPC). However, the Nigerian government appears determined to revitalise this flagging industry.

In the latest development, Itay's Eni announced plans to build a 150Kbd crude refinery in Nigeria through its Agip subsidiary. A memorandum of understanding is being prepared. According to ENI, the new refinery would also help to revamp the existing 210Kbd Port Harcourt refinery.

The Nigerian government has attempt to go beyond a reliance on the state owned NNPC to engage with the private sector. This policy will start to come to fruition next year when the private 107Kbd Azazel refinery is scheduled to begin operations, along with a new 650Kbd refinery to be built by the Dangote Group.

In another attempt to engage the private sector and also diffuse the unrest in the Niger Delta - Nigeria's oil producing region - the government has floated a policy to make some of the illegal refiners and the local communities in the Niger Delta shareholders in the proposed modular refineries concept of the Federal Government, and this seems to be gaining traction with the setting up of the Modular Refinery Business Stakeholders'

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Integrated expansion project boosts Kochi Refinery

- Apr 2017 - The Integrated Refinery Expansion Project (IREP) at the BPCL-Kochi Refinery is now mechanically completed, according to Executive Director Prasad K Panicker. The major units commissioned are designed to increase the company's refining capacity by 120Kbd from 190Kbd to 310Kbd.

Five of the total nine units have been commission – a new crude distillation unit, a diesel hydrotreater unit and a vacuum gas oil hydrotreating unit to remove sulphur from diesel and petrol, etc.

The remaining projects such as the delayed coker unit to recover value-added products from refinery residue steams, petro FCCU for producing feedstock for the petrochemical complex and sulphur recovery unit for recovering sulphur are under commissioning. Other units of IREP such as naphtha hydrotreating and isomerisation will be completed in the next 2-3 months.

Latest

1 IOC in early talks with Saudi Aramco for mega refinery project - Apr 2017 - India's top refiner (IOC) is in initial talks with Saudi Aramco on downstream investments, including a mega project on its west coast that could help lock in export volumes for Saudi Arabia.

IOC and its partners are expected to make a final investment decision on the west coast Maharashtra project, which includes a 60Kbd ethylene unit, and would then take five years to complete, with start up in late-2018 to early 2019.

Gazprom advances Moscow refinery modernisation project - Apr 2017 - Gazprom Neft has reached 20% completion on construction of its project to build a Euro+ combined oil refining unit (CORU) as part of the ongoing modernisation and upgrade of its 240Kbd Moscow refinery. The project remains on schedule for start-up in late 2018.

First announced in 2013, Euro+ CORU forms a key project under Gazprom Neft's second-phase modernisation work at the Moscow refinery, which specifically aims to further improve the manufacturing site's overall environmental performance, as well as its yield of light-end, Euro 5-quality petroleum products.

Ground broken for Cambodian oil refinery - Apr 2017 - After years of delays and setbacks, Cambodia Petrochemical (CPC) has finally broken ground on its greenfield 100Kbd refinery, the country's first. Originally expected to be completed in 2014, the updated completion date is set for the middle of 2019.

The oil refinery, which will be built on 365 hectares across Kampot and Sihanoukville provinces, is expected to be dependent on crude imports from the Middle East in the near term and would initially be used for domestic distribution, though once Cambodia produces its own oil, the facility would help the country become a net exporter.

1 Uzbekistan breaks ground on new Jizzakh refinery - Apr 2017 - The Republic of Uzbekistan has broken ground on its grassroots 100Kbd Jizzakh refinery, but a definitive timeframe for start-up has yet to be revealed.

Designed in collaboration with a consortium of leading international companies and to be equipped with the most advanced technologies for deep processing of crude oil, as well as ensuring industrial and ecological safety, the modern refining complex comes as part of Uzbekistan's 2017-21 Action Strategy development plan, which includes achieving national fuel-energy independence, as well as increasing the country's export potential.

The refinery will process crude feedstock delivered via pipeline from Russia and Kazakhstan to produce 74Kbd of motor fuel, 14Kbd of aviation fuel and 6Kbd of other finished petroleum products.

Port Arthur refinery now 100% Saudi owned - Apr 2017 - Saudi Aramco now controls 100% of the 600Kbd Port Arthur oil refinery in Texas – the largest facility in the US. Previously, Aramco owned 50% the refinery in a joint venture with Royal Dutch Shell. The split between the two companies has now reached completion.

1 Oil to flow both ways after Kenyan refinery upgrade - Apr 2017 - Kenya has completed modifying its ageing 32Kbd Mombassa refinery to allow two way flow of oil through the pipeline – from onshore storage tanks to ships ahead of the start of crude exports next month, and from ships to the tanks.

Petroleum Principal Secretary Andrew Kamau said the storage facilities at the Kenya Petroleum Refineries (KPRL), which has been closed since 2013, have been refurbished to handle the Turkana crude. KPRL has 45 tanks, nearly half of which will store the crude from Turkana for shipment while the rest is for refined products.

The first tankers are expected to dock at the Mombasa port in June to pick up the consignment.

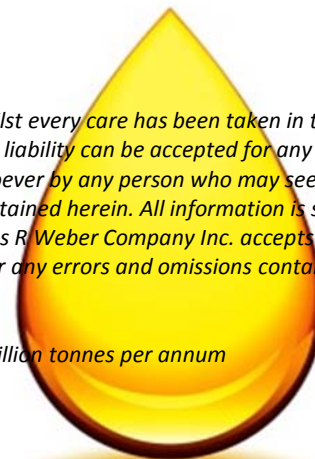
1 Vitol expands into refining with purchase from Koch - May 2017 - Vitol, the world's largest independent oil trader, has moved to expand its refining business with the purchase of a 85Kbd condensate splitter in the Netherlands from Koch Supply and Trading.

Persian Gulf Star refinery Phase 1 inaugurated - Apr 2017 - Phase 1 of a new gas condensate refinery at Bandar Abbas, dubbed the Persian Gulf Star, has been inaugurated, and will make Iran self-sufficient in gasoline production and set the country on its way to turning into an exporter of the fuel.

When it begins full operation in 2018, the refinery will have a capacity of 37MnL/day of gasoline. In its first phase, it can produce 12MnL/day. Iranians consume approx. 60MnL/day of the fuel but only produce approx. 50MnL/day.

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Notes: Mta = million tonnes per annum



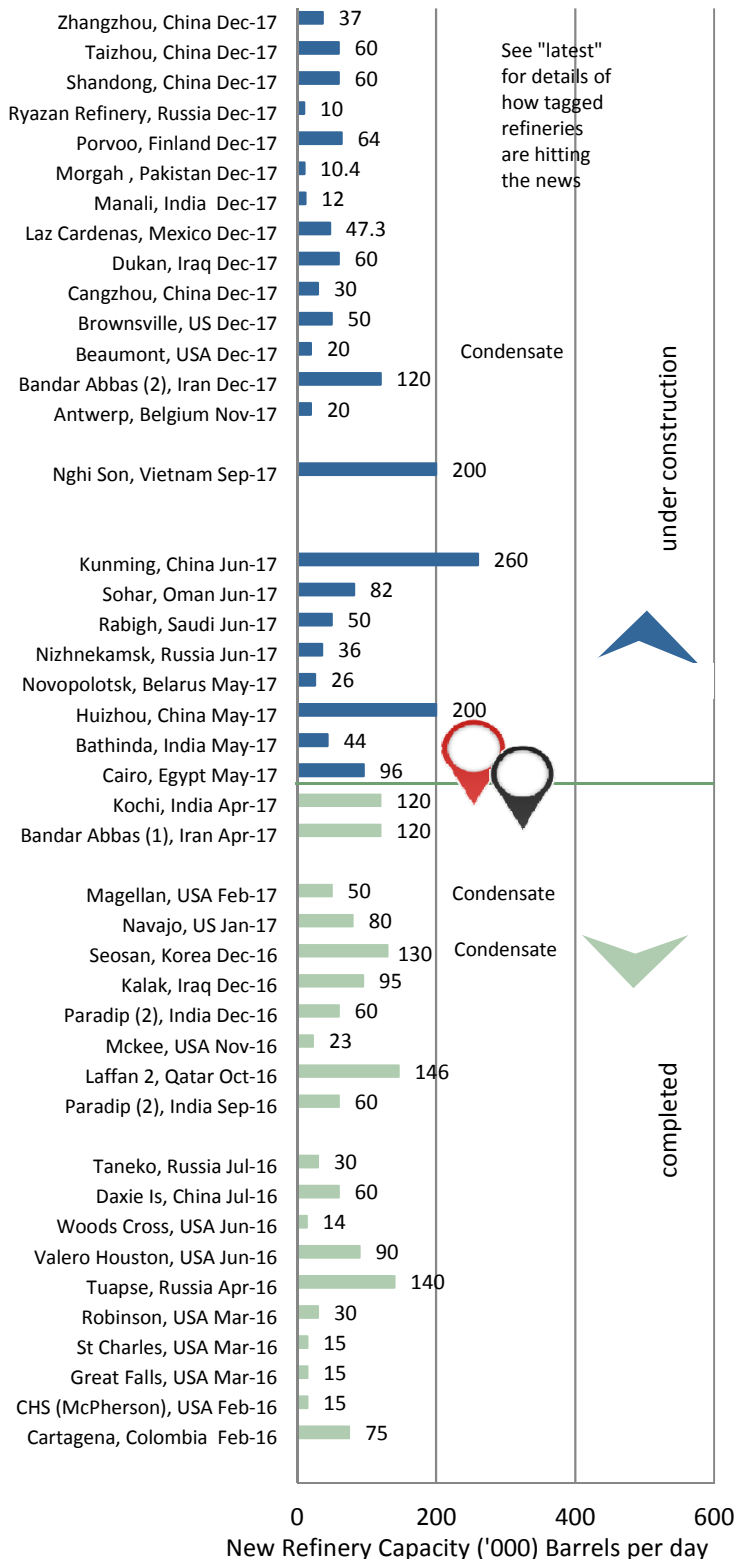
Latest
continued...

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Timeline

Recent and Planned Refinery Additions



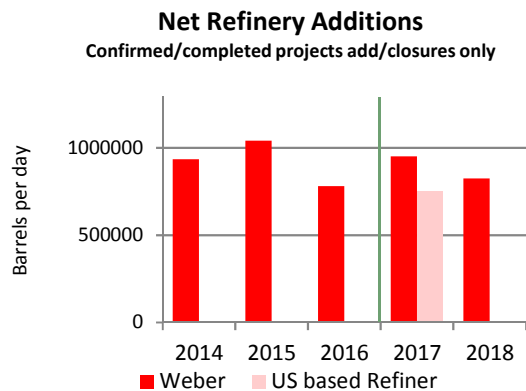
We estimate that net global refinery capacity increased by 0.8Mnbd in 2016. This built on increases of 1.1Mnbd in 2015, 0.9Mnbd in 2014, 1.4Mnbd in 2013 and 1.1Mnbd in 2012 (the latter two numbers are based on BP data).

In 2017, we anticipate net refinery capacity additions of just under 1Mnbd. After 17 new refinery additions (each adding >=10Kbd) in 2014, 23 in 2015, and 15 in 2016, we expect approx 29 (often small) projects to complete in 2017. However, it should be noted that a number of projects were pushed back in 2016, in part due to weak oil prices, and the project completion rate this year will be similarly dependent on oil prices continuing to at least sustaining plus USD50Bbl.

In 2014-15, closures accounted for more than 1Mnbd of capacity. The rate of closures declined to 0.7Mnbd in 2016, and we expect a similar rate this year with closures scheduled in the Middle East and Asia.

New Chinese refinery additions coupled with the internationalisation of the independent "teapot" refinery sector helped to galvanise Chinese exports in 2016, which are estimated to have expanded by 26% last year - underpinned by gasoil/diesel 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 2015-2018 with that provided by a large US based refiner. This comparative forecaster factors in project delays beyond those reported by the refiners themselves. The US refiner has an interest, of course, in taking a conservative view of new projects coming online and has pushed some projects out beyond 2017.



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