Weber Refinery Report

January 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.

Trump wants more oil refineries built in US - *Dec 2016* - US President-elect Donald Trump has said that American energy dominance will become a declared strategic economic and foreign policy goal. As part of this strategy, Trump wants to see more oil refineries built in the US, and pledged to do away with "job-killing restrictions" suppressing the energy sector.

There seems little doubt that the US oil industry will be in a strong position following the inauguration, but will oil production recover faster than previously expected, and will oil and refined product exports grow faster than previously thought?

US oil producers have been weakened by low oil prices over the last couple of years. The strongest surviving producers are intent on consolidation by drilling within established profitable plays. It seems more likely that oil prices rather than government policy will shape the signposted recovery in US production in 2017.

Refiners will be wary of proposals to tax crude oil imports, as PADD3 refiners require heavy crude imports from Canada and elsewhere for their input slate, and an unintended consequences of such a policy may be to push up domestic feedstock prices - not to mention gasoline pump prices for consumers. However, proposals to build new refineries - like the Raven proposal discussed later in this report - which seek to rely on a dedicated US shale oil feed may proliferate.

China cuts teapot crude oil import quotas - *Jan 2017* - Having stated in December that China's small independent refiners would maintain their 1.76 million b/d intake quotas (which were gradually built up over last year), it has now emerged that government quotas will be cut by 380,000 b/d to 1.38 million b/d in 2017 - although it is also anticipated that quotas will be reviewed at mid-year.

The cutback in quotas is in response to the OPEC deal to reduce production in an effort to bring the market back into balance, and support crude oil price rises. Saudi Arabia is set to bear 40% of the future cuts and there are signs that it is taking steps to make this happen with Saudi Aramco indicating its intention to cut supplies to non-strategic Asia-Pacific buyers by 7-8% from February.

Meanwhile, Iraq, Venezuela and Kuwait have reiterated their support for the deal, while UAE production will fall in March-April as a result of field maintenance. Oman is telling all its Asia-Pacific buyers to expect a 5% reduction in term liftings.

Latest

If you have questions or comments, please contact Charles R Weber Research.
John M Kulukundis & **George P Los** at: research@crweber.com
www.crweber.com

Phillips 66 cuts 2017 capital budget by 25% - *Dec 2016* - Phillips 66, which has over 15 refineries, has lowered its capital budget for 2017 by approx. 25% to USD2.7Bn. It also plans to invest USD905Mn in "reliability, safety and environmental projects".

CEO Greg Garland said, "The reduction in capital spending from prior years reflects that fewer projects meet our return thresholds in the current business environment."

Pertamina advances Cilacap oil refinery upgrade finish to 2021 - *Dec 2016* - Pertamina aims to finish a USD5Bn upgrade to its Cilacap oil refinery in Central Java in 2021, one year earlier than its previous target. Pertamina will take 55% of the refinery joint venture, with Aramco controlling the remaining 45%.

NNPC to commence full repair of refineries in 2017 - *Dec 2016* - According to Nigerian National Petroleum's (NNPC) COO Mr. Anibor Kragha, the company plans to undertake a comprehensive rehabilitation of its three refineries located in Port Harcourt, Warri and Kaduna to achieve optimal capacity utilization for 2017.

Algeria awards contracts for Skikda refinery - *Dec 2016* - Sonatrach has awarded a contract to Tecnicas Reunidas to deliver engineering and project management consultancy (PMC) services for two grassroots units to be built at the 16.5Mta Skikda refinery – a 4.6Mta gas oil hydrocracker and a 4Mta catalytic reformer.

Scheduled for completion in 2019, the two units will boost the Skikda refinery's production of Euro 5-quality diesel and gasoline by 3.2Mta and 3.5Mta, respectively. They will come as part of Sonatrach's broader goal to independently meet Algeria's fuel demand and to generate surplus production for exports.

Shell finalises sale of Japanese refining assets - *Dec 2016* - Royal Dutch Shell has completed the previously announced sale of almost all its interest in Japanese refiner Showa Shell Sekiyu. However, it reiterated its commitment to continuing to do business in Japan, which remains an important LNG market for the company's upstream integrated gas business.

The Showa Shell divestment follows the company's flurry of recent downstream selloffs, the most recent of which involves the pending $80-million sale of its Danish subsidiary AS Dansk Shell—including the 70,000-b/d Fredericia refinery. Shell is also negotiating selling refinery assets in Germany and Malaysia, having already divested downstream assets in Australia, Italy and the UK.

Indian refiners sign MoU for proposed mega-refinery - *Dec 2016* - Indian Oil (IOC), Bharat Petroleum (BPCL) and Hindustan Petroleum (HPCL) have formed a consortium, signing a MoU on 7 December, to pursue a previously announced plan to jointly develop a grassroots 60Mta integrated refining and petrochemical complex in India's Maharashtra state.

If it comes to fruition the complex would displace the 33Mta refinery operated by Reliance Industries at its two-refinery, 60Mta Jamnagar manufacturing complex to become India's largest refinery.

South Korea's Daelim Wins USD2Bn Iran Refinery Project - *Dec 2016* - The National Iranian Oil Company and S Korea's construction conglomerate Daelim Industrial Company have reached an agreement to cooperate on constructing the Isfahan refinery, which is expected to take 48 months to complete from groundbreaking.

Raven Petroleum to build a new Texas refinery - *Dec 2016* - Newly formed Raven Petroleum is to construct a 50Kbd refinery east of Laredo in South Texas to export nearly all of its fuels to Mexico.

The goal, according to Christopher Moore, who's behind the project, is to take advantage of vast amounts of Texas shale oil, recently deregulated energy markets in Mexico and increasing demand south of the border. Mexico's fuel consumption is growing approx 3% pa, twice the global average.

Construction is expected to start by mid-2017, with operations by the end of 2018. However, the project has yet to secure financing.

Australian Government plans on scrapping 91 octane unleaded petrol - *Dec 2016* - The Australian government has released a controversial proposal calling for 91 octane unleaded petrol (the most popular petrol) to be phased out in Australia in a bid to clean up its environmental record, which will force drivers to switch to either 95 octane unleaded petrol (sulphur 10ppm) or a new premium 98 octane unleaded petrol.

If the phase out is successful, it will also cost the nation's main oil refineries billions to upgrade their plants and there's no details yet on whether or not it will be taxpayers who are expected to pay for it.

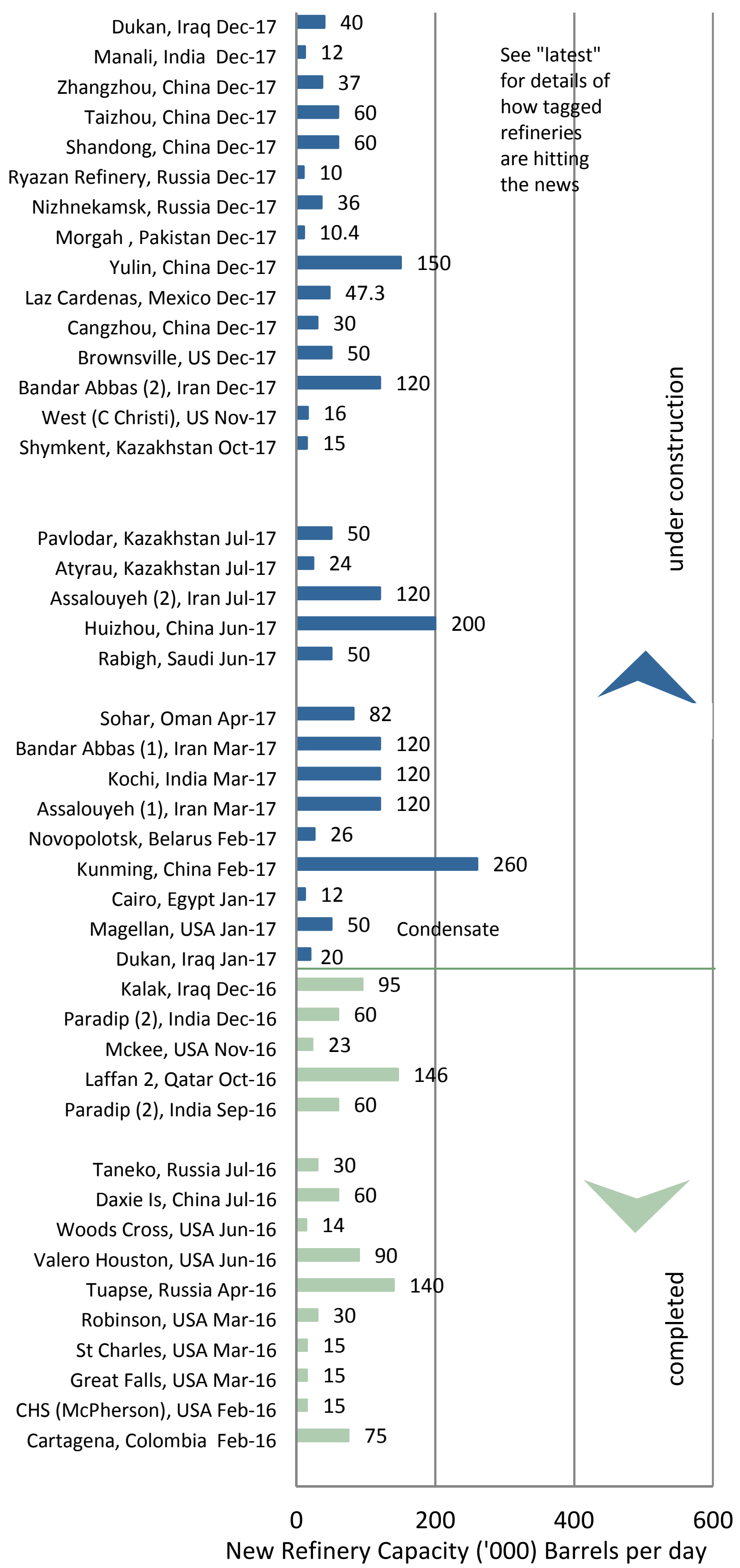
Notes: *Mta = million tonnes per annum*

If you have questions or comments, please contact Charles R Weber Research.
John M Kulukundis & **George P Los** at: research@crweber.com
www.crweber.com

Latest
continued...

Timeline

Recent and Planned Refinery Additions



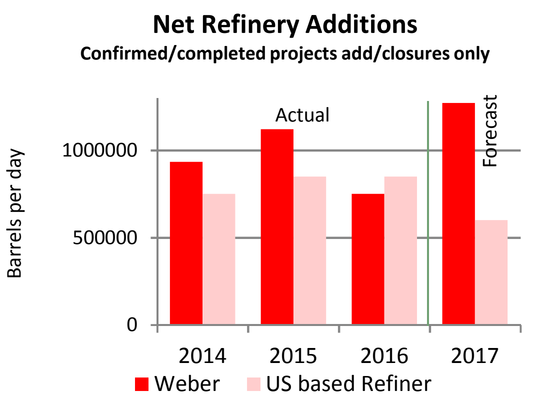
We estimate that net global refinery capacity increased by 0.8Mnbd in 2016. This built on increases of 1.1Mnbd in 2015, 0.9Mnbd in 2014, 1.4Mnbd in 2013 and 1.1Mnbd in 2012 (the latter two numbers are based on BP data).

In 2017, we anticipate net refinery capacity additions of 1.3Mnbd. 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 sustain the modest rally seen from 4Q16.

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 additons 2015-2017 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.



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

John M Kulukundis & **George P Los** at: research@crweber.com
www.crweber.com