Weber Refinery Report



February 2016

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.



China continues to make waves in the refined product sector - Jan 2016 - Having started the process of deregulating its domestic crude oil import and product export markets, which may lead to significant growth in its product exports this year, China is further expanding its interest in the crude/products sector by intensifying relationship building around the world, including with Saudi Arabia and Pakistan.

Following the recent visit of Chinese President Xi Jinping to the JV Sinopec/Saudi Aramco YASREF refinery, it was reported that Saudi Aramco is in advanced talks with CNPC and Sinopec regarding investment opportunities in refining, marketing and petrochemicals in China.

Aramco had been in talks to acquire a stake in a CNPC refinery and retail assets, a deal, estimated to be worth approx. USD1-1.5Bn, that would help it sell more of its output to China amid growing competition.

According to Saudi Aramco Chairman Khalid al-Falih there may be opportunities for further expansion at the 400Kbd YASREF refinery, which began operations at full capacity in July.

Ties are also being strengthened with Pakistan where China has showed interest in setting up an oil refinery, preferably at Gwadar and Karak in Khyber-Pakhtunkhwa - where China is already developing a mega deep-sea port.

Pacific Future Energy oil refinery enters environmental review process - Jan 2016 - Pacific Future Energy plans to build a USD11Bn oil refinery halfway between Terrace and Kitimat, having submitted project descriptions to both the British Columbia Environmental Assessment Office (EAO) and Canadian Environmental Assessment Agency (CEAA).

Pacific Future plans to bring bitumen from Alberta by rail rather than pipeline, where it would be refined into gasoline, diesel and jet fuel, requiring three to four trains each day, carrying a total of 360-480 rail cars.

The environmental review process is expected to take two years, and if approved and financed, would be the first refinery to be built in North America in over 30 years.

The 210Kbd refinery is one of two that have been proposed for the area. The other, Kitimat Clean, is headed by BC newspaper owner David Black. That project has yet to file a project description with the relevant agencies.

Latest

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

India's largest refinery - Jan 2016 - Oil firms Indian Oil (IOC), Bharat Petroleum (BPCL), Hindustan Petroleum (HPCL) and Engineers India (EIL) are to invest Rs.1.5 lakh crore in constructing a 60Mta oil refinery in Maharashtra, India's largest refinery on the west coast.

Oil Minister Dharmendra Pradhan said, "Refinery to be built in 2 phases (40 and 20Mntonnes); 1st phase will have more than Rs.1 lakh crore investment (biggest in India)."

Shell awards contract for unit at Rotterdam refinery

- Jan 2016 - Royal Dutch Shell has awarded a contract
at the 404Kbd Pernis refinery in Rotterdam, Netherlands,
to KBR, to provide technology for a solvent deasphalting (SDA)
unit – to remove heavier fractions from and upgrade a larger
portion of its crude feedstock into lighter, high-grade products.

This will enable the refinery to produce a more varied product mix, as well as allow it greater flexibility in adjusting its production slate to respond to market developments.

Two more China teapot refineries apply to process imported crude - Jan 2016 - The National Development and Reform Commission has received applications for two more Chinese independent teapot refineries, Shandong Jincheng Petrochemical and Hebei Xinhai Chemical, to process a total of 9.96Mta of imported crude oil.

Shandong Jincheng Petrochemical, in eastern Shandong province with a crude processing capacity of 5.9Mta (118Kbd), applied to the NDRC to process 4.56Mta of imported crude. In order to meet the NDRC's requirement for an imported crude quota, the refinery has committed to get rid of two older units with a total processing capacity of 3.8Mta.

Hebei Xinhai Chemical, in northern Hebei province with a crude processing capacity of 6Mta, applied to process around 5.4Mta of imported crude oil.

Balikpapan refinery faces setback - Jan 2016 - Indonesia's ambitious refinery upgrade plan has hit another setback as talks collapsed between state-owned Pertamina and JX Nippon Oil & Energy on the expansion and upgrade of the 260Kbd Balikpapan plant.

According to a spokesman, JX Nippon has dropped out of the project after the two sides could not agree on certain issues. Pertamina said that the main point of contention was the investment estimate, which will cause a setback of two to three years on the target completion date of 2021-2022.

Visakh refinery modernization project (VRMP) - Jan 2016 - India's Ministry of Environment, Forest, and Climate Change (EFCC) has granted Hindustan Petroleum (HPCL) environmental clearance to proceed with a project to expand and modernise its 8.3Mta Vishakapatnam (Visakh) refinery in Andhra Pradesh.

A brownfield project, the Visakh refinery modernisation project (VRMP) will include both installation of new units and revamps of existing units to expand the refinery's processing capacity by 6.7Mta to 15Mta, as well as boost its production of low-sulphur fuels that conform to Euro 4 and Euro 5 quality standards.

Indian Oil to spend USD600Mn on Paradip refinery upgrade - Jan 2016 - Indian Oil plans to invest Rs 4,000crore (USD600Mn) in upgrading its 300Kbd Paradip refinery in Odisha, commissioned last year, after the central government decided to bring forward by four years the introduction of road vehicle fuels which are compliant with Euro VI emission standards to April 2020.

IPMAN awaits FG's directive to kickstart projects - Jan 2016 - The Independent Petroleum Marketers Association of Nigeria (IPMAN) is awaiting the Federal Government's directive to commence its proposed USD3Bn 200Kbd refineries located at Itobe in Kogi and Abbe in Bayelsa States.

The IPMAN National Assistant Secretary Alhaji Ahmed Fashola said that the association remained committed to the projects, with foreign investors having conducted feasibility studies in August 2015, but they were put on hold by the delay in government policy.

Gunvor completes acquisition of Rotterdam refinery - Jan 2016 - Gunvor Group has completed the acquisition of the 88Kbd KP Europoort in Rotterdam - its third European refinery from Kuwait Petroleum International (KPI). The refinery will be re-named Gunvor Petroleum Rotterdam.

Gunvor said it would maintain the refinery running, linking it to its two other refineries in Antwerp, Belgium and Ingolstadt, Germany. Previously Gunvor had planned to close one crude distillation unit at the plant which would mean cutting 25% of the refinery's workforce.

Iran to invest in new refinery project in Spain - Jan 2016 - Iran and Spain are discussing a plan to build a joint 200Kbd oil refinery at the Gibraltar Strait, in Spain, in what appears to be a long-term strategy to guarantee Iran's own oil sales to Europe.

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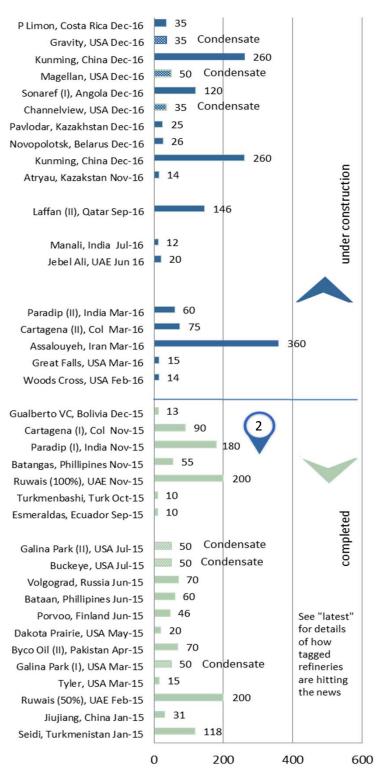
Notes: Mta = million tonnes per annum

Latest continued...

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Timeline

Recent and Planned Refinery Additions



New Refinery Capacity ('000) Barrels per day

We estimate that net global refinery capacity increased by 0.7Mnbd in 2015. This built on increases of 0.6Mnbd in 2014, 1.4Mnbd in 2013 and 1.1Mnbd in 2012 (the latter two numbers are based on BP data).

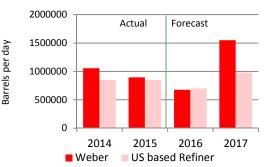
In 2016 and 2017, we anticipate net refinery capacity additions of 1Mnbd and 1.5Mnbd respectively. After 17 new refinery additions (each adding >=10Kbd) in 2014 and 18 in 2015, we expected approx 20 projects to complete in 2016. However, the collapse in oil price is likely to cause delays to expansion projects, which may alter the picture significantly.

In 2014, closures accounted for 1Mnbd of capacity, and 1Mnbd has been confirmed for closure in 2015-16. A further 0.7Mnbd of capacity - spread between Japan, FSU and China - is also thought to be under threat of closure over the next two years.

It will be interesting to see if the new Chinese refinery capacity will succeed in backing out non-Asian imports into Asia, especially now that Chinese "teapot" refineries have the potential to start exporting from 2016. As of 1H15, North East Asia has seen strong product import growth, with regional exporters holding onto market share in the face of strong competition from the Middle East.

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 2015-2017 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.

Net Refinery Additions Confirmed/completed projects add/closures only



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