

## **Feature: Future China paraxylene start-ups cool enthusiasm for new non-Chinese PX projects**

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Major capacity additions in the Chinese paraxylene market in the next four years, estimated to be at least 20 million mt/year over 2017-2021, are forcing a rethink of new projects elsewhere in Northeast Asia, industry sources said Thursday.

The most notable non-Chinese project in Northeast Asia is the proposal to expand South Korean refiner GS Caltex's PX production capacity at Yeosu to 2.35 million mt/year, from 1.35 million mt/year, via a joint venture comprising GS Caltex as well as Japan's Showa Shell and Taiyo Oil.

Showa Shell, Taiyo Oil and GS Caltex signed a memorandum of understanding in April 2012, with the aim to complete the expansion by end-2014, but the project never moved beyond the proposal stage.

CB&I, which won the contract for licensing, basic engineering and catalyst supply for the new plant, in October 2013 said the new plant was set to start up in 2016. But this was later rebutted by a source with one of the JV companies, who said construction had not started, S&P Global Platts previously reported.

Although the different parties had varying comments, what is clear is that there is little motivation to embark on a capacity expansion anytime soon.

"At the moment, GS Caltex is not considering moving forward on this [project]," a source close to the company said of the JV project. "It has been shelved temporarily. [The company] cannot be in a situation where [it] contributes to an impending oversupply in the market," the source added.

A Taiyo Oil official, however, offered a different perspective.

"We're still waiting on the Korean side to give an indication. At the moment, none is forthcoming. It would certainly be beneficial to Taiyo Oil if there was increased demand for isomer-grade mixed xylenes for PX production, given the length in that market."

Taiyo Oil has an isomer-MX production capacity totaling 700,000 mt/year at its plant in Kikuma.

Isomer-MX is used as a feedstock for PX production, which is then used as feedstock for PTA, the raw material for polyester production.

### **BACK-INTEGRATION OF CHINA PTA PLANTS TO CUT PX IMPORT DEPENDENCY**

"With a lot of Chinese purified terephthalic acid producers integrating upstream over the next few years, demand for imported PX is definitely going to take a massive hit," a South Korean producer had said.

Rongsheng Group and Tongkun Group are among the Chinese companies that are building an integrated refinery and petrochemical complex on Zhoushan Island in

Zhejiang province, which will alone boost the country's PX production capacity by 8 million mt/year by 2020, Platts previously reported.

Stage one comprises the completion of 4 million mt/year of PX production capacity by end-2018, and stage two an additional 4 million mt/year by end- 2020.

Additionally, stage two of Ningbo Zhongjin Petrochemical's PX project is expected to start up in late 2018, which will add another 2 million mt/year of PX capacity to its existing 1.6 million mt/year. Ningbo Zhongjin is a subsidiary of Rongsheng Group.

Rongsheng Group is also one of the owners of China's largest PTA producer, the Yisheng group of companies, which has PTA plants at Ningbo, Dalian and Hainan, totaling more than 12 million mt/year of PTA capacity.

Tongkun is also a PTA producer with one plant at Zhapu, Zhejiang province, with a capacity of 1.5 million mt/year. The company is building another 2.2 million mt/year PTA plant at Zhapu, which is expected to start up in the fourth quarter of 2017, Platts previously reported.

Of the 12.36 million mt of PX that China imported in 2016, 47.37% or 5.86 million mt was sourced from South Korea, Chinese customs data showed, while China's total imports from Northeast Asia, including South Korea, accounted for 77.67% last year.

For China, as the world's largest producer of PTA with a total nameplate capacity of close to 45 million mt/year, and hence the largest consumer of PX, a move to increase its own domestic PX supply is logical, although it has faced challenges in recent years.

In 2015, Dragon Aromatics at Zhangzhou suffered its second explosion in as many years at its 1.6 million mt/year PX plant, which prompted an investigation by authorities into its operations and procedures.

The plant remains shut till this day, with sources saying that a restart is extremely unlikely for at least a year. The company has not commented on that yet, although market sources rule out a restart this year.

The plant's closure led to the shutdown of Xianglu Petrochemical's neighboring 4.5 million mt/year PTA plant, which sourced most of its feedstock from Dragon Aromatics, Platts previously reported.