

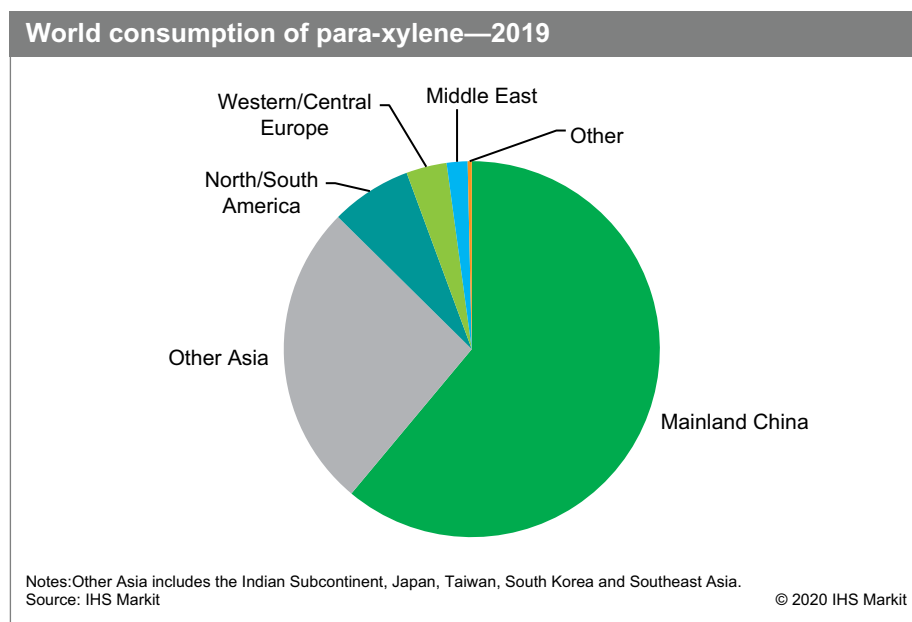
para-Xylene

30 November 2020

Abstract

para-Xylene (PX) is an aromatic compound that is commonly derived from crude oil sources and extracted from the mixed xylenes stream. PX is the most widely used of the three xylene isomers (the two others being ortho-xylene and meta-xylene). In 2019, PX accounted for more than 85% of global mixed xylenes demand. The major source of isolated PX is refinery reformers; however, a significant amount of para-xylene is left in the reformate stream and sent to the gasoline pool for octane value enhancement. High-octane gasoline is the most important use of reformate, competing with use for isolation of xylenes/para-xylene; therefore, consumption of high-octane gasoline has a key influence on para-xylene markets globally.

The following pie chart presents world consumption of para-xylene:



PX is a key raw material used in the production of purified terephthalic acid (PTA) and dimethyl terephthalate (DMT), which are used almost exclusively in the production of polyethylene terephthalate (PET) polymer for the production of polyester fibers, PET solid-state resins, and PET film. Over the past three decades, global PX demand has been driven by the extensive development of the polyester chain, which has taken place largely in Northeast Asia. The development of the Northeast Asian polyester industry has been driven primarily by the significant advancement of the regional textile industry, especially in mainland China. Production of polyester fibers is more labor intensive than traditional and heavily automated petrochemical manufacturing processes, and their production has developed rapidly where manpower costs were the most competitive and where the downstream textile industry was flourishing. Therefore, PX consumption has remained heavily dominated by Northeast Asia.

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In 2019, more than three-fourths of the global capacity for PX was located in Asia (Northeast Asia, the Indian Subcontinent, and Southeast Asia). Since 2014, PX capacity has expanded at about 4–5% per year, driven by new plant start-ups in Asia. The largest PX producers typically operate world-scale facilities that can produce between 1.0 million and 2.0 million metric tons of PX on an annual basis. Most are international oil companies and national oil companies, or large refiners and petrochemical producers. World's largest PX producers were SINOPEC, Reliance, and ExxonMobil.

PX consumption will continue to grow strongly, driven by growing production of polyester fibers and PET solid-state resin; ultimately, the polyester value chain will benefit from the increasing world population, changing lifestyles, and improvement in living standards, as well as the further economic development of emerging regions. Despite positive growth prospects for PX demand, the world average operating rate is forecast to drop below 80% during the forecast period because of the onslaught of new Chinese capacity scheduled to come onstream.

For more detailed information, see the table of contents, shown below.

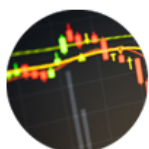
IHS Markit's Chemical Economics Handbook – *para-Xylene* is the comprehensive and trusted guide for anyone seeking information on this industry. This latest report details global and regional information, including



Global summary;
regional coverage



Producers with
annual capacities
and plant sites



Production figures
and trends



Consumption and
forecasts by end use
application



Manufacturing
processes and
environmental issues



Trade – imports
and exports

Key benefits

IHS Markit's Chemical Economics Handbook – *para-Xylene* has been compiled using primary interviews with key suppliers and organizations, and leading representatives from the industry in combination with IHS Markit's unparalleled access to upstream and downstream market intelligence and expert insights into industry dynamics, trade, and economics.

This report can help you

- Identify trends and driving forces influencing chemical markets
- Forecast and plan for future demand
- Understand the impact of competing materials
- Identify and evaluate potential customers and competitors
- Evaluate producers
- Track changing prices and trade movements
- Analyze the impact of feedstocks, regulations, and other factors on chemical profitability

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