



A JAB FOR THE ECONOMY

Exactly how the world economy recovers will be the driving force behind the level of demand for petrochemical products in 2021.



Vaccination drives have raised expectations for a recovery in economic activity.

The initial shock

The worldwide pandemic seriously affected various sectors of the economy: during the first wave, when the harshest measures were implemented, demand for large swathes of commodities fell. Although supply also declined on the back of lockdowns in key producing regions, there were also plenty of surpluses, which led to further sell-side pressure on prices.

“At first, we saw a sharp drop in the demand and price for raw materials: oil, steel, non-ferrous metals, fertilisers and so on. But this was only temporary, as production quickly started back up again, operating in compliance with all COVID measures and restrictions,” says Ksenia Lapshina, an analyst at QBF Portfolio Management. “Manufacturers of food, essential goods and everyday products – that is to say agricultural companies and light industry – did not halt operations. I can also add to this list producers of household chemicals, medical products and the pharmaceutical industry as a whole. Worring about their health, people stocked up on all kinds of medicines, medical products and related goods.



During the first wave of the pandemic, demand for large swathes of commodities fell.

China saved the day by emerging from lockdown first and stepping up its economic activity, which was stimulated by the government through, for example, investment in infrastructure. This drove a growth in demand for hydrocarbons, metal ores and primary metals. “By the end of 2020, prices for raw materials rebounded dramatically from the plunge, with some even exceeding their pre-COVID levels. Over the coming year, it is unlikely that China will put the brakes on. On top of this, industrial demand for raw materials will recover throughout the rest of the world when countries have vaccinated their populations and come out the other side of the pandemic,” says Alexey Kalachev, an analyst at Finam Group.

THE RAW MATERIALS MARKETS GOT OFF TO A GOOD START IN THE BEGINNING OF 2021. THE IMF RAISED ITS FORECAST FOR GLOBAL GDP GROWTH THIS YEAR TO 5.5%, UP 0.3% ON ITS PREVIOUS ONE

The raw materials markets got off to a good start in the beginning of 2021. The IMF raised its forecast for global GDP growth this year to 5.5%, up 0.3% on its previous one. Right now, the general consensus is that by the end of 2021, we will be able to get close to pre-COVID levels of GDP growth. Asia will account for the bulk of this growth, particularly China.

“China managed to dodge the second wave of the virus, so they have a better chance of recovery. Global raw materials markets are being buoyed by these bullish expectations. For example, in October last year, the price of rubber surged by 50%, the biggest jump seen since 1975. Hopefully, the global economic recovery will bolster raw material prices,” says Oleg Bogdanov, senior analyst at QBF.

Raw materials are recovering

Today, the oil market as a whole largely depends on the needs of the Middle Kingdom: according to the IEA, in the previous decade, China created about 80% of all new global oil demand. Compared to 2019, demand for oil fell by 10% last year, and it could have been worse if not for the positive signals from China. The dip in economic activity in China during the pandemic actually ended in February 2020, and the economy started to grow in March, while most of the other major economies bottomed out in Q2.

The OPEC+ deal, which stabilised oil prices, also played a role. By way of reminder, after Brent traded at USD 64 per barrel in January 2020, a combination of rapidly growing inventories and limited storage capacity caused the price to bottom out in April at USD 26.99, the lowest price in two decades.

Over the following months, raw material prices began to recover amid growing demand and supply curtailments triggered by production restrictions. In December, futures hit USD 50 on the news of emerging COVID-19 vaccines showing promising results and the OPEC+ decision to increase production in January 2021 by just 0.5 million barrels per day (2.1 million tonnes per month), instead of the planned 2 million barrels per day (8.3 million tonnes per month). In February, the price of Brent exceeded USD 60.

The EIA forecasts an average crude price of USD 56 per barrel for Q1 2021. In 2H, it may fall to USD 51, faced with increased supply-side pressure from growing production and a slower drawdown of inventories piled up last year. For the meantime, the average annual oil price will remain below its pre-COVID levels (from 2022, the drawdown in crude oil inventories will accelerate, supporting growth in raw material prices), and there are still risks posed by the emergence of new COVID strains and the delayed benefit of vaccination.

FOR THE MEANTIME, THE AVERAGE ANNUAL OIL PRICE REMAINS BELOW ITS PRE-COVID LEVELS

“Even with a successful vaccine rollout, the world will continue to spend the first half of 2021 in some kind of lockdown, albeit a much less severe one than last spring, which puts a damper on a fast recovery in energy demand,” predicts Ekaterina Krylova, Managing Expert, Economic and Industry Research, Promsvyazbank. One of the market headwinds will be the slow recovery of air passenger traffic: according to the International Air Transport Association (IATA), it will be 1.6 times lower in 2021 than in 2019.

“Oil in general is highly dependent on the market balance, and the pace of demand recovery this year is also a key factor. For this, not everything depends on China, we are also looking towards Europe and the USA. Now the concern is both the slowdown in the supply of vaccines to Europe and new COVID restrictions. All of this has an impact on demand,” explains Ekaterina Krylova.

Petrochemical market dynamics

The petrochemical industry has not been left unscathed by the pandemic, but with mass vaccination programmes underway and a drop in the number of cases, the sector can see the light at the end of the tunnel. The American Chemistry Council (ACC) estimates that global chemical volumes will increase by 3.9% this year, following a 2.6% drop in 2020, the biggest fall in the past 40 years. The bounce-back will be seen across the world: output may increase by 4.1% in North America, and by 3.1% in Europe. The Asia-Pacific region is poised to ramp up production: chemical production is expected to increase by 4.4% in the region, and by 5.4% in China.



The China National Offshore Oil Corporation and China Petroleum & Chemical Corporation buildings in Beijing. Photo: Andy Wong/AP/TASS

“Without a doubt, China proved to be an important driver behind stabilising and restoring demand for ethylene and polymers, as well as for other basic primary materials, including steel and industrial non-ferrous metals. But while China’s share in both the global supply and demand for industrial metals ranges between 40% and 60%, its petrochemical capacity is still less than 20% of the global total. At the same time, although its domestic ethylene capacity is about 33 million tonnes per annum (mtpa), demand in China is about 56 mtpa, which is a key cushion of support for the industry,” Alexey Kalachev notes.

EXPERTS PREDICT THAT THE GROWTH IN GLOBAL PETROCHEMICAL PRODUCTION WILL CONTINUE IN 2022 AND 2023 – BY 2.6% AND 2.3%, RESPECTIVELY

Listing the most important drivers to watch in the chemical industry, IHS Markit highlights not only the resurgence of regional economies but also the increased attention governments pay to climate policy and sustainability, the pick-up of M&A activity in the industry, as well as how the US–China trade war plays out with the arrival of the Biden administration.

Experts predict that the growth in global petrochemical production will continue in 2022 and 2023 – by 2.6% and 2.3%, respectively. Analysts from ResearchAndMarkets are more bullish, forecasting that the global petrochemical market will grow by 17.6% this year, increasing its size from USD 365.01 billion in 2020 to USD 429.11 billion in 2021. The market is forecasted to reach USD 477.85 billion by 2025, with increased demand for products from the automotive industry expected to be a major growth driver.

Meanwhile, the petrochemical market may not fully recover from the impact of the pandemic: according to an IHS report, demand for polyethylene will grow by 4.8% in 2021 and 4.1% in 2022, but this will not be enough to make up for 2020’s losses. Under this scenario, the global PE operating rate will drop below 80% for the first time since 1985. It does not help matters that in recent years, additional petrochemical industries have cropped up around the world. Excess assets are now estimated at 10 million tonnes, which will stop the global average operating rate for existing PE capacity from increasing in the future.

The outlook is similar for polypropylene. In 2021, IHS Markit predicts a 5.4% growth in PP demand (4 million tonnes), but at the same

time, capacity surplus will grow by 2.9 million tonnes, which will reduce the global operating rate to 82%. Interestingly, some of the misfortune that 2020 brought turned out to be a blessing in disguise. The combination of a number of factors (constraints on raw materials, production and logistics issues, some of which were COVID-related) meant the actual operating rate of available PP capacity was kept at 90%, otherwise it would have fallen to 84.2%.

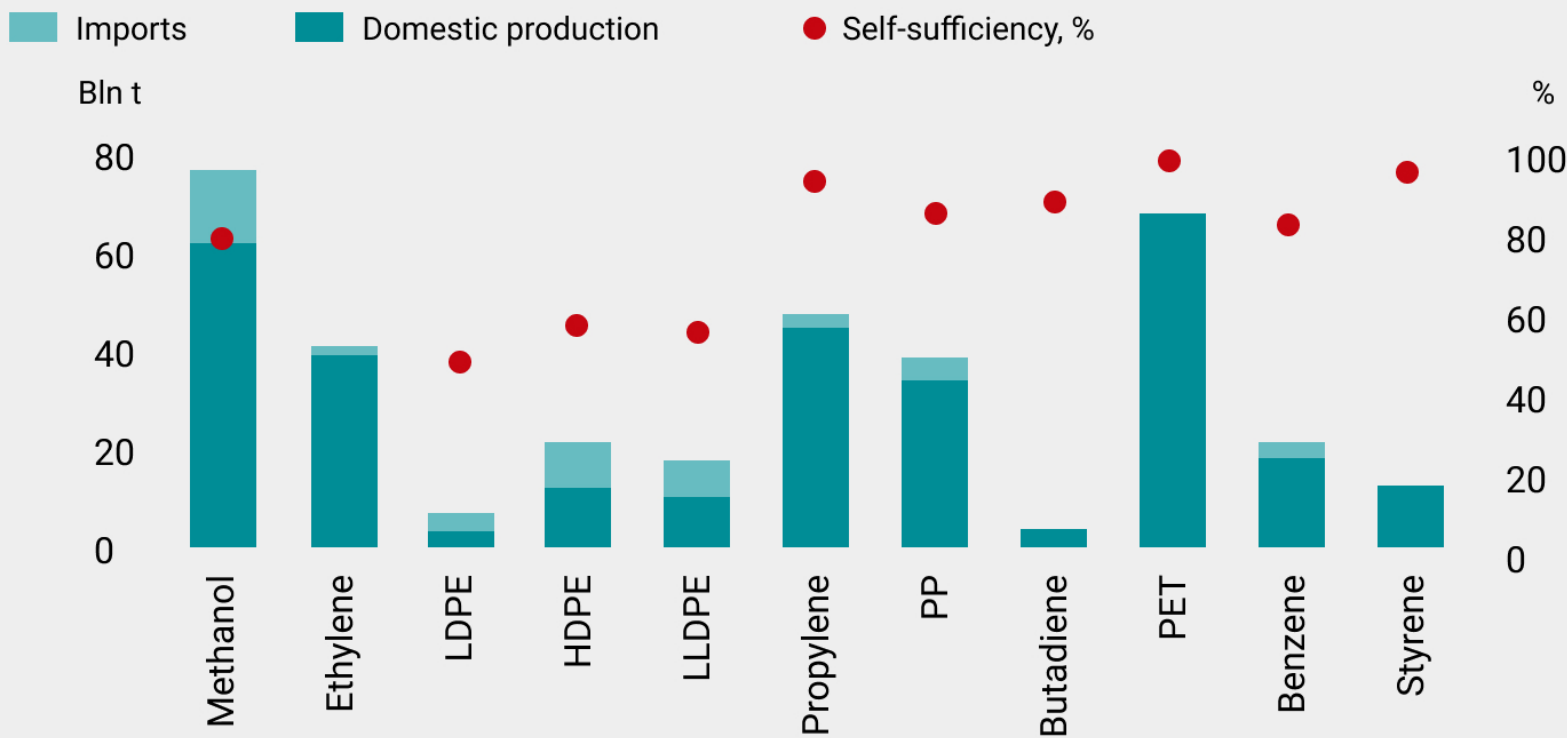
“Excess capacity threatens to squeeze margins for basic products, specifically polyethylene and polypropylene,” the IHS experts conclude. Of the total 22.4 mtpa of PE capacity additions slated for launch in 2020–2022, 10.6 mtpa will come from China. As it becomes more self-sufficient, less polyethylene will be supplied to China, a market that PE producers around the world rely on.

The Chinese chemical industry

It is no secret that the chemical industry has huge growth potential in the Middle Kingdom. For the past two decades, the Chinese chemical industry has accounted for half the growth in global production: according to the Engineering Chemical Technological Center, the Chinese chemical market grew at a CAGR of between 4% and 5% until 2020, while the global CAGR was 3%.

China remains the largest consumer of petrochemicals, all while striving to boost self-sufficiency in basic petrochemicals, with continued cuts in obsolete capacity under its industry modernisation programme.

CHINA’S PETROCHEMICAL SELF-SUFFICIENCY BY 2025



CHINESE INDUSTRY IS EXPECTED TO BECOME MORE COMPETITIVE AS NEW CAPACITY (INCLUDING OLEFIN CAPACITY) COMES ONLINE OVER THE NEXT FIVE YEARS

Chinese industry is expected to become more competitive as new capacity (including olefin capacity) comes online over the next five years. By 2025, China’s ethylene capacity, which grew the fastest pre-COVID, will exceed 51 mtpa, ICIS predicts. Ethylene capacity is expected to grow at a 10.4% CAGR between 2020 and 2025, while propylene capacity is forecasted to reach 56 mtpa (a 7% CAGR) over the same period. At the same time, the Chinese PP market will remain in surplus but will continue to rely on imports for specialty grades, such as high-transparency polypropylene. In addition, China’s self-sufficiency in polyolefins like LDPE, HDPE and LLDPE will not exceed 40% by 2025, and they are vital for the development of the tech industry.

“In any event, the chemical industry continues to be a growth story, significantly outpacing global GDP growth,” says Alexey Kalachev. “In the longer term, the global industry’s visible trends towards sustainability, energy transition and decarbonisation, coupled with the emergence of new technologies and markets, will drive the demand for new materials and products derived from polymer feedstocks,” the Finam Group analyst believes.