

### **Survey of Phosphorus Industry in China**

The Seventh Edition

December 2022

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#### 1. Introduction

China has become one of the biggest phosphorus producers and exporters in the world after 20 years of fast expansion. A relatively complete industrial system for phosphorus industry has been established in China, covering from mining of phosphate rock, to production of basic and fine phosphorus chemicals.

What had happened to the industries during 2017–2021? How about the performance of the producers?

Answers to these questions can be found in this intelligent report.

The key points of this report are listed as below:

- Output and price of phosphate rock in China, 2017–2021;
- Price and export analysis of two major types of phosphate fertilizers in China, 2017–2021;
- Capacity and output of yellow phosphorus in China, 2017–2021;
- Export analysis of yellow phosphorus in China;
- Key phosphorus producers information in China.

Scope of the report: Region scope: China

Time scope: 2017 to 2021

#### 2. Approach for this report

This report is based on data collected with diverse methods, which are listed as follows:

#### Desk research

This includes access to published magazines, journals, government, industry and customs statistics, association seminars as well as information from the Internet. A lot of work has gone into the compilation and analysis of the obtained information. Data collected and compiled are variously sourced from:

- CCM's database
- Published articles from periodicals, magazines, journals, and third-party database.
- Statistics from governments and international institutes
- Customs statistics
- Comments from industrial experts on various platforms
- Information from the Internet

#### **Telephone interview targets**

- Key producers
- Key traders
- Industrial associations
- Industrial experts

#### Data compilation and crosscheck

Data obtained from various sources have been combined and cross-checked to ensure that this report is as accurate and methodologically sound as possible.

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#### 3. Executive summary

Phosphate rock is the upstream source of phosphorus element. The distribution of the phosphate rock reserves in the world is uneven; they are primarily distributed in Morocco and Western Sahara. In China, most of the phosphate rock reserves are distributed in provinces including Hubei, Yunnan, Guizhou and Sichuan. China's yearly output of phosphate rock from 2017 to 2020 presented a downtrend. Yet in 2021, bolstered by the strong market demand, the output of phosphate rock moved up, which ended the continuous drop in the past four years. At present, the reserves-production ratio of phosphate rock in China is lower than the world average. And the pressure to protect the phosphate rock resources is intense, as serious over-exploitation still exists in China.

As for its application, phosphate rock is mostly used in the production of phosphate fertilizers. However, the production capacity for phosphate fertilizers in China has been declining in recent years, due to China's supply-side structural reform, increasingly stringent environmental regulation, and fluctuations in downstream demand. Since 2017, the outputs of DAP and MAP have been dropping in general. However, the output of MAP in 2021 climbed year on year, owing to increased export demand. In 2021, XXX tonnes of MAP and XXX tonnes of DAP were produced in China.

The output of yellow phosphorus in China accounts for a large proportion in the world. However, the rectification of environmental nonconformities in the yellow phosphorus industry is still in progress, because higher requirements of environmental protection and energy conservation have been imposed on the industrial production in the wake of China's economic development. From 2017 to 2021, China's yellow phosphorus output showed a downtrend overall. The capacity for yellow phosphorus in China was still XXX t/a in 2021, and the output decreased by XXX year on year to XXX tonnes, with an annual average ex-works price of XXX, XXX higher than that in 2020.

#### 4. What is in the report?

Note: Key data/information in this sample page is hidden, while in the report it is not.

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#### 1.1 Overview of global phosphate rock

The estimated global output of phosphate rock in 2021 climbed by XXX% compared to the output in 2020, and went down by XXX% compared to the output in 2017.

The global output of phosphate rock declined year by year from 2017 to 2020, which can be attributed to the efforts to protect the environment and non-renewable phosphate rock resources. Some countries began to control their own phosphate rock production, and protected their local resources by importing phosphate rock from overseas and restricting exports. It is predicted that the tight supply of phosphate rock in the global market will become a general trend.

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Figure 1.1-1 Global phosphate rock output, 2017–2021E



http://www.cnchemicals.com/

Output, million tonne

Source: United States Geological Survey (USGS), National Bureau of Statistics (NBS)

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#### 1.2.1 Distribution of phosphate rock reserves, 2021

In 2021, the proven phosphate rock reserves in China were about XXX tonnes, which was basically unchanged compared to that in 2020. Most of the phosphate rock reserves in China are distributed in provinces including Yunnan, Hubei, Sichuan, and Guizhou.

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Figure 1.2.1-1 Distribution of phosphate rock reserves in China by region, 2021



http://www.cnchemicals.com/

Source: CCM

1.2.2 Output of phosphate rock, 2017-2021

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Figure 1.2.2-1 Output of phosphate rock in China, 2017–2021

# **CCM**

http://www.cnchemicals.com/

Source: NBS

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1.2.3 Price of phosphate rock, 2017-2021

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Figure 1.2.3-1 Monthly ex-works price of 29% phosphate rock in China, 2020-2021



Source: CCM

#### 2.2 MAP in China, 2017-2021

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#### 2.2.3 Import and export

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Source: China Customs

#### 2.3 DAP in China, 2017-2021

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#### 2.3.3 Import and export

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Figure 2.3-3 Monthly exports of DAP in China, Jan. 2017-Dec. 2021



Source: China Customs

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3 Yellow phosphorus in China

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3.2 Price of yellow phosphorus, 2017-2021

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Figure 3.2-3 Monthly ex-works price of yellow phosphorus in China by region, Jan. 2017–Dec. 2021

## **CCM**

http://www.cnchemicals.com/

Strip Strip

Source: CCM

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