

Survey of Phosphorus Industry in China

The Fifth Edition June 2020

Researched & Prepared by:

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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, flowing from mining of phosphate rock, to production of basic and fine phosphorus chemicals.

Survey of Phosphorus Industry in China, finished in June 2020, is CCM's fifth edition report on China's phosphorus industry. This intelligent report attaches importance to the following parts:

- Global phosphate rock reserves and output
- China's phosphate rock reserves, output, price and exports
- China's phosphate fertilizer output, price and exports
- China's yellow phosphorus capacity, output, price and exports



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.



3. Executive summary

Global output of phosphate rock was in an upward trend during XXX–XXX, growing at a CAGR of XXX. However, for grain sustainable development and environmental protection, many countries had reduced production since XXX.

Global phosphate rock reserves are primarily distributed in Morocco and Western Sahara. In China, most of the phosphate rock reserves are distributed in Hubei, Yunnan, Guizhou, Hunan, and Sichuan provinces. Since exploitation restriction, the output of phosphate rock in China saw a XXX year-on-year decline in XXX.

As a key phosphate fertilizer supplier in the world, China exported a large quantity of phosphate fertilizers every year. Monoammonium phosphate (MAP) and diammonium phosphate (DAP) are two major types of phosphate fertilizer, which accounting for more than XXX of the total output. In XXX, China's export volume of MAP and DAP were about XXX tonnes and XXX tonnes respectively.

Ex-works prices of MAP and DAP in China showed a downward trend in XXX because of a slump in the price of raw material sulfur and weak downstream demand.

China's yellow phosphorus capacity has been on a downward trend. In XXX, under the influences of supply-side structural reform, stricter environmental protection supervision, and phaseout of backward capacities, the total capacity declined; the output of yellow phosphorus also decreased by XXX tonnes and the export reduced by XXX year on year.

In XXX, under the tightening environmental regulations, many yellow phosphorous producers shut down their production lines, leading to short supply of the product. Its average price thus rose to XXX, increasing by XXX year on year.

The majority of China's phosphorus-related producers are located in regions with abundant phosphate rock reserves, such as Yunnan, Guizhou and Hubei provinces.



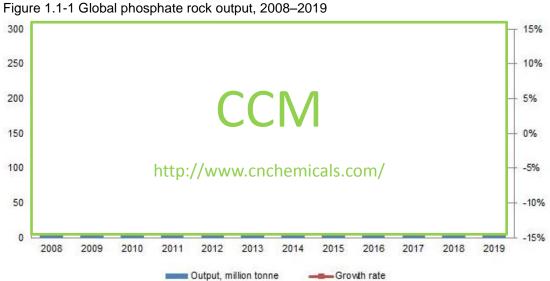
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Note: Key data/information in this sample page is hidden, while in the report it is not.

1.1 Overview of global phosphate rock

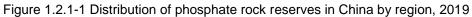


Source: United States Geological Survey (USGS), National Bureau of Statistics (NBS) . . .

1.2.1 Distribution of phosphate rock reserves, 2019

In 2019, the proven phosphate rock reserves in China were XXX million tonnes. Most of the phosphate rock reserves in China are distributed in Hubei, Yunnan, Guizhou, Hunan, and Sichuan provinces.







Source: CCM

Table 1.2.1-1 Average P₂O₅ content of phosphate rock in China by region, 2019

Region	Average P₂O₅ content
Hubei Province	XXX
Guizhou Province	XXX
Yunnan Province	XXX
Sichuan Province	XXX
Hunan Province	XXX

Source: CCM



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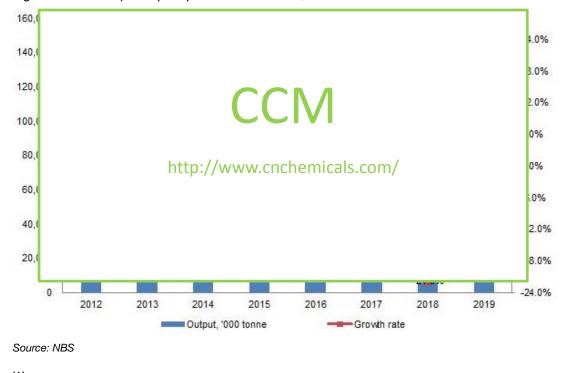


Figure 1.2.2-1 Output of phosphate rock in China, 2012–2019

1.2.3 Price of phosphate rock, 2016–2019



Figure 1.2.3-1 Monthly ex-works price of 30% phosphate rock in China, Jan. 2017–Dec. 2019

Source: CCM

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2.3 Export analysis of phosphate fertilizers, 2012–2019

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Figure 2.3-2 Monthly exports of monoammonium phosphate (MAP) from China, Jan. 2016– Dec. 2019



Source: China Customs, CCM



Figure 2.3-3 Monthly exports of diammonium phosphate (DAP) from China, Jan. 2016–Dec. 2019

Source: China Customs, CCM

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3.2 Price of yellow phosphorus, 2012–2019

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Figure 3.2-2 Monthly ex-works price of yellow phosphorus in China by region, Jan. 2016–Dec. 2019



Source: CCM

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