

# Impact of Environmental Policies on Pesticides in China The First Edition May 2018

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### 1. Introduction

In recent years, with the overall implementation of the state's sustainable development strategy, China steps up environmental improvement by introduction of series of increasingly stringent environmental protection policies, measures and plans, which sweep across the whole country—many enterprises including those of the pesticide industry have been fined or have to restrict or suspend production. When comes to pesticide industry, despite the high requirement for environmental protection due to the large amount of water, gas and solid wastes generated in the production process, some pesticide enterprises seek profits and fail to spend on necessary environmental protection, defying the related environmental protection laws and regulations. They obtain certain market shares with the advantage of low cost by polluting the environment. Unfair competition between enterprises who follow the law and those who don't restricts the healthy development of the industry. Environmental protection policies, measures and plans that come into force successively will have significant influences on the country's pesticide industry.

Under the strict environmental protection policies, there are opportunities for relatively strong pesticide companies. In the pesticide market, where prices have risen sharply in 2017, they have achieved growth in both operating revenue and profits through environmental protection reforms, technology upgrades and effective cost control. Moreover, as enterprises which failed to meet the environmental protection standards withdraw from the market, these powerful enterprises that meet the environmental standards will gain more market share. For small plants, environmental protection policies bring more challenges.

What are the major environmental protection policies in China? How these policies affect China's pesticide market? In this report, CCM introduces the polices and their influences from the aspects of production, sales, exports, prices, supply and demand of pesticides.

### 2. Approach for this report

### - Desk research

The sources of desk research are various, including published magazines, journals, government statistics, industrial 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 processing and presentation

The data collected and compiled were sourced from:

- Published articles from Chinese periodicals, magazines, journals, and the third-party databases
- Government statistics & customs statistics
- · Comments from industrial experts
- · CCM's innovative database
- Professional databases from other sources
- Information from the internet
- Telephone investigation

The interviewees included the following groups:

- Key producers
- Key end users
- · Key traders
- Material suppliers
- Associations involved
- Industry experts

The data from various sources have been combined and cross-checked to make this report as precise and scientific as possible. Throughout the process, a series of internal discussions were held in order to analyse the data and draw the conclusions.



### 3. Executive summary

In recent years, as various laws and regulations related to environmental protection have been introduced in succession, pesticide companies have found themselves under increasing pressures. In 2017, local governments in China had stepped up the implementation of environmental laws and regulations. In H2 2017, the pesticide companies obviously felt the pressure from the environmental protection policies in terms of raw material costs and environmental protection costs. Inevitably, many pesticide companies had restricted production, relocated, or even shut down, causing continuous decline in pesticide output and further led to tight supply and increasing pesticide prices. Under such circumstances, traders and manufacturers have raised the price of pesticide technical, causing the price of most pesticides to keep rising. Therefore, China's exports of pesticides lost their price advantages to some extent.

Under the environmental protection pressure, many pesticides were in short supply in 2017 and the prices of pesticides rose. In 2017, most of the major agrochemical producers in China achieved increases in operating income and profit. Overall operating revenue and operating profit of China's pesticide industry increased by XXX% and XXX % year on year respectively.

Ex-works prices of pesticide technical increased in general in 2017 compared to 2016. Starting in H2 2017, the prices showed significant uptrends. This was mainly because the tight supply caused by limitation in production at the time of strict environmental protection inspections. At the end of 2017, many companies were unable to provide quotation and supply products because they had suspended production for environmental protection reasons.

Besides, in 2017, pesticide suppliers' speculation on pesticide prices played a non-negligible role in driving up pesticide prices. Difference between quoted prices and transaction prices of pesticides in H2 2017 was much higher than that in H1 2017, owing to the fact that manufacturers and traders took the opportunity to raise prices.

China's environmental protection policies affect China's pesticide exports mainly in terms of export volume and export prices. Under the severe environmental protection policies, manufacturers of China's pesticide and its raw material are restricted in production. In the case of declining output, the domestic market has experienced a tight supply of pesticide, leading to the rising ex-works prices of pesticides and their main raw materials. So export prices of pesticides have inevitably risen accordingly.

# 4. What's in this report?

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

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# 2.3 Decline in China's pesticides output is expected to continue in 2018

In 2018, the previous environmental protection policies and measures will continue to affect China's pesticide industry. Not only that, two more policies and measures on environmental protection begin to take effect, namely the *Environmental Protection Tax Law of the People's Republic of China* and the *Measures for Pollutant Discharge Permitting Administration (for Trial Implementation)*. Therefore, the pressure on pesticide supply will be intensified. It is expected that the output of China's pesticide technical will continue to decline in 2018, reaching XXX tonnes.

Previously, according to the *Classification Administration List of Pollutant Discharge Permitting* for Fixed Pollution Sources, the pesticide manufacturing industry companies (except for the manufacture of biochemical pesticides and microbial pesticides) needed to apply for pollutant discharge permits in 2017. Only after obtaining pollutant discharge permits can companies discharge waste water and exhaust gas and produce normally. The companies failing to obtain pollutant discharge permits may withdraw from the market.

According to data from the NBS, output of China's pesticide technical continued to decline in January–February 2018. In January and February of 2018, XXX provinces/cities produced pesticide technical in the country. Among them, XXX provinces/cities showed growth in pesticide technical output, while most provinces/cities witnessed decline in pesticide technical output.

Table 2.3-1 Output of China's pesticide technical by region, Jan. 2018-Feb. 2018

| No. | Region                | Output, tonne | Year-on-year growth rate |
|-----|-----------------------|---------------|--------------------------|
| 1   | Jiangsu Province      | XXX           | XXX                      |
| 2   | Henan Province        | XXX           | XXX                      |
| 3   | Jiangxi Province      | XXX           | XXX                      |
|     |                       | XXX           | XXX                      |
| 20  | Heilongjiang Province | XXX           | XXX                      |
| 21  | Shaanxi Province      | XXX           | XXX                      |
| 22  | Shanxi Province       | XXX           | XXX                      |

Source: NBS

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# 4.3 Glyphosate

Export volume of China's glyphosate decreased year on year slightly in 2017. This was because most of China's glyphosate enterprises lost their price advantages in the overseas market due to substantial increase in the market price caused by huge increases in environmental protection cost and raw material cost under serious pressure from environmental protection.

Table 4.3-1 Monthly FOB price of 95% glyphosate technical exported from China, Jan. 2016–Dec. 2017, USD/kg

| Dec. 2017, USD/kg |      |  |  |  |  |  |  |
|-------------------|------|--|--|--|--|--|--|
| 2017              | 2016 |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
| XXX               | XXX  |  |  |  |  |  |  |
|                   | XXX  |  |  |  |  |  |  |

Source: China Customs

Table 4.3-2 Monthly export volume of glyphosate (calculated by 100% TC) from China, Jan. 2016–Dec. 2017, tonne

| Month | 2017 | 2016 | Year-on-year growth rate |
|-------|------|------|--------------------------|
| Jan.  | XXX  | XXX  | XXX                      |
| Feb.  | XXX  | XXX  | XXX                      |
| March | XXX  | XXX  | XXX                      |
| April | XXX  | XXX  | XXX                      |
| May   | xxx  | XXX  | XXX                      |
| June  | XXX  | XXX  | XXX                      |
| July  | xxx  | XXX  | XXX                      |
| Aug.  | XXX  | XXX  | XXX                      |
| Sept. | XXX  | XXX  | XXX                      |
| Oct.  | xxx  | XXX  | XXX                      |
| Nov.  | xxx  | XXX  | XXX                      |
| Dec.  | xxx  | XXX  | XXX                      |
| Total | xxx  | XXX  | XXX                      |

Source: China Customs

Table 4.3-3 Monthly export volume of China's glyphosate technical (calculated by 100% TC) by specification, Jan. 2016–Dec. 2017, tonne

| Month | 95%  |      | 96%  |      |  |
|-------|------|------|------|------|--|
| Month | 2017 | 2016 | 2017 | 2016 |  |
| Jan.  | xxx  | XXX  | XXX  | XXX  |  |
| Feb.  | xxx  | XXX  | XXX  | XXX  |  |
| March | xxx  | XXX  | XXX  | XXX  |  |
| April | xxx  | XXX  | XXX  | XXX  |  |
| May   | xxx  | XXX  | XXX  | XXX  |  |
| June  | xxx  | XXX  | XXX  | XXX  |  |
| July  | xxx  | XXX  | XXX  | XXX  |  |
| Aug.  | xxx  | xxx  | xxx  | XXX  |  |

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| Month | 959  | %    | 96%  |      |  |
|-------|------|------|------|------|--|
| Month | 2017 | 2016 | 2017 | 2016 |  |
| Sept. | XXX  | XXX  | XXX  | XXX  |  |
| Oct.  | XXX  | XXX  | XXX  | XXX  |  |
| Nov.  | XXX  | XXX  | XXX  | XXX  |  |
| Dec.  | XXX  | XXX  | XXX  | XXX  |  |

Source: China Customs

Table 4.3-4 Monthly export volume of China's major glyphosate formulations (calculated by 100% TC) by specification, Jan. 2016–Dec. 2017, tonne

| Month - | 41% IPA |      | 51% IPA |      | 62% IPA |      | 75.7% WSG |      |
|---------|---------|------|---------|------|---------|------|-----------|------|
|         | 2017    | 2016 | 2017    | 2016 | 2017    | 2016 | 2017      | 2016 |
| Jan.    | XXX     | XXX  | XXX     | XXX  | XXX     | xxx  | XXX       | XXX  |
| Feb.    | XXX     | xxx  | xxx     | xxx  | xxx     | xxx  | xxx       | XXX  |
| March   | XXX     | XXX  | XXX     | xxx  | xxx     | XXX  | XXX       | XXX  |
| April   | XXX     | XXX  | XXX     | XXX  | XXX     | xxx  | XXX       | XXX  |
| May     | XXX     | XXX  | XXX     | XXX  | XXX     | XXX  | XXX       | XXX  |
| June    | XXX     | XXX  | XXX     | XXX  | XXX     | XXX  | XXX       | XXX  |
| July    | XXX     | XXX  | XXX     | XXX  | XXX     | XXX  | XXX       | XXX  |
| Aug.    | XXX     | XXX  | XXX     | XXX  | XXX     | XXX  | XXX       | XXX  |
| Sept.   | XXX     | XXX  | XXX     | XXX  | XXX     | XXX  | XXX       | XXX  |
| Oct.    | XXX     | XXX  | XXX     | XXX  | XXX     | XXX  | XXX       | XXX  |
| Nov.    | XXX     | XXX  | XXX     | XXX  | XXX     | XXX  | XXX       | XXX  |
| Dec.    | xxx     | XXX  | XXX     | XXX  | XXX     | XXX  | XXX       | XXX  |

Source: China Customs

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# 5.3 Industry speculation drove up pesticide prices

In 2017, pesticide suppliers' speculation on pesticide prices played a non-negligible role in driving up pesticide prices. Difference between quoted prices and transaction prices of www.cnchemicals.com

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pesticides in H2 2017 was much higher than that in H1 2017, owing to the fact that manufacturers and traders took the opportunity to raise prices.

Table 5.3-1 Quoted prices and transaction prices of selected pesticides in H1 2017 in China

|     | Product      | RMI          | B/t               | USD/t        |                   |  |
|-----|--------------|--------------|-------------------|--------------|-------------------|--|
| No. |              | Quoted price | Transaction price | Quoted price | Transaction price |  |
| 1   | Glyphosate   | XXX          | XXX               | XXX          | XXX               |  |
| 2   | Acetochlor   | XXX          | XXX               | xxx          | XXX               |  |
| 3   | Chlorpyrifos | XXX          | XXX               | XXX          | XXX               |  |
| 4   | Imidacloprid | XXX          | XXX               | XXX          | XXX               |  |
| 5   | Carbendazim  | XXX          | XXX               | XXX          | XXX               |  |
| 6   | Pyridine     | XXX          | XXX               | XXX          | XXX               |  |

Source: CCM

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