BASF-YPC Company Limited Report 2018

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A senior employee introduces BASF-YPC operations to a new employee.

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On this page:

Three employees conduct a safety inspection at the new propionic acid plant.

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About this Report

"BASF-YPC Company Limited – Report" is published annually as a concise document about the company's development, progress and performance in regard to economy, environment, and society. The reporting period for this publication is the financial year 2018. All data in the report is the 100% total from BASF-YPC Company Limited.

Welcome Message from the President

Deas friends and staheholdes,

I am very pleased to present to you the BASF-YPC Company Limited (BASF-YPC) Report 2018, our yearly overview of the company's operations in terms of our sustainability performance. With this report, we want to demonstrate how we balance the economic, environmental, and social aspects of our company.

We achieved a number of important objectives in 2018. Our plants maintained high operation rate, a fundamental precondition to ensuring reliable supply for our customers and good results for the company.

Our overall safety performance in 2018 was also satisfactory. We devoted significant efforts to the continuous improvement of our already high environmental protection standards. We saw many visible improvements internally, and we fully support recent regulatory decisions which help improve the overall safety and environmental protection level for the industry.

Employees are the foundation of our company and ensure our long-term success. In 2018, we continued to invest in forming the best team. We aim to be a reliable partner and good neighbor, and to take our social responsibility seriously. We actively supported diverse projects in the community where BASF-YPC is located.

I would like to express my heartfelt thanks to our employees, suppliers, customers, and the community for their support and confidence during the past year. We will continue to work with the same strong commitment and dedication in 2019. With the strength of the team and the support of the community and both of our parent companies, BASF-YPC is on the right track for success and will continue to achieve great results in the future!



Yours,

The dilight

Uwe Kirchgaessner President BASF-YPC Company Limited

BASF-YPC Company Limited At a glance

BASF-YPC is a 50-50 joint venture between BASF and Sinopec, founded in 2000, with a total investment of approximately US\$5.2 billion. The integrated petrochemical site produces about three million tons of high-quality chemicals and polymers for the Chinese market annually. The products serve the rapid-growing demand in multiple industries including agriculture, construction, electronics, pharmaceutical, hygiene, automotive and chemical manufacturing. All BASF-YPC plants are interconnected in order to use products, by-products and energy in the most efficient way, to save cost and minimize environmental impact. BASF-YPC posted sales of €2,764 million in 2018 and employed 1,893 people as of the end of that year.

BASF-YPC continues to grow. Commercial operations were first achieved in 2005, and the second phase started operation in January 2012. Acrylics projects started operation in April 2014, while ethylene oxide expansion and a new neopentyl glycol plant came into operation in 2015. Additionally, the propionic acid expansion project was started up at the end of 2018.

According to a Memorandum of Understanding signed by BASF and Sinopec in October 2018, the two companies agreed to evaluate the further expansion of BASF-YPC. Among the expansion projects, BASF-YPC will invest in a 50% stake to build a second steam cracker with a capacity of 1,000,000 metric tons of ethylene per year. Sinopec Yangzi Petrochemical Company Limited (YPC) will invest the other 50%.



The newly built propionic acid plant

BASF-YPC Company Limited Parent companies



About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 122,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Until December 31, 2018, our portfolio was arranged into four segments: Chemicals, Performance Products, Functional Materials & Solutions and Agricultural Solutions.¹ Since January 1, 2019, BASF's activities have been grouped into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions.

BASF has been a committed partner to Greater China since 1885. With larger production sites in Shanghai, Nanjing and Chongqing, BASF is a major foreign investor in the country's chemical industry, and operates the Innovation Campus Shanghai, a global and regional research and development hub.

BASF posted sales of more than €7.3 billion in 2018 to customers in Greater China and employed 9,317 people as of the end of the year. Greater China is currently BASF's third largest market after Germany and the United States.

BASF currently operates 25 major wholly-owned subsidiaries, nine major joint ventures, and maintains 24 sales offices in Greater China. BASF's business in Greater China includes petrochemicals, intermediates, performance materials, monomers, dispersions and pigments, performance chemicals, catalysts, coatings, care chemicals, nutrition and health, agricultural solutions and construction chemicals.

These chemicals are used in almost all areas of daily life such as in houses, cars, food, agriculture, pharmaceuticals, textile, household goods, electronic equipment and packaging. Over the past 30 years, BASF has invested more than ϵ 6 billion in Greater China (more than ϵ 9 billion with partners) to build a locally competitive production, marketing, sales, technical service and innovation network.

1 Excluding the oil and gas activities presented as discontinued operations

E Further information on BASF is available at basf.com and basf.com/cn.



About Sinopec

China Petroleum & Chemical Corporation (Sinopec) is a listed company on domestic and international stock exchanges with integrated upstream, midstream and downstream operations, strong oil & petrochemical core businesses and a complete marketing network. The company was incorporated on February 25, 2000 by China Petrochemical Corporation (Sinopec Group) as the sole initiator, pursuant to the Company Law of the People's Republic of China.

Sinopec is one of the largest integrated energy and chemical companies in China. Its principal operations include the exploration and production, pipeline transportation and sale of petroleum and natural gas; the production, sale, storage and transportation of refinery products, petrochemical products, coal chemical products, synthetic fiber, and other chemical products; import and export, including an import and export agency business, of petroleum, natural gas, petroleum products, petrochemical and chemical products, and other commodities and technologies; and research, development and application of technologies and information. The company is a large-scale integrated energy and chemical company with upstream, mid-stream and downstream operations. The company is a large-scale oil and gas producer in China; in respect of refining capacity, it ranks first in China; equipped with a welldeveloped refined oil products sales network, the company is the largest supplier of refined oil products in China; and in terms of ethylene production capacity, the company takes the first position in China, and has a well-established marketing network for chemical products.

Sinopec has established a standardized structure of corporate governance and adopted a management system of centralized decision-making, delegated authorities at different levels and business operations handled by specialized business units. It has more than 100 subsidiaries and branches including wholly-owned, equity-holding and equity-sharing companies, engaging in oil and gas exploration and production, refining, chemicals, marketing, R&D and foreign trade. Business assets and principal markets are located in the east, south and middle part of China, where China's most developed and dynamic economy lies.

Purther information on Sinopec is available at sinopec.com

Members of the Board of Directors



Hong Jianqiao Chairman of the Board of Directors Chairman of the Board of Directors, Sinopec Yangzi Petrochemical Company Limited



Dr. Stephan Kothrade Vice Chairman of the Board of Directors President, Functions Asia Pacific & President and Chairman Greater China, BASF



Hartwig Michels Member of the Board of Directors President, Petrochemicals Division, BASF SE



Dr. Andrea Frenzel Member of the Board of Directors President, Intermediates Division, BASF SE



Mirko Bengel Member of the Board of Directors Vice President, Legal, Insurance & Intellectual Property, Asia Pacific, BASF



You Houping (until February 17, 2019) Succeeded by Tan Xiaoping, Vice Director of International Cooperation Department, Sinopec Corporation (as of February 18, 2019)

Member of the Board of Directors

Vice Director of Joint Venture Office and Vice Director of Development Planning Department, Sinopec Corporation



Xu Yuehua Member of the Board of Directors Vice Director of Chemicals Department of Sinopec Corporation



Xing Jianliang Member of the Board of Directors Vice President, Sinopec Yangzi Petrochemical Company Limited

Overview

At BASF-YPC we never compromise on safety. We also put significant effort into managing our environmental footprint. Employees are the foundation of our excellent performance and ensure our long-term success: their skills, commitment and motivation make BASF-YPC competitive and fit for the future. BASF-YPC aims to sell high-quality products to cater to the rapidly growing Chinese market and to satisfy customers with excellent services. BASF-YPC strives to be a highly competitive chemical company, a reliable partner to our suppliers and customers, and a trustworthy corporate citizen.

Business development

Despite a challenging market environment and an unplanned turnaround in April and May 2018, it was still a successful year for the business.

To ensure the company's continuous development, investments play an important role. At the end of November 2018, the company's propionic acid expansion project reached mechanical completion and the start-up was successfully achieved in December. Additionally, the power plant gas turbine upgrade project entered its design and manufacturing phase, and the neopentylglycol expansion was approved.

The most significant milestone in 2018 was the Memorandum of Understanding signed between BASF and Sinopec at the end of October 2018. The partners agreed to evaluate the further expansion of BASF-YPC, through the establishment of a 50-50 joint venture between Sinopec Yangzi Petrochemical Co., Ltd. and BASF-YPC, for a new steam cracker with a capacity of 1,000,000 metric tons per year.



Dr. Martin Brudermüller (right), Chairman of the Executive Board of Directors, BASF SE, and Mr. Dai Houliang (left), Chairman of Sinopec Corporation and Sinopec Group, signed a Memorandum of Understanding to expand the two companies' cooperation in China.

Environmental protection, health and safety

BASF-YPC is committed to environmental responsibility. Cleaner materials, such as natural gas and naphtha, are used as feedstock and fuel. Low-NOx burners, thermal oxidizers, and regenerative thermal oxidizers are used in order to reduce emissions to air. In 2018, we further reduced emissions by implementing a range of improvement projects including burner modification, leak detection and repair, and loading arm modification. Additionally, we are continuously improving water protection and supply processes.

The BASF-YPC medical team completed its annual health review program in 2018, with the participation of more than 1,800 employees. The team continuously updated and maintained the medical emergency response management system. Industrial hygiene, including area monitoring and personal monitoring, as well as bio-monitoring, was implemented successfully, as was the BASF Asia Pacific Chemical Health Risk Assessment project. The BASF global health promotion campaign, "Life.Saving.Heros", was also rolled out in 2018.

We implemented several measures in 2018 to further enhance and increase safety awareness throughout the company. For example, as part of the program "Safety Acts Indicator for Plants in Site", production plant staff and contractors were encouraged to actively conduct self-checks and eliminate potential hazards through a clearly defined checklist of unsafe behaviors and conditions. In May 2018, BASF-YPC held its sixth "Safety Days" event, with the theme "Understand Risk, Take Action", to encourage employees and contractors to find and deal with the safety risks around them and create a safer working environment.

Environment, health and safety reviews for more than a hundred projects and high-risk change projects were conducted in 2018.

Employees and society

Be the preferred company for excellent people is derived from the vision of BASF-YPC. In 2018, to address future demographic changes among employees, the company initiated a number of strategic collaboration projects with selected vocational colleges, to jointly define curricula, and to select and cultivate talent in order to accelerate the process from student to qualified staff. Additionally, to encourage life-long learning, the company has defined learning plans for all employees, as well as a succession plan for key positions and a mentorship program. BASF-YPC also launched a New Leader Program to strengthen the company's leadership team.

Our economic success depends on trust and social acceptance. In 2018, we continued to work closely with local authorities, educational institutions and public welfare organizations to fulfill our social responsibilities.

Key data 2018

	2018	2017	2016
Financial Results	-		
Sales Million	€ 2,764	2,761	2,358
Employees (as of December 31)	_		
Number of employees	1,893	1,882	1,880
Employee age structure			
Up to and including 25 years	6 1	2	3
Between 26 and 39 years 9	6 34	35	36
Between 40 and 54 years	6 61	61	60
55 years and older 9	6 4	2	1
Occupational Safety	_		
Lost-time injury rate (BASF employees, leased personnel and contractors) per 200,000 working hours	0.19	0.10	0.05
Fatalities (total)	0	0	0
Environment			
Emissions to air	_		
Greenhouse gas emissions Metric tons of CO ₂ equivalent	s 3,079,267	3,180,039	3,146,071
Air pollutants (without CH ₄) Metric ton	s 1,763	1,993	1,998
Water	_		
Emissions to water: Organic substances (CoD) Metric ton	s 273	244	251
Emissions to water: Nitrogen Metric ton	s 4.9	5.6	8.5
Emissions to water: Heavy metals Metric ton	s 0.2	0.11	0.14
Water supply Million cubic meter	s 16	15	16
Water used for production Million cubic meter	s 6.3	5.9	5.9
Water used for cooling Million cubic meter	s 1,254	1,228	1,248
Water supply by source			
Surface water 9	6 100	100	100
Groundwater 9	6 0	0	0
Drinking water 9	6 0	0	0
Waste			
Waste (total amount) Metric ton	s 153,345	155,138	149,899
Recycling and thermal recovery 9	6 94	94	95
Disposal of waste			
Incineration 9	6 5	6	4
Landfill 9	δ 1	0	1
Underground storage 9	6 0	0	0
Energy Electricity consumption MW	1 450 400	1 460 001	1 107 610
		1,460,991	1,497,612
Steam consumption Metric ton		5,892,874	5,892,127
Fuel consumption (central powerplants and boilers) MW	n 3,766,183	3,827,796	3,852,162

1 Hours worked by BASF employees, temporary employees and contractors. We previously reported on the number of lost-time injuries per one million working hours worldwide (BASF and temporary employees). The 2016 and 2017 figure have been adjusted based on 200,000 working hours.

Further information

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Generation on BASF-YPC Company Limited, see www.basf-ypc.com.cn