

Environmental, Social and Governance Report 2017



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# **About this Report**

# **Company Profile**

Sinofert Holding Limited ("Sinofert", or the "Company") and its company profile (the "Group") constitute China's largest fertilizer supplier and distributor, covering the whole industry chain of resources, research and development (R&D), production, distribution, and agrochemical services. The Company was listed on The Stock Exchange of Hong Kong Limited (Stock code: 00297) in July 2005 after its successful acquisition of China Fertilizer (Holdings) Company Limited and its subsidiaries. The Company was the first from China's fertilizer industry to be listed in Hong Kong. Benchmarked by its 2017 turnover, the Group is:

- The largest fertilizer distribution service provider in China;
- The largest supplier of imported fertilizers in China;
- One of the largest fertilizer manufacturers in China.

In more than 60 years of international trade experience, Sinofert has built strong strategic partnerships with leading global fertilizer suppliers. As China's largest fertilizer importer, it also plays an important role in meeting domestic needs for quality fertilizer products which are in short supply, and in regulating the supply and demand of those resources. The Company presently has 300 million tonnes of high-quality phosphorus ore in reserve.



Moorita 1

Sinofert is not only committed to transferring scarce upstream resources into the fertilizer products needed by agricultural producers, but also to providing quality service solutions for China's agricultural production system. As China's agricultural sector continues its modernization, Sinofert's own development strategies have evolved in step to satisfy emerging user needs and create business value.

# **About this Report**

This is the second Environmental, Social and Governance (ESG) Report published by Sinofert. By disclosing the Group's sustainable performance, policies and strategies for the year ended 31 December 2017, the Report intends to increase each stakeholder's understanding of the Group's current direction of development and maintain our close relationship with stakeholders in the long run.

### **Reporting Guidelines**

This report was prepared in compliance with the ESG Reporting Guide in Appendix 27 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Stock Exchange"). The report's content conforms to the phased requirements of the Stock Exchange in disclosing Sinofert's environmental and social performance.

The Group welcomes sustainable development, social responsibility and caring for employees in the production of work. We operate in compliance with the "redline alert" security management concept, and adheres fully to a scientific, safe and green development philosophy. Sinofert is people-oriented and practices the HSE Management System, with its emphasis on controlling job risks and enhancing security standards.

#### **Feedback**

Our Company welcomes and values all constructive feedback. If you have any feedback or suggestions regarding this report, please contact Sinofert Holdings Limited at the following locations:

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### Chairman's Message

As one of China's largest chemical fertilizer producers, Sinofert has an important responsibility in promoting the industry's sustainable development. Therefore, with the assistance of all Sinofert employees, I hereby submit the Company's second ESG Report (hereinafter the "Report") to our stakeholders from across society.

Sinofert understands that chemical fertilizer production involves natural resource development, energy consumption, waste emissions and other unavoidable issues. In the interest of transparency regarding these and other matters, the Health, Safety and Environmental Management (HSE) Committee of each regional holding enterprise helped to prepare the 2016 ESG report. In 2017, the Company reviewed and enhanced its approach to environmental protection, adopted systematic regulatory guidelines, and devoted additional resources to caring for its employees and the general public. Sinofert continues to review and improve in these and other areas as part of its effort to become a major force in the advancement of national agriculture security and chemical technology.

Employee development and health is a major topic in the Report. During 2017, our management team visited local branches to enhance our communications with front-line staff. Our participation in technical, safety and team training also gave us a valuable opportunity to hear feedback about the Company's operations, its environmental practices and management. The feedback we received helped us to allocate resources more effectively for environmental, social and governance projects.

On behalf of the Board, I sincerely thank the colleagues and friends who helped us achieve our environmental, social and governance goals. In future, the Company will continue to work closely with professionals from different fields to promote corporate and national economic sustainability. Each ESG Report provides the Company with an opportunity to reflect on its actions and recognize opportunities for improvement. After reading this report, we hope the public will appreciate Sinofert's sincere efforts in the area of corporate social responsibility, and will provide us with advice on guiding the Company on sustainable path of development.

> **Zhang Wei** Chairman of the Board

> > 30 May 2018



# **Environmental**

#### **Environmental Performance**

The Company is committed to the basic national policy of protecting the environment. We adhere to national laws and regulations on environmental protection, clean production and the conservation of water and soil resources. The Company has furthermore established its own environmental protection plan and regulations which actively promote clean production through nurturing comprehensive management and a people-oriented culture, prioritizing environmentally friendly practices, and taking a preventative approach to potential sources of environmental damage. As well as minimizing new sources of pollution, we have adopted the latest technology and equipment to continually reduce the amount of pollutants generated by our existing operations. Our intention is to maintain an effective environmental protection mechanism in the long term, creating harmony between production and the environment, and continuously improving the Company's environmental performance.

The Company carries out promotional and educational environmental protection activities to provide employees with environmental protection knowledge and skill-based training. We have also implemented an environmental protection target responsibility system, and are considering environmental management as a factor in HSE risk assessment. At the beginning of each year, we sign HSE responsibility statement, allocating and implementing environmental protection goals for every job position and employee. By strictly implementing our "three simultaneous" 1 environmentally friendly management protocols for construction projects, we ensure compliance with national environmental laws. The Company has also formulated contingency plans and carried out practice drills for sudden environmental events, established regular management and monitoring mechanisms for emissions targets, carried out rigorous evaluations on operational efficiency, maintenance effectiveness, and compliance with pollutant discharge targets by our environmentally friendly facilities. Through the years, our strict controls have proven to be effective. Our subsidiaries have strictly implemented management policies such as "Sinofert Administration Measures of Environmental Protection" and "Sinofert Measures for the Administration of Energy Saving and Emission Reduction", resulting in stable production and tightly controlled pollution emissions. In 2017, Sinochem Jilin Changshang Chemical Co. Ltd. ("Sinochem Changshan") and Sinochem Shandong Fertilizer Co. Ltd. ("Sinochem Shandong") completed the fourth round of inspections of eight provinces during the Central Environmental Protection Supervision Team's visit, and both had maintained environmental protection operations at a good level. No significant complaints or public opinions were recorded during this period.

<sup>&</sup>lt;sup>1</sup> The "three simultaneous" system refers to all newly constructed, redeveloped and expanded infrastructural projects, technology upgradation projects, natural resources development projects, and other construction projects which may pollute or damage the environment. For these projects, the design and construction work of pollution and other public hazard prevention facilities as well as other environmental protection devices shall be undertaken at the same time as the main project and become operational simultaneously with the main project. This system can effectively prevent or mitigate the damages of new projects to the environment.



### **Emissions Control**

Sinofert has succeeded in reducing its emissions resulting from operations, including reductions in exhaust gases from boilers, industrial gas emissions, and sewage from production. The Company strictly controls industrial emissions such as sulfur dioxide (SO<sub>2</sub>), chemical oxygen demand (COD), NH3-N and Nitrogen oxides (NOx). The Company's performance regarding four types of industrial emissions during the past three years is shown in the table below:

Performance in four gas emission factors (2014-2017)

Emission factor	2014 total emissions (tonnes)	2015 total emissions (tonnes)	2016 total emissions (tonnes)	2017 total emissions (tonnes)
SO <sub>2</sub>	2361.12	2254.34	1703.64	1509
COD	176.43	159.9	50.43	49.96
NH <sub>3</sub> -N	33.12	29.64	10.94	9.37
NOx	488.88	479.35	355.77	562²

<sup>&</sup>lt;sup>2</sup> Sinochem Changshan's operations rate increased for 2017 due to a newly-renovated expansion and equipment upgrades in 2017. During the same period, local governments raised standards for the four emission indicators. Though the Company's NOx emissions show an increase as compared with 2016, the emissions rate is still meeting Sinochem Changshan's emission reduction target.

#### **Exhaust Emission Control**

Sinochem Changshan completed refinements to its boiler flue gas denitrifier and began operations this year. This enables emissions of smoke, sulfur dioxide and nitrogen oxide from the facility's six boiler sets to satisfy the latest standards. Sinochem Yunlong Co., Ltd. ("Sinochem Yunlong") has completed installation of two 75t/h boiler flue gas phosphate slurry desulfurizers and conducted joint calibration testing. To commence operation in early 2018, these upgrades will reduce emission concentrations of SO<sub>2</sub> and NOx in flue gas to below set standards. Also, Hubei Sinochem Dongfang Fertilizer Co. Ltd.'s ("Sinochem Dongfang") conversion of one 4t/h coal-fired boiler to natural gas is now complete and ready for operation.

#### Sewage Discharge Control

Sinochem Changshan implemented a dredging and anti-seepage project at its Changshan Ender boiler gas washing sewage circulation facility. The terminal facility's equipment will be upgraded for improved sewage treatment and sewage treatment capacity, as well as adding functions such as reverse osmosis clean water in-line drainage to reduce emissions from the source. Sinochem Chongqing Fuling Chemical Fertilizer Co., Ltd. ("Sinochem Fuling") has completed a Feasibility Study Report on its phosphogypsum storage yard sewage treatment station and will finish construction of a sewage treatment station by the end of 2018. Among other measures, Sinochem Fuling strengthened the management of the phosphogypsum leachate pool, raised and reinforced the leachate dam, took actions to prevent leachate efflux, conducted periodic testing of leachate re-use water and groundwater in proximity to the storage yard, and commenced the greening of 240 acres for the phosphogypsum storage yard. In 2017, Sinochem Yunlong implemented a technical alternation project for its phosphoric acid sewage recycling and rainwater sewage diversion systems. The project successfully enabled initial rainwater treatment disposal and collection of effluent rainwater emissions.



### **Waste Control**

The Company has formulated comprehensive management guidelines for the responsible handling of general industrial solid waste and hazardous waste. All waste is first divided by category: steel and cables are allotted for later recycling and reuse by the Company, while other recyclable materials such as cinders are resold as building material. Part of the phosphogypsum solid waste generated by production of phosphate fertilizers is retained for use in the production of gypsum powder, cement retarder and other products. The remaining waste is stored in a dedicated phosphogypsum storage yard. The Company plans to liaise with eligible suppliers to arrange for appropriate disposal of the stored waste. The storage yard near Sinochem Yunlong has passed the construction project acceptance and production operation examination. It meets relevant regulatory standards and has been listed as a benchmark model by the Yunnan Provincial Department of Environmental Protection.

### Performance in hazardous waste emissions and disposal

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Item	Hazardous Waste	Category	Disposal		
1	Metallic bucket (metal	Recyclable solid	Handled by qualified units		
	buckets for engine oil,	waste			
	paint, etc)				
2	Desulfurization catalyst	Hazardous solid	Handled by qualified units		
		waste			
3	Copper, nickel catalyst, etc	Hazardous solid	Handled by qualified units		
		waste			
4	Engine oil, etc	Hazardous solid	Handled by qualified units		
		waste			
5	Domestic waste	Unrecyclable solid	Handled by refuse stations		
		waste			

#### Performance in non-hazardous waste emissions and disposal

Item	Non-hazardous Waste	Category	Disposal
1	Remaining steel	Recyclable	Recycled within company
2	Remaining cable	Recyclable	Recycled within company
3	Phosphogypsum	Partially recyclable	Stored



### **Resource Consumption**

Sinofert's energy management system, which completed review and was accredited in 2017, was established with the aim of bringing energy consumption management in line with national and Company requirements for efficiency. The Company has also reviewed the composition of its energy management lead group, with the Deputy General Manager of the HSE assigned as its leader. Other members include the heads of the HSE and Business Management Department, Office Department, Human Resources Department and Finance Department. The HSE and Business Management Department is responsible for handling day-to-day energy management. Each member of the lead group has clear duties and responsibilities to help ensure the effectiveness of the Company's energy reduction management work.

Sinofert and its subsidiaries have signed letters of HSE commitment and energy reduction responsibility, and implemented clear emissions and energy reduction targets. Among the practical measures taken to achieve these targets is the inclusion of the completion status of energy reduction targets in each subsidiary's performance assessment, strengthened monitoring, examinations for each grade level, and implementation of a system of rewards and punishments. As well as promoting employee education, the Company has advocated a general raising of environmental awareness among employees that has contributed to more efficient energy usage.

As part of its energy management system, the Company has developed policy documents such as "Sinofert Measures for Assessment of Energy Conservation and Emission Reduction", "Sinofert Group Measures for Energy and Water Savings", "Instructions on Reporting Energy Savings and Environmental Protection Information Statistics", and "Instructions on Energy Resource Management" to provide practical guidance on reducing energy and resource consumption.

The Company's energy-consuming units are equipped with energy measuring devices, allowing for the creation of an energy auditor. The auditor summarizes energy usage records and maintains accounts in accordance with the "Sinofert Group HSE Information Management System". Regular analyses of usage data have also been performed. The Company frequently organizes training sessions for energy management employees to enhance their abilities.



To achieve its energy reduction targets in the context of actual operational considerations, Sinofert and its subsidiaries developed the following energy reduction measures in 2017.

Energy reduction measures in 2017

Region	Mea	asure	Outcome
Sinochem	1.	Maintenance of old equipment to improve	Sewage treatment station
Changshan		operational levels, flue gas	energy consumption reduced
		desulphurization unit to recycle	by 80,000 kilowatts (kWh),
		ammonium sulfate byproduct.	reduced production of
	2.	Installation of additional reverse osmosis	desulfurization byproducts.
		water direct discharge facilities will be	
		installed to reduce the production load of	
		sewage treatment stations.	
Sinochem	1.	Balanced outsourced and self-generated	Reduced usage of lignite and
Yunlong		power, adjusted load of 3MV turbine	overall energy consumption.
		generator.	Heat source reform saved
	2.	Feed conversion of phosphate heat source	approximately 14,000 tonnes
		project completed the connection of the	of coal annually and reduced
		heat source pipeline. Operation was	sulfur dioxide emissions by 35
		normalized and the coal gas station was	tonnes per year.
		shut down.	
	3.	Improved rate of rainwater discharge reuse	
		and reduced fresh water usage by	
		rainwater and sewage diversion.	
Sinochem	1.	Eliminated use of high energy-consuming	Improved energy efficiency of
Fuling		capacity, three organizations of dilute	hot stoves, saving
		phosphoric acid and mineral acid, and	approximately 3,420 tonnes of
		shuttling of calcium.	standard coal per year.
	2.	Added sampling analysis facilities to	
		analyze combustion and thermal efficiency	
		of compound fertilizer hot stove.	



#### Energy consumption in 2014-2017

	2014	2015	2016	2017³
Total energy consumption	810,405	804,323	480,946	843,310
(tonnes)				
Coal (tonnes)	545,692	507,437	225,646	553,005
Electricity (kWh)	801,792,576	802,000,000	554,451,290	756,697,813
Natural gas (1000m³)	123,539	147,870	139,585	185,575
Steam (tonnes of coal)	512.61	400.69	290.09	1,555.65
Integrated energy consumption per				
output value (tonne of coals per	1.55	1.50	1.16	1.67
ten thousand RMB)				

<sup>&</sup>lt;sup>3</sup> Sinochem Changshan's operational rate increased due to new expansion and equipment upgrades in 2017. Industrial output increased by 32.79% and energy consumption increased by 75% compared to the previous year. At the same time, coal and electricity consumption increased by 145% and 36% respectively, and integrated energy consumption per output value increased by 44% compared to the previous year. The Company continuously monitors and optimizes the energy efficiency of new operational capacity, reviewing and tackling all energy efficiency issues resulting from changes in production capacity.

#### **Conservation of Water**

The energy conservation lead group promotes water saving plans throughout the Company's different branches in various cities. For Sinochem Changshan, planning led to investment in the recycling and reuse of water. For Sinochem Yunlong, plans called for the redevelopment of sewage circulation and rainwater collection/recycling facilities. Sinochem Fuling meanwhile launched an energy- and water-saving assessment system for its work teams. These investments in both hardware and staff systems were intended to help the Company substantially reduce its consumption of water resources. In 2017, Sinofert consumed 230,198.0 tonnes less fresh water than it did in 2016.

#### Water usage in 2014-2017

	2014	2015	2016	2017
New water (tonnes)	13,131,491	10,244,982	8,367,267	8,137,069
Recirculated water	42 120 250	E6 071 220	49 004 740	26 261 000
(tonnes)	43,130,250	56,071,230	48,094,749	36,261,080



### **Soil Protection**

Sinofert aims to manufacture high quality fertilizers to boost China's agricultural development and help create a stable food supply. Nevertheless, inappropriate or overuse of fertilizers leads to environmental problems such as water source pollution, soil ecology destruction and soil depletion. To educate farmers on the proper use of fertilizers, Sinofert offers them soil testing formulas and gives scientific advice on which fertilizer products will best meet their needs. This initiative both enhances fertilizer efficiency and reduces agriculture's impact on the ecology.



# **Interesting Facts**

The soil testing formula prescribes the most suitable amount of fertilizers to be used according to crop fertilizing patterns, soil fertility and fertilizer response. Fertilizers are applied scientifically under the guidance of agricultural scientific personnel. The formulated fertilizer and fertilizer technology can regulate and solve the conflicts between soil fertility and crop nutrition, providing specific nutrients for the crops. As a result, the soil testing formula enhances the efficiency of fertilizers and reduces the amount of fertilizers used. Other than that, it improves the quality and quantity of crops produced, lowers the cost and labour of the farmers, ultimately achieving the aim to reduce costs and increase revenue.



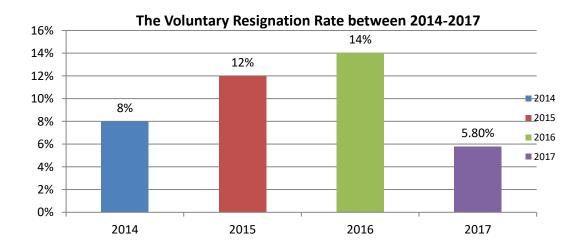
# **Social**

# **Employee Relationships**

Sinofert believes that "people are the Company's most important resource, promoting the enterprise value and employee value mutually". As the Company's most valuable asset, employees support its business development and drive the business startup for the third time. In return, Sinofert cares for employees' well-being from their first day of work to their retirement. To this end, the Company undertakes the following:

- 1. Protecting employee rights: Sinofert fully protects the rights of its employees. The Company insists on employing labour legally and protecting equal rights. It also supports a democratic management style and promotes the diversity of talent in accordance with its sustainable development model.
- 2. Promoting staff values: Sinofert continuously improves staff training and its employees' professional abilities. By broadening employees' career development, their value is maximized,
- 3. Fostering a sense of belonging: Sinofert is a "people-oriented" corporate culture. Its deep concern for employees leads to a reduced turnover rate and an enhanced sense of belonging within the Company.

This Company is devoted to creating career development paths for its employees. In 2017, the voluntary resignation rate reached 5.8% -- the lowest in the past four years. This proved that an increasing number of staff members regarded the company as their long-term career development platform. The Company believes that a stable and unified environment plays a key role in its development. It also creates an innovative atmosphere, helping to establish a highly competitive and coherent team, and to retain and attract core talented individuals.





# **Staff Composition**

Sinofert strictly complies with the Labor Contract Law of the People's Republic of China and other employment regulations and policies. The Company is committed to employment equality, and to providing a fair, democratic, competitive and merit-based staff selection and employment mechanism. Discriminatory behavior in any form is strictly prohibited, as is the employment of child labor and forced labor. The Company protects the rights and interests of female employees by implementing equal pay for men and women for the same work, and by prohibiting the employment of female workers in mines or as mine laborers.

### Staff by Age

	2016	2017
Under 31	25.8%	25.8%
31 to 50	69.1%	66.6%
51 or over	5.3%	7.5%

# Staff by Gender

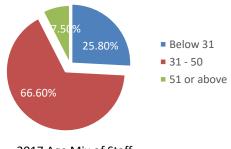
	2016	2017
Male	74%	76.7%
Female	26%	23.3%

# Staff by Education

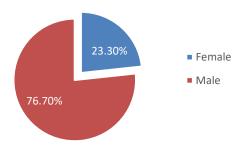
	2016	2017
Bachelor degree or higher	29.1%	27.7%
Without Bachelor degree	70.9%	72.3%

# **Staff by Function**

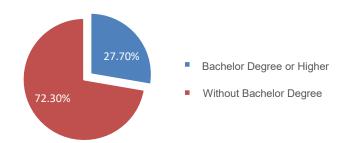
	2016	2017
Office Staff	31.5%	22.2%
Labor workers	68.5%	77.8%



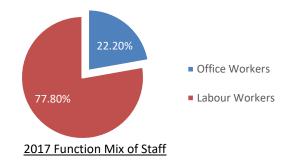
2017 Age Mix of Staff



2017 Gender Mix of Staff



2017 Education Level Mix of Staff





### **Employee Health Protection – Occupational Safety and Health System**

The Company's occupational health enforcement policy is based on the principle of "prevention first, integrating prevention and control with comprehensive control" and complies with relevant regulations and standards such as the "Law of the People's Republic of China on the Prevention and Control of Occupational Diseases", "Provisions on the Supervision and Administration of Occupational Health at Work Sites" and "Measures for the Supervision and Administration of Employers' Occupational Health Surveillance". The Company has also enacted a management system of "corporate responsibility, classified management and regular assessment".

In accordance with current requirements, the Company provides work-related injury insurance for all employees. The Company also employs qualified technical service institutions at least annually to identify and evaluate occupational hazard factors in its operations. Branch offices and departments conduct evaluations of identified occupational hazards and take rectification measures at least once every three years. The Company ensures that its employees are always equipped with appropriate personal protective gear, and are trained for the proper use of such gear.

# **Continuous Occupational Safety and Health Training**

The Company considers its chief executives fully responsible for the prevention and control of occupational hazards. It has thus established occupational health management units under the supervision of human resources and the employees' union. Furthermore, it has instituted a responsibility system for occupational disease prevention and control, a hazard warning and informing system, a declaration mechanism for occupational disease hazards, a system of promotion, education and training, management and maintenance systems for occupational disease prevention equipment, and a monitoring and recommendation management system for occupational disease hazards. The Company has adopted a "three simultaneous" management policy for occupational hygiene, health monitoring and file management for construction projects. This includes the enforcement of systems for occupational hazard disposal and reporting, emergency rescue and management, and regulations for occupational health operations.



Fire drill training provided by the fire protection and traffic police provided to the Sinofert staff



In January 2017, the Deputy General Manager, Mr. Ma Yue visited Fujian to research and express solicitude to the frontline staff



In March 2017, the Chief Executive Officer, Mr. Qin Heng De and the others visited Shandong for investigation and research.

In March 2017, the Chief Executive Officer of Sinofert, Mr Qin Heng De, made a visit to Shandong's ammonia station. The site is considered as a major source of occupational safety and health hazards. At the site, the employees cooperated as an on-site inspection was made, and carried out emergency drills using chemical protective gear and cardiopulmonary resuscitation equipment.

# **Continuous System Improvements**

Sinofert has set a goal of "zero accidents". To this end, the Company is continually assessing risks, investigating and rectifying hidden dangers, improving emergency mechanisms, carrying out emergency drills and improving its HSE management. The Company has established a production safety accountability system which continuously improves the HSE file system's occupational health management and its ability to systematically identify and evaluate occupational health risks. Through control mechanisms such as provisions for personal protection equipment (PPE matrix management) and implementation of occupational health and safety measures, supervision and continuous improvement, the Company protects its employees from occupational health risks and ensures their safety.



# **Training and Development**

Sinofert regards the development of professional skills as important for all its employees, as improving their capabilities leads to greater competitiveness for the whole organization. In all, the Company has provided 19 different training programs to 968 people, with a total of 11,219 study hours. The micro study platform has caught wide attention and recognition. A total of 24 papers by senior executives and case studies on MAP strategy for demonstration and other high-quality articles were published on the platform with an average readership of 1,259 visitors. It has promoted team-building and cooperation effectively, strengthened the strategic mutual understanding and spread the concept and culture of talent training.



In the summer of 2017, the Company held many model plots observing and emulating meetings, the contralateral deep fertilizations, slow controlled release fertilizers and product meal demonstrations



In early June 2017, internal training about agricultural techniques was held in the branch office of Heilongjiang

Social



# **Community Care**

The Company is conscious of its role as a conservator of resources, a model for environment-friendly operation, and a supporter of national agricultural security. In the first half of 2017, with "deepen the structural reform of the agricultural supply side" as the goal, the Company's major aims are the promotion of scientific fertilizer, volume reduction, organization of agricultural courses and soil testing formula production, and testing of model plot foundation, etc. The Company also cooperated with the National Ministry of Agriculture and local agricultural units to promote fertilized formula demonstration foundations, construct farmer field schools, train new professional farmers and construct grassroots agricultural service centers.

Under the Ministry of Agriculture's "National 'One-stop' Alliance for Agricultural Technology Innovation", the Company fulfilled its responsibility for establishing a Chemical Fertilizer Reduction and Synergy Technology Innovation Alliance. On 20 March 2017, the Alliance held a kick-off meeting at Beijing Kaichen World Trade Center, attended by a delegation from the Ministry of Agriculture. Under Sinofert's leadership, the Alliance works to integrate industry resources, strengthen cooperation, reform the agricultural supply side, and act as a platform for fertilizer reduction and efficiency. To help achieve these goals, the Company will organize the agriculture industry's main enterprises and scientific research institutions to break through the bottlenecks that beset the sector.

Since 2015, Sinofert has cooperated closely with the key national commodity grain base - the Heilongjiang Farms and Land Reclamation Administration Jian San Jiang Branch to form special project groups, develop new fertilizers for paddy rice and carried out massive field tests and sampling activities to solve the problems of excessive fertilizer and low manure use in rice cultivation. Based on contralateral deep fertilization techniques and good employment of the fertilizer, the new technology has been adopted rapidly. Between 2015 and 2017, the area of contralateral deep fertilization increased from 4,000 to 1.4 million mu. It is estimated that extra income of some RMB168 million were generated for the farmers. On 15 May 2017, the Company held a function named "Sinofert's Dedication to Rural Prosperity" to demonstrate the technique of contralateral deep fertilization for Jian San Jiang paddy rice in Heilongjiang. Sinofert technical staff provided farmers with on-site guidance about contralateral deep fertilization to help solve any problems encountered while using the product.



On 15 May 2017, the on-site guidance of contralateral deep fertilization during "Sinochem's Dedication to Rural Prosperity" in Jian San Jiang of Heilongjiang



# **Interesting Facts**

Side deep fertilizing is a synchronous fertilizing technique where fertilizer is put 3 cm to 5 cm behind the root tip at a depth of 5 cm in the course of transplantation. Compared with traditional methods, it allows simultaneous transplantation and fertilization, avoiding repeated re-fertilization, hence minimizing working hours and labour cost. Furthermore, fertilizer use efficiency has been increased as less fertilizers are used. This technique serves as the solution to over-fertilization and manpower shortage in China's aquaculture industry, and the production quantity, quality and profit are boosted.



# Facilitating the Implementation of National Policy - "Zero Growth of Chemical Fertilizer and Pesticide Consumption by 2020"

As the largest supplier and distributor of chemical fertilizers in China, the Company participates in the development of modern agriculture and facilitating agricultural reform to tackle food and ecological safety, growth of chemical fertilizer use, agricultural industry overcapacity, high circulation costs and the proliferation of fake commodities. The Company promotes the circulation of rural land and efficient fertilizer use, and the development of smart manufacturing and integrated agricultural systems.

In partnership with the Ministry of Agriculture, the National Agro-tech Extension and Service Center and other government agencies, Sinofert has worked to reduce consumption of chemical fertilizers and explore new fertilization methods. We play a key role in the new economy through organizing observation activities at demonstration farms and exploring new enterprise partnerships in conjunction with provincial governments such as Anhui, Shandong and Hainan. Additionally, to encourage more efficient fertilizer use, we work with local technical centers to promote advanced techniques and production models among farmers.

The Company will continue to address the demands of modern agriculture while focusing on its core operational pillars and fulfilling its corporate social responsibilities. Under government guidance, we will strive to further reduce the use of chemical fertilizers and pesticides, and will strengthen our cooperation with the Ministry of Agriculture and research institutes in promoting scientific fertilization and agricultural innovations and nurturing the next generation of farmers. By utilizing both internal and external resources, we will continue to provide quality, professional and efficient integrated services, and to make a valuable contribution to agriculture development in China.



# Governance

### **Internal Control and Management**

The Group's internal monitoring and risk management system was formulated in accordance with the Listing Rules of the Stock Exchange, the Committee of Sponsoring Organizations of the Treadway Commission of the U.S (COSO), and the "Basic Framework of Internal Control and Risk Management – A Basic Framework" of The Hong Kong Institute of Certified Public Accountants (HKICPA). For risk identification and assessment, the Company based on the guidelines and framework of Basic Standards for Enterprise Internal Control System issued by five ministries of China, execute "prioritization, continuous monitoring, transferring risks" as risk handling flow. Throughout the processes of risk identification, assessment, handling, as well as full-process risk pre-alert management, a comprehensive mechanism of forewarning and contingency planning on risk management is taken place.

In line with our strategic development in modern agriculture, the Group had established new departments like Basic Fertilizer Business Department and Sales and Marketing Department in 2017 in accordance with "Streamlining Efficiency with Clear Responsibility and Controlled Authority" principles, which enhanced development of business departments and operational risk assessment management. In addition, the functions of various other departments were optimized to manage risk and conduct internal control at different levels. The Group has also restructured the functions and duties of each department and management system, and continued to reinforce, examine and evaluate the results to ensure smooth operation and effectiveness of the Company's structure and risk management system. A series of corporate actions not only were in compliance with the requirements of both local and overseas regulatory authorities, but also helped to accommodate changes of global trends and business strategy reform, protecting the interests of our shareholders and assets and safeguarding our business quality and strategy.



### **Establishing A Corruption Prevention System**

The Company has emplaced a "no corruption" system built upon the principles of "dare not corrupt" and "unwilling to corrupt" to safeguard our strategy of development and innovation.

- (1) Establishing a "No Corruption" mechanism
  - After a thorough study of the exercise of power and accountability and sources of corruption risk within the Company, measures were formulated to limit power and curb corruption. All operating units are closely monitored for their implementation of corruption risk management. Meanwhile, management systems in high risk and key areas have been strengthened to encourage engagement with the anti-corruption mechanism.
- (2) Implementing comprehensive disciplinary education

  Efforts to combat corruption have been intensified through the incorporation of anti-corruption messages in the Company's mission and vision statements. Anti-corruption emails and messages are disseminated during holidays and anti-corruption news is posted on WeChat on a daily basis. Moreover, training is provided to new employees and personnel in key positions to ensure that the anti-graft campaign is fully implemented within our Beijing headquarters. To raise employee awareness, the Company also invited its management team, key personnel and subordinate units to visit anti-corruption educational bases and watch documentaries of corruption prevention.
- (3) Assigning senior executives to safeguard discipline, making the best use of internal and external supervision Strong anti-corruption policies are integral to the selection of senior executives and new key personnel. The Company has also made internal reporting email and hotlines available to all employees and posted 'service supervision' signs at base units to establish an intracompany supervision system. In 2017, no violations of discipline were found.

#### **Supply Chain Management**

Sinofert is a member of the International Fertilizer Association (IFA), and is one of the 17 members of the International Plant Nutrition Institute (IPNI). The Company has more than 60 years of experience in developing fertilizers and engaging in fertilizer importation and international trade. For potash fertilizer imports, Sinofert has established long-term strategic partnerships with major potash suppliers including Canpotex, the Arab Potash Company (APC) and the Belarusian Potash Company (BPC) to safeguard a stable supply.

### **Segmented Management of National Suppliers**

In 2017, the Company complied data from all its suppliers in China. As of 31 December 2017, the Company's total number of accredited bulk raw material suppliers reached 1,175, of which 544 were in trading and 631 in manufacturing industries. By integrating information on the supply chain network, the Company can more effectively select, manage and supervise its suppliers and improve the cost effectiveness of its supply chain.



### National Suppliers in 2017

Suppliers' Figures	No. of Suppliers in 2017 (no.)
Accredited Raw Material Bulk Suppliers	1,175
■ Trading	544
■ Manufacturing	631

### **Employment, Management and Supervision of Suppliers**

The Company categorizes its material procurement and has adopted an integrated system of supplier management. To become an accredited raw material bulk supplier, companies must first pass assessment criteria which include the nature of business, scale, business terms, site inspection, and other factors. The Company also regularly conducts reviews to eliminate suppliers with unsatisfactory performance and to recruit new suppliers to maintain the stability of our supply chain.

### **Product Responsibility**

In compliance with the "Measures of National Manufactured Compound Fertilizer Quality Management", the Company inspects, categorizes and issues product certificates with reference to the national standards and proprietary quality requirements.

Sinofert strives to provide quality service and protect the rights of customers. Under the "Sinochem Dedicating to Rural Prosperity" series, a number of agrochemical service activities have been conducted and have been widely embraced by farmers.

Our customer service team is dedicated to providing the best possible support in a clear and professional manner. The team provides information to address enquiries regarding products and services and also manages complaints by providing on-site investigations or technical support.

#### **Quality Control**

Sinofert strictly upholds all national provisions on product quality, and all state laws and regulations regarding quality management. By strengthening the Company's process management and adopting advanced technologies and equipment, we ensure our products to conform to all mandatory safety standards.

The "Measures of National Manufactured Compound Fertilizer Quality Management" stipulates quality and technical parameters for intermediate products and manufacturing equipment. Under these regulations, unqualified intermediate products are prohibited from processing to the next stage of manufacturing, and product defect identification and corrective actions are to be established to handle defective products. Additionally, every production batch is inspected at our professional laboratory, and faulty products are not allowed to leave the factory.



In accordance with the regulation for the Administration of Product Quality Certification of the People's Republic of China, Sinofert conducts annual ISO 9001 product quality system assessments, and all our products meet the relevant requirements of the certification scheme. The Company strictly enforces international regulatory measures on the use of chemicals such as chloride, biuret and heavy metals, closely monitors the quality of raw materials and manufacturing, and ensures all relevant parameters are followed.





# **Total Quality Management**

In accordance with national product quality laws and regulations and the "Sinochem Group Product Quality Management Approaches", the Company has developed the new "Sinofert Quality Management Approaches". These are intended to ensure standardization of all the Company's quality management requirements and process management procedures, from raw material procurement, production and manufacturing, to process inspection, logistics inventory, sales tracking and product accident handling. The Company's subsidiaries have established specialized and collaborative quality management departments to ensure controllable processes and results. The Company also promotes the establishment of quality standards for product management within its subsidiaries, where corporate standards should be equivalent to or stricter than national standards. The Company carries out publicity and education on quality management and provides quality management and operational skill training for quality management personnel as well as other staff, implementing quality management systems and operational requirements. The Company implements a target system for quality management, defines essential quality indicators for the corporation, and periodically tracks and assesses the operational results of corporate quality indicators.



### **Compound Fertilizer Test**

To implement "Sinofert Compound Fertilizer Enterprise Standard" (Stricter than National Standard GB15063):

Testing items include the specified indicators in national standards such as nutrients, water, chloride etc., as well as the scrap rates, particle strength testing and other corporate indicators (Not specified in national standards but in the Company). For national standard projects, subsidiaries of Sinofert launch continuous sample tests, testing one batch each shift or the batches of no more than 500 tones. For non-national standard projects, the Company takes type inspection methods, in principle

### Tests for Urea, Phosphate (ADP, Diammonium Phosphate)

To implement national standard (GB00240, GB10205):

The Company conducts tests in accordance with the continuous inspection method for each shift.

# **Enhancing Customer Service Quality**

The Company is making a focused effort to enhance the quality of its sales channels and consolidate its customer base. As of 30 June 2017, we have upgraded more than 7,200 of our stores and set up 98 basic agricultural service centers. The latter promote modernized agricultural development while providing famers with information on crops, fertilizers and agricultural technologies. More than 11,000 events have been held with the theme of "Sinofert's Dedication to Rural Prosperity" to enhance our customer service quality.

### **Continuous Product Optimization**

Sinofert is always introducing advanced new fertilization techniques and manufacturing equipment to develop highly efficient side deep fertilizers. Our fertilizers not only meet intensity and absorptivity parameters, but also enhance nitrogen use efficiency. Zine chelate and effective silicon have been added to our fertilizers to address the nutrient deficiencies and micronutrient needs of crops in Sanjiang district. Through continuous monitoring of the manufacturing process, our service team can identify points of weakness and areas for improvement and provide instant feedback to our research and production departments for product upgrades and improvements.

About this report

Social



# 2016-2017 Performance Data Summary

		201	16	20	017	
	Emission					
	Sulphur dioxide (Tonne)	1703	3.64	1,	509	
	Chemical oxygen demand (Tonne)	50.4	43	49	49.96	
	Ammonia nitrogen (Tonne)	10.9	94	9.37		
	Nitrogen oxides (Tonne)	355.77		5	62	
ntal	Energy Consumption (in Tonnes of Standard Coal)	480,	946	843	3,310	
Environmental	Coal (in Tonnes of Standard Coal)	225,	646	553	3,005	
invir	Electricity (kWh)	554,45			97,813	
	Natural Gas (in Thousands Standard m3)	139,			5,575	
	Steam (in Tonnes of Standard Coal)	290	.09	1,5	55.65	
	Integrated Energy Consumption Per Output Value (in Tonnes of Standard Coal per RMB 10,000)	1.16		1	.67	
	Number of Staff					
	Total Staff Number	6,240		5,	941	
	By Age	(headcount)	(%)	(headcount)	(%)	
	<31	1,607	25.80%	1,535	25.80%	
	31- 50	4,310	69.10%	3,959	66.60%	
	>50	331	5.30%	447	7.50%	
Employment	By Gender	(headcount)	(%)	(headcount)	(%)	
ploy	Male	4,589	74%	4,558	76.70%	
E	Female	1,651	26%	1,383	23.30%	
	By Qualification	(headcount)	(%)	(headcount)	(%)	
	Bachelor Degree or higher	1,816	29.10%	1,644	27.70%	
	Without Bachelor Degree	4,424	70.90%	4,297	72.30%	
	By Professional Profile	(headcount)	(%)	(headcount)	(%)	
	Office Staff	1,966	31.50%	1,318	22.20%	
	Labor Workers	4,274	68.50%	4,623	77.80%	



# **ESG Content Index**

KPIs	HKEx ESG Reporting Guide	Section/Remarks
A. Environmental		
Aspect A1	Emissions	
General disclosure	Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	P. 6 Emission Control
KPI A1.1	The types of emissions and respective emission data.	P. 6 Emission Control
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P. 6 Emission Control
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	P. 7 Waste Control Data of quantity and intensity to be collected upon development of data collection flow
KPI A1.4	Total non- hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P. 7 Waste Control Data of quantity and intensity to be collected upon development of data collection flow
KPI A1.5	Description of measures to mitigate emissions and results achieved.	P. 8 Resource Consumption
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	P. 7 Waste Control Disclosed categorization and handling methods. Figures on achievement to be disclosed upon development of waste data collection system
Aspect A2	Use of resources	
General disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	P. 5-11 Environmental
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	P. 5-11 Environmental



KPIs	HKEx ESG Reporting Guide	Section/Remarks
A. Environmental (Cor	o'd)	
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P. 5-11 Environmental
KPI A2.3	Description of energy use efficiency initiatives and results achieved.	P. 5-11 Environmental
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	P. 5-11 Environmental
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	To be disclosed next year Reviewing data collection system among operation points in the country
Aspect A3	The environment and natural resources	
General disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	P. 5-11 Environmental
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P. 5-11 Environmental
B. Social		
Employment and Labo	our Practices	
Aspect B1	Employment	
General disclosure	Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	P. 12-13 Employment Relationship
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	P. 12-13 Employment Relationship
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	P. 12-13 Employment Relationship
Aspect B2	Health and safety	
General disclosure	Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer.	P. 14-15 Employee Health Protection – Occupational Safety and Health System
KPI B2.1	Number and rate of work-related fatalities.	No Fatal accident in this reporting year



KPIs	HKEx ESG Reporting Guide	Section/Remarks
B. Social (Con'd)		
KPI B2.2	Lost days due to work injury.	Data collection and calculation not available currently
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	P. 14-15 Employee Health Protection – Occupational Safety and Health System
Aspect B3	Development and training	
General disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	P. 16 Training and Development
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P. 16 Training and Development
KPI B3.2	The average training hours completed per employee by gender and employee category.	P. 16 Training and Development
Aspect B4	Labour standards	
General disclosure	Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	P. 12-13 Employment Relationship, Employees Composition
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	P. 13 Employees Composition
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	No violation in this reporting year
Operating Practices		
Aspect B5	Supply chain management	
General disclosure	Policies on managing environmental and social risks of the supply chain.	P. 21-22 Supply chain management
KPI B5.1	Number of suppliers by geographical region.	P. 21-22 Supply chain management Number divided by regions to be disclosed in the future.
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	P. 21-22 Supply chain management



KPIs	HKEx ESG Reporting Guide	Section/Remarks
B. Social (Con'd)		
Aspect B6	Product responsibility	
General disclosure	Information on:	P. 22
	(a) the policies; and	Product responsibility
	(b) compliance with relevant laws and regulations that have a	
	significant impact on the issuer relating to health and safety,	
	advertising, labelling and privacy matters relating to products and	
	services provided and methods of redress.	
KPI B6.1	Percentage of total products sold or shipped subject to recalls	No Product Recall Issues
	for safety and health reasons.	in the year.
KPI B6.2	Number of products and service related complaints received and	P. 22
	how they are dealt with.	Product responsibility
KPI B6.3	Description of practices relating to observing and protecting	N/A
	intellectual property rights.	
KPI B6.4	Description of quality assurance process and recall procedures.	P. 22-24
		Quality Control, Total
		Quality Management
KPI B6.5	Description of consumer data protection and privacy policies,	N/A
	how they are implemented and monitored.	
Aspect B7	Anti-corruption	
General disclosure	Information on:	P. 21
	(a) the policies; and	Establishing corruption
	(b) compliance with relevant laws and regulations that have a	prevention system
	significant impact on the issuer relating to bribery, extortion,	
	fraud and money laundering.	
KPI B7.1	Number of concluded legal cases regarding corrupt practices	No legal cases reported in
	brought against the issuer or its employees during the reporting	the year.
	period and the outcomes of the cases.	
KPI B7.2	Description of preventive measures and whistle-blowing	P. 21
	procedures, how they are implemented and monitored.	Establishing corruption
		prevention system
Community		-
Aspect B8	Community investment	
General disclosure	Policies on community engagement to understand the needs of	P. 17-18
	the communities where the issuer operates and to ensure its	Community Care
	activities take into consideration the communities' interests.	
KPI B8.1	Focus areas of contribution (e.g. education, environmental	P. 17-18
	concerns, labour needs, health, culture, sport).	Community Care
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	P. 17-18
		Community Care