

# **Sinofert Holdings Limited**

# Environmental, Social and Governance Report 2016

# CONTENT

About this Report	2
Company Profile	2
Report Introduction	2
Reporting Period	2
Reporting Guideline	2
Feedback	3
Chairman's Message	4
Environmental	6
Emissions Control	7
Resource Consumption	8
Soil Protection	11
Our Employees	12
Employees Composition	12
Employees Composition Employee Health Protection	
	13
Employee Health Protection	13 14
Employee Health Protection Training and Development	13 14 14
Employee Health Protection Training and Development Discipline Inspection	13 14 14 <b>17</b>
Employee Health Protection Training and Development Discipline Inspection High Quality Product Management	13 14 14 <b>17</b> 17
Employee Health Protection Training and Development Discipline Inspection High Quality Product Management Supplier Management	13 14 14 <b>17</b> 17
Employee Health Protection Training and Development Discipline Inspection High Quality Product Management Supplier Management Quality Control	13 14 <b>1</b> 7 17 17 <b>1</b> 7

# **About this Report**

### **Company Profile**

Sinofert Holdings Limited (referred to as "Sinofert" or the "Company") is China's largest fertilizer distributor and supplier of imported fertilizer products and one of the largest producers in China. With an emphasis on distribution operation, Sinofert integrates its upstream and downstream value chain, produces and markets fertilizer products such as nitrogenous fertilizer, phosphate fertilizer, potash fertilizer and compound fertilizer. It offers the widest range of fertilizer products in China. Sinofert has the largest agricultural resources distribution network in China and a complete agrochemical service system.

### **Report Introduction**

This Environmental, Social and Governance ("ESG") Report is the first ESG report published by Sinofert. To increase each stakeholder's understanding of the Company's sustainability development direction, this report will disclose Sinofert's work and performance on environmental and social aspects during 2016.

### **Reporting Period**

From 1 January 2016 to 31 December 2016, inclusively.

# **Reporting Guideline**

This report is prepared in compliance with the ESG Reporting Guide set out in Appendix 27 to the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange. The content of this report conforms to the phased requirements of the Hong Kong Stock Exchange, disclosing Sinofert's performance in environmental and social aspects.

### Feedback

We welcome and value each of your feedback. If you have any feedback or suggestions regarding this report, you are welcomed to contact Sinofert Holdings Limited.

Hong Kong Office

Address: Units 4705, 47<sup>th</sup> Floor, Office Tower, Convention Plaza,1 Harbour Road, Wanchai, Hong Kong

Tel: 852-3656 1588 Fax: 852-2850 7229

Investor Relation Department, Sinofert Holding Limited

Address: Level 10, Central Tower, Chemsunny World Trade Center, 28 Fuxingmennei Street, Beijing

Postal Code: 100031

Tel: 010-5956 9358 Fax: 010-5956 9095

# Chairman's Message

"To create value with excellence" is one of our core values. As one of the biggest fertilizer producers in China, we have an inescapable responsibility towards the promotion of sustainable development in our industry. In addition to the promotion of food safety and service improvement of agricultural production in China, Sinofert understands that the fertilizer production process involves problems such as the development of natural resources, energy consumption and waste emissions etc. With this in mind, the Company has established a Health, Safety and Environmental (HSE) Management Committees for each subsidiary, with the corporate's main person-in-charge having to act as the primary individual accountable for environmental protection and take full responsibility for environmental protection work. With collective efforts, we hope to become the industry's role model regarding advanced technology, resource conversation and being environmentally friendly, and an essential base for the nation's improvement in agricultural safety and chemical technologies.

In the past year, Sinofert has allocated resources to lower our production impact on the environment and continuously strengthening our environmental production system. The Company is not only strengthening promotional education in environment protection and pushing forward employee's involvement in sustainability development, we have also greatly increased the allocation of corporate resources to upgrade production equipment, reducing emissions and pollution. With each party's hard work, the Company successfully achieved the emission reduction target set for 2016, and hence reduced total energy consumption by a considerable amount. The Company has invested RMB 25.93 million into enterprise-wide environmental projects, which clearly shows our determination to become the industry leader of being environmentally friendly. For employees, the Company assures a safe work environment by our comprehensive "professional safety and health" and disciplinary regulation policy. Moreover, we always provide our customers with excellent service through quality management and ongoing product improvement. In order to drive the sustainability development in the first industry sector, the Company also cares for the needs of farmers and strives to improve their lives by providing fertilizers, education and material support.

In the future, the Company will continue to work with stakeholders to drive the sustainable development of enterprise and the national economy.

Zhang Wei Chairman of the Board 25 May 2017

# Environmental

The Company is committed to the basic national policy of protecting the environment. We adhere to national laws and regulations on environmental protection, cleaner production and the conservation of water and soil. An environmental protection plan and regulation has been set up by the Company and we actively promote clean production by insisting on being people-oriented, placing being environmentally friendly at a priority, taking a preventing approach and adopting a comprehensive management. As we prevent the production of new polluting sources, we have also adopted the latest technology and equipment to continuously reduce the amount of pollutants we have emitted, maintaining an effective environmental protection mechanism in the long term, creating harmony between energy and the environment, continuously improving the Company's environmental performance.

The Company carried out promotional and educational environmental protection activities to provide employees with environmental protection knowledge and skillbased training for their roles. We actively implemented an environmental protection target responsibility system, and considered environmental management as a factor of HSE risk assessment. At the beginning of each year, we sign HSEs, allocating and putting into practice environmental protection goals to every job position and employee. Through strictly implementing our "three simultaneous" environmentally friendly management protocols for construction projects, we ensure compliance with national environmental laws.

We also formulated contingency plans for sudden environmental events and carried out pre-drills; established regular management and monitoring mechanisms for emission targets, carried out rigorous evaluations on the operation efficiency, maintenance effectiveness and the completion of pollutant discharge targets of our environmentally friendly facilities. In addition, we strengthened industrial exhaust emissions, boiler emissions, radioactive sources and solid waste management, so as to earnestly fulfill our corporate environmental responsibility.

Throughout the years, our strict controls have been effective, our subsidiaries have strictly implemented management policies such as "Sinofert Group's Measures for Energy and Water Saving", "Sinofert Administration Measures of Environmental Protection" and "Sinofert Measures for the Administration of Energy Saving and Emission Reduction" etc., resulting in a stable production and well-controlled pollution emissions.

# **Emissions Control**

#### Gas & Sewage Management

Sinofert's main industrial emissions included exhaust gas from boilers, industrial gas emissions and sewage from production etc. The Company imposes strict controls on industrial emission targets, including SO2, COD, NH3-N and NOX. The performances of the four types of industrial emission in the past three years are as follow:

Four emission factors	2014 total emission (Tonnes)	2015 total emission (Tonnes)	2016 total emission (Tonnes)
SO <sub>2</sub>	2,361.12	2,254.34	1,703.64
COD	176.43	159.90	50.43
NH <sub>3</sub> -N	33.12	29.64	10.94
NOx	488.88	479.35	355.77

Table 1: The performance of the four gas emission factors

#### Exhaust Emission Control

Sinochem Shandong Fertilizer Co. Ltd. ("Sinochem Shandong") finished the transformation of low-carbon boiler and implemented the project of enhancing the pollution management of our spray granulation devices this year. The project upgraded three wet electrostatic precipitators, a set of denitrification device and other related improvements, resulting in Shandong Fertilizer's current boiler and spray granulation devices to satisfy extremely low emission requirements: dust ≤10mg/m3, SO2 ≤50 mg/m3, NOx≤200mg/m3. Hubei Sinochem Orient Fertilizer Co. Ltd.'s 4t/h boiler and two hot air furnaces switched its fuel feed from bituminous coal to biomass, causing the concentration of SO2 and NOx to decline. Furthermore, Fujian Sinochem Zhisheng Chemical Fertilizer Co. Ltd carried out technological transformations to its hot air furnace exhaust scrubber nozzle and rainwater separation tank, enhancing dust removal ability, lowering the concentration of industrial exhaust particulates emitted and emission rate.

#### Sewage Discharge Control

Sinochem Chongqing Fuling Chemicals Co. Ltd ("Sinochem Fuling") comprehensively cleaned up each production area's rain and sewage diversion system, implementing standardized improvements to it. Nine terminal collection pools were constructed to ensure the collection of rain water in the early stage. Sinochem Jilin Changshang Chemical Co. Ltd. ("Sinochem Changshan") implemented capacity assessments to the terminal wastewater treatment facility in Xidapao. Implementing measures from two aspects – reducing pollution from source and a comprehensive wastewater treatment, water saving management was strengthened to reduce the amount of water discharged during production whilst improvements were made to the sewage treatment facilities, ultimately

strengthening wastewater treating ability. Sinchem Yunlong Co., Ltd. ("Sinochem Yunlong") also completed the upgrades made to its rain and sewage diversion system during the end of the year, strengthening its sewage control.

#### Waste Control

The Company has formulated a management guideline on general industrial solid waste and hazardous waste, all waste produced is handled responsibly. Waste is first divided by category. For remaining steel and cables they are later recycled and used within the company, whilst for other recyclable materials they are recycled and reused by other relevant handling units. Also, as the phosphate fertilizer emits general solid waste – phosphogypsum during its production process, the Company has developed a guideline for handling the phosphogypsum yard. According to the guideline, phosphogypsum has to be stored in the phosphogypsum yard whilst a portion of phosphogypsum is used in the production of gypsum powder and cement retarder.

Item	Name of Hazardous Waste	Category	Disposal
1	Metallic bucket (metal	Recyclable solid waste	Handled by qualified units
	buckets for engine oil, paint etc. )		
2	Plastics (plastic bags, plastic buckets etc.)	Recyclable solid waste	Handled by contractors
3	Chemical waste	Hazardous solid waste	Handled by qualified units
4	Engine oil	Hazardous solid waste	Handled by qualified units
5	Domestic waste	Unrecyclable solid waste	Handled by refuse stations

Table 2: Performance of hazardous waste emission and disposal

Table 3: Performance of unhazardous waste emission and disposal

ltem	Name of Unhazardous Waste	Category	Disposal
1	Remaining steel	Recyclable	Recycle within company
2	Remaining cable	Recyclable	Recycle within company

### **Resource Consumption**

To strengthen Sinofert's energy consumption management, according to the national and Company's requirements regarding energy reduction work, Sinofert established an energy management system and accredited the system before the end of 2016. An energy management leading group was set up, with our deputy general manager as the group leader, other related senior staff as vice group leader and key staff from Office Operations, Human Resources, and the Financial Department as group members. The leading group is based in the Corporate

Management Department and is responsible for handling daily duties of energy management. Each member in the leading group has clear duties and responsibilities so as to ensure the effectiveness of energy reduction management work.

Sinofert and its subsidiaries have signed the HSE commitment letter and energy reduction letter of responsibility, implementing clear goals and tasks on emission reduction and energy reduction targets. Including the completion status of our energy reduction targets as one of the aspects to assess each subsidiary's performance, we have strengthened our monitoring efforts, carrying out examinations for each grade levels and implementing rewards and punishments. Through strengthening the promotional education towards our employees, we advocate an energy saving environmentally friendly idea, increasing all employee's energy saving awareness. The Company implements 6S+TPM management. As we regulate our operations, we have also standardized the practices of using the Company's electrical appliances, resulting in a more efficient use of energy.

Through establishing a comprehensive energy management system, the Company has strengthened energy management and regulated the use of energy. We have established policy documents such as "Sinofert Measures for Assessment of Energy Conservation and Emission Reduction", "Sinochem Group Measures for Energy and Water Saving", "Instructions on Reporting Energy Saving and Environmental Protection Information Statistics", and "Instructions on Energy Resources Management", hoping to realize a reduction in energy through managing the energy usage process.

Our energy-consuming units are equipped with energy measuring devices. The Company has established an energy auditing position, summarizing the energy usage record and maintaining accounts according to the "Sinochem Group HSE Information Management System", also regular analytical work has been carried out on energy data regularly. We have also frequently organized trainings for our energy management employees to enhance their competence.

To achieve our energy reduction targets, Sinofert and its subsidiaries in light of the Company's actual operation considerations have developed the following energy reduction measures.

Region	Energy Reduction Measures	Outcomes
Sinochem Changshan	<ol> <li>Replace 44 high energy consuming engines with RMB 0.3 million's investment</li> </ol>	Expected reduction of 15 million kWh electricity and approximately RMB 70,000 per annum
Sinochem Yunlong	<ol> <li>Reduce electricity generation within the factory and increase the composition of purchased electricity so as to ensure the use of clean electricity</li> <li>Promote utilization of thermal energy</li> <li>Recycle different types of water resources in production process through the rain and sewage diversion system</li> <li>Replace energy inefficient machines</li> </ol>	Lessen the usage of lignite and overall energy consumption. Reduce 8,529 tonnes of coal and increase production.
Sinochem Shandong	<ol> <li>Utilize heat energy released from boilers to generate steam so as to reduce coal usage</li> <li>Install potassium ammonium devices to reduce steam usage</li> <li>Cooperate with energy saving companies for recycling and phasing out of high energy consuming engines</li> </ol>	Reduction of estimated 545 tonnes of coal.

Table 4: Different region's energy reduction measures

Through implementing the above measures, the total energy consumption in 2016 significantly decreased by 40.2%. In the meantime, the usage of coal and electricity decreased by 59.64% and 30.84% respectively, which effectively reduced the Company's carbon footprint. Total energy consumption per output value fell from 1.50 in 2015 to 1.16 in 2016, showing Sinofert's determination to promote clean production.

	2014	2015	2016
Total energy consumption (Tonne)	810,405	804,323	480,946
Coal (Tonne)	545,692	507,437	225,646
Electricity (kWh)	801,792,576	802,000,000	554,451,290
Natural gas (1000m <sup>3</sup> )	123,539	147,870	139,585
Steam (Tonne of coal)	512.61	400.69	290.09
Integrated energy consumption per output value (Tonne of coal per million dollar)	1.55	1.50	1.16
Integrated energy consumption per added value (Tonne of coal per million dollar)	21.39	6.79	27.02

Table 5: Energy consumption of 2014-2016

Besides measures in energy reduction, the energy management leading group also carried out measures on cutting water usage, including pipeline transformation, and device insulation carried out by Sinochem Fuling. Through transforming some of the pumps, increasing pipelines and valves etc., annual water usage amounted to 240,000 tonnes. With the complement of other water saving projects, the new water consumption usage in 2016 decreased by 1,877,714.6 tonnes, compared to that of 2015.

	2014	2015	2016
New water usage (Tonne)	13,131,491	10,244,982	8,367,267
Recycled water usage (Tonne)	43,130,250	56,071,230	48,094,749

Table 6: Water usage of 2014-2016

#### **Soil Protection**

Sinofert aims to manufacture high quality fertilizers so as to boost China's agricultural development and provide a stable food supply. Nevertheless, inappropriate or over use of fertilizers leads to environmental problems such as water source pollution, soil ecology destruction and soil depletion. In order to educate farmers about the proper use of fertilizers, Sinofert apart from selling fertilizers, offers farmers soil testing formulas and uses science to direct farmers to choose the appropriate fertilizer products, enhancing the efficiency of using fertilizers and reducing the impact on the environment and ecology.

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.

# **Our Employees**

### **Employees Composition**

Sinofert strictly adheres to The Labour Contract Law of the People's Republic of China and other employment regulations and policies. We are committed to employment equality, and providing a fair, democratic, competitive and meritbased selection and employment mechanism for staffs.

We will also publicly release the list of fresh graduate candidates to be hired on the Company's website, ensuring the disclosure of recruitment information, hiring processes and the results. Any employment discrimination behaviour in any form is prohibited and there are no cases of child labour employment, forced labour employment, etc. We protect the rights and interests of our female employees by implementing equal pay for equal work for males and females and banning female labourers from being employed as mine labourers. In 2016, the signing rate of employee labour contracts was 100%.

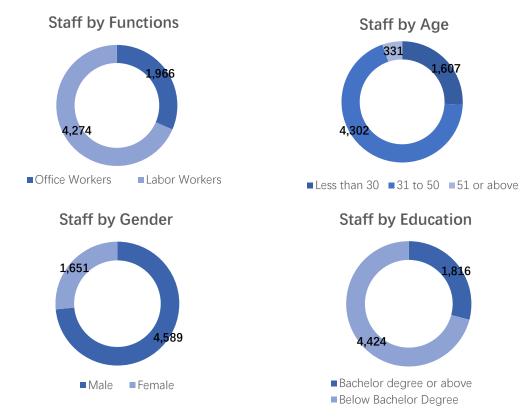


Chart 1: Staff Structure of 2016



### **Employee Health Protection**

#### Occupational Safety and Health System

The Company's occupational health enforcement policy adheres to the principle of "Prevention first, integrating prevention and control with comprehensive controlling", by implementing relative regulations and standards, such as "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", etc. We also enforce the management system of "Corporate responsibility, classified management and regular assessments".

Enterprise bears the main responsibility of occupational hazard prevention and control, and the chief executives of which are fully responsible for the Company's occupational hazard prevention and control. The Company has set up occupational health management units with occupational health management personnel, under the supervision of human resources and the employee's union. The Company has established the responsibility system of occupational disease prevention and control, the hazard warning and informing system, the declaration mechanism of occupational disease hazards, the system of promotion, education and training, the system of maintenance for occupational disease prevention equipment, the system of occupational disease equipment management, the monitoring and recommendation management system of occupational disease hazards, the "Three Simultaneous" management policy of occupational hygiene for construction project, the occupational health monitoring and file management place is a specific to the specific to the system of provide the system of occupational disease prevention and training and recommendation management system of occupational disease prevention and recommendation management policy of occupational health provide the specific the occupational health monitoring and file management provide the system of the system of the system of the system of occupational health monitoring and file management provide the system of the system of provide the system of the system

system, disposal and reporting system of occupational hazards, emergency rescue and management system for occupational hazards, and occupational health operations regulations, etc.

#### Occupational Safety and Health Measures

- 1. Enterprises shall buy work-related injury insurance for all the employees, in accordance with the present regulations;
- 2. Enterprises entrust qualified technical service institutions to detect and evaluate occupational hazard factors at least once a year;
- 3. Enterprises with serious occupational hazards shall, at least once every three years, conduct an evaluation of the existing state of occupational hazards and make rectification of the problems raised in the evaluation;
- 4. Enterprises shall provide qualified, appropriate personal protective equipment to employees, and shall supervise, educate and guide the staff to use the equipment correctly.

#### Continuous System Improvements

The Company has established an accountability system for production safety, continuously improving the content of occupational health management in the HSE file system, to systematically identify and to evaluate the employees' occupational health risks. Through control mechanisms, such as provision of 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 employee safety.

### Training and Development

Sinofert values the importance of developing the overall quality and professional skills of all employees, aiming to improve their own capabilities and upgrade the competitiveness of their own talents. In 2016, Sinofert Institute of Excellence continued to organize "Four Gold and Four Hundred Talents" training programs, including the training series on Agricultural 100 Talent Services, the Golden Seed of Young Talent Training, the Sunflower Talent Training, "Meet the Success" training series for professional skills development and Excellence Lectures special training activities. In 2016, the Company held a total of 27,610 hours of various types of training.

### **Discipline Inspection**

To further strengthen our effort on combating corruption, Sinofert has continuously improved the discipline inspection system to reinforce education on integrity and to review case studies for comprehensive training on anti-corruption.

#### Improvement of the Discipline Inspection System

The Company insists on building a line of defense for integrity risk prevention and control from an institutional level, timely revision is made to the discipline inspection system in order to achieve the "Existence of Laws". For example, the original 22 various regulations have been amended to 21 terms, mainly including "Code of Conduct for Business Activities and Approaches to Turn Over Gifts", "Guidance on Administration of Petition, Case Inspection and Trial Work", "Guidance on Liability Investigation for Losses of Assets", "Guidance on Work Integrity for Senior Management", "Guidance on Work Integrity for the Party Members", "Guidance on Building a Clean and Responsibility System", "Guidance of Misuse of Power for Seeking Improper Interests", etc.

#### Strengthen the training

The Company has continued to strengthen anti-corruption promotional education, and has made full use of modern mass media to create a culture of integrity, such as organizing seminars, reminders in the form of e-mails or text messages before holidays, issuing briefings of discipline inspection and organizing visits to education sites. The Company remains committed to discipline inspection and supervision over staff selection and employment, making full use of conversations and other means to achieve "Bring responsibility and commitment into the mind, with the problems detected, warned and solved early". During the reporting period, we conducted 19 integrity seminars with the new leading cadres, organized Sinofert staff in key positions in the Company to sign 181 annual integrity undertakings, organized the Beijing headquarters and subordinate units to sign 48 undertaking letters for building a corporate environment of integrity, had integrity conversations with grass-roots face-to-face or via video connections for 269 times, held professional or case training with discipline inspection personnel and marketing staff at grass-roots level for 859 times.

#### Improvement of the Discipline Inspection Level

Targeted measures were taken to help grass-roots raise the level of discipline inspection work in order to better assure the supervision function of discipline inspection. During the year, our work included:

 We established teams of full-time and part-time inspection personnel to carry out discipline inspection work. In four subsidiaries, we set up full-time secretaries of Commission for Discipline Inspection and full-time discipline inspection personnel. In other subsidiaries, 17 branches and R&D centers, we set up discipline inspection committees and part-time discipline inspection personnel;

- 2. The headquarters has strengthened its targeted guidance and training for subordinate units. Three employees from department headquarters have undertaken remote and on-the-spot guidance on 25 branches / affiliate companies, of which monthly reports have been commented on the remote basis 12 times, grassroots work guidance has been executed 41 times in the field and 133 times in the professional training;
- 3. Combining the annual operating features and corporate strategic requirements, based on the analysis of integrity risks of grass-roots entities, we assigned grass-roots discipline inspection personnel self-examination work in specific areas or parts, to mobilize their initiative of supervisions, such as self-checking on integrity risk prevention and control, on significant business hospitality and travel expenses, on marketing and other special costs, on special governance of related party transactions, on the accessibility of customers and suppliers, and others;
- 4. Discipline inspection personnel in the Beijing headquarters have increased verifications for self-examination work of grassroots entities. In the verification process, we continued to notice weaknesses in management and urged that corrective measures be introduced;
- 5. The grassroots discipline inspection work performance was included into the annual performance assessment of grassroots units, as one of the score- deductive items. The assessment of grassroots entities improves the sense of integrity and compliance awareness of the person in charge, senior management and all employees.

To deal with issues received through various reporting channels, according to the authorized power, we have reasonably allocated personnel resources in a timely manner to initiate investigations based on the basis of careful analysis and objective judgments. We have implemented our investigations and other follow-up work in strict accordance with the "Procedures on Petition, Case Inspection and Case Trials". The Company shall take appropriate action on personnel violating the regulations and disciplines, in strict accordance with its relevant provisions.

# **High Quality Product Management**

# **Supplier Management**

The Company categorizes purchased materials and implements through unified access management for raw material suppliers of commodities. Only accredited raw material suppliers that pass the assessments can become the Company's qualified suppliers. Evaluation criteria include the nature of the supplier, size of the business, business duration, site visits, etc. The access of suppliers in other categories is administered by the operating units based on their own systems. The company examines and assesses the cooperation with suppliers on a regular basis, eliminating suppliers with unsatisfactory performance and introducing new suppliers to protect the stability and feasibility of the supply chain structure.

# **Quality Control**

The Company strictly abides by national laws and regulations on product quality, formulating our own rules and policies about product quality according to relevant laws and regulations of the state and Sinochem Group. By strengthening process management, and actively adopting advanced technology and equipment, our products meet the national safety regulations. The Company operates in strict accordance with the relevant provisions of Regulations of the People's Republic of China for the Administration of Product Quality Certification, and carries out the subsidiaries' annual ISO 9001 product quality system certification. The product systems of subsidiaries all meet the relevant requirements of ISO 9001 system management. The Company strictly enforces the national standards in safety guidelines and process management on the chloride ion, allophanamide, heavy metals and other products. We also control the indicators of raw materials and production links in order to meet requirements.

#### Whole Process Quality Management

According to national laws and regulations about product quality and "Sinochem Group Product Quality Management Approaches", we have developed "Sinofert Quality Management Approaches", making sure that the entire process of quality management requirements and process management of all products operated by the Company are standardized and orderly, from raw materials procurement, production and manufacturing, to process inspection, logistics inventory, sales tracking and product accident handling.

The Company's subsidiaries have set up specialized and collaborative quality management departments to control various segments, ensuring controllable processes and results for internal and external whole process quality management.

The Company also promotes the establishment of quality standards for product management within 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.

#### Quality Test Management

#### **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 tonnes. For non-national standard projects, the Company takes type inspection methods, in principle with a test once every three months (except for special circumstances).

Tests for Urea, Phosphate (ADP, Diammonium Phosphate)

To implement national standard (GB00240, GB10205), the Company should take the tests in accordance with the continuous inspection method for each shift.

# **Community Care**

The Company concerns about the farmers' living conditions, not only providing fertilizers for agricultural products, but also focusing on their farming situations. In 2016, we launched the "Sinochem Dedicating to Rural Prosperity" agriculture service project, and "Spring Breeze Action" poverty-alleviating program in response to the "Opinions" proposed by the Central Government of China. The agricultural service projects include product supply, on-site services and frontline farming. In addition to stable product supply, the project also offers training to farmers to increase their production efficiency. There are more than 4.6 million people who directly benefit from this project. In addition, the "Spring Breeze Action" Poverty Alleviation Program has helped farmers and poor children in need, and has also helped farmers improve production efficiency through the donation of water-fertilizer-integrated drip irrigation systems.

### "Sinochem Dedicating to Rural Prosperity" into the House

Product Supply	In the critical period of spring farming and land management, Sinofert relies on its comprehensive agricultural distribution and service network of agricultural resources covering more than 95% of arable land in China and provides high-quality distribution services, which promotes the direct accessibility of agricultural resources at the grassroots level, to ensure the stable supply of fertilizer, pesticides and other fundamental agricultural products.
On-Site Services	Sinofert offered over 6,000 field trainings and field tests, covering no less than 1,000 villages and over 1.1 million farmers. Sinofert also promoted a crackdown campaign to protect farmers' rights, organizing over 5,500 activities on the promotion of agricultural resources into rural areas, delivering more than 40,000 copies of printed information and directly benefiting farmers and more than 2 million people.
Frontline Farming	Sinofert Joint Agricultural Technology Service Center organized more than 2,000 farmer training programs, benefiting in excess of 5 million farmers. Sinofert also built more than 2,000 demonstrative fields and provides 1000 on-site demonstration meetings with no less than 30,000 copies cumulatively, from which 1.5 million farmers directly benefit.



"Sinochem Dedicating to Rural Prosperity" provides on-site field training and tests for farmers

# **Charities for Caring People**

On 27 January 2016, the Central Government File No. 1 "Some Opinions on Developing New Concepts, Speeding up Agricultural Modernization, and Building China into a Moderately Prosperous Society Completely" was officially released, which clearly indicated the implementation of poverty alleviation projects. To precisely implement these projects, various policies should be executed depending on different people and locations, supporting families in poverty, to resolutely win the battle against poverty. "Opinions" put forward the measures to bring about poverty alleviation for low income sectors, through industry support, employment transfers, population relocating and others. To be exact, the targeted poverty alleviation project has already become the top priority among the "Four Completely" strategies.

# **Targeted Poverty Alleviation**

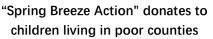
Sinofert bears the social responsibility of state-owned enterprise. In 2016, the Company organized more than 100 "Spring Breeze Action" poverty alleviation projects, including in Ar Horqin Banner, Linxi County, Changfeng, Xundian and other locations, with donations of fertilizer, pesticides and fertilization equipment worth over RMB 1 million to solve the plights of farmers in poor counties who cannot cultivate or purchase fertilizer due to natural disasters.

In April 2016, Sinofert officially launched the "Spring Breeze Action" targeted poverty alleviation projects and started internal donation activities. In July, Sinofert went to poor counties in Xundian Yunnan, donating schoolbags, stationery, books, sporting goods and educational toys to the children there. In conjunction with the local government, Sinofert organized technical training for farmers to help Yunnan counties to enhance production technology capacity.

In August 2016, a water-fertilizer-integrated drip irrigation system, donated by Sinofert to Xinping Village in Ar Horqin Banner (hereinafter referred to as "Ar

Banner"), was installed and tested successfully. After 4 days of hard work, with the staff working for 13 hours a day, the drip irrigation system was finally under normal operation. The equipment was installed in a 100- acre sunflower field for demonstration, which was expected to increase the production by 10% - 15%, to save water resources by 30% - 45%, and to cover and benefit over 5,000 acres of the surrounding farmland.







Sinofert donated and installed waterfertilizer-integrated drip irrigation system

# **Performance Data Summary**

2016 Actual Completion

		Unit	2016	2015	2014
	Headcount				
	Total		6,240	-	-
	By Age				
	<31		1,607	-	-
	31- 50		4,302	-	-
	>50		331	-	-
	By Gender				
	Male		4,589	-	-
	Female		1,651	-	-
	By Qualifications				
	Bachelor Degree or Higher		1,816	-	-
	Below Bachelor Degree		4,424	-	-
	By Professional Profile				
	Office Employees		1,966	-	-
	Labour Workers		4,274	-	-
	Employee Turnover Total by Age Group				
e	<31	%	3.81	-	-
Workforce	31-50	%	6.88	-	-
Norl	>50	%	1.25	-	-
-	Total	%	11.94	-	-
	Employee Turnover Total by Gender				
	Male	%	9.36	-	-
	Female	%	2.58	-	-
	Total	%	11.94	-	-
	Employee New Hire Rate Total by Age Group				
	<31	%	4.10	-	-
	31-50	%	1.62	-	-
	>50	%	0.11	-	-
	Total	%	5.83	-	-
	Employee New Hire Rate Total by Gender				
	Male	%	4.58	-	-
	Female	%	1.25	-	-
	Total	%	5.83	-	-
	Employee Training Total Time	Hour	27,610	-	-

		Unit	2016	2015	2014
	Emission				
	Sulphur dioxide	Tonne	1,703.64	2,254.34	2,361.12
	Chemical oxygen demand	Tonne	50.43	159.9	176.43
	Ammonia nitrogen	Tonne	10.94	29.64	33.12
tal	Nitrogen oxides	Tonne	355.77	479.35	488.88
Environmental	Energy Consumption	Tonne	480,946	804,323	810,405
ronr	Coal (in Tonnes of Standard Coal)	Tonne	225,646	507,437	545,692
Envi	Electricity (kWh)	kWh	554,451,290	802,000,000	801,792,576
	Natural Gas (in Thousands Standard m <sup>3</sup> )		139,585	147,870	123,539
	Steam (in Tonnes of Standard Coal)	Tonne	290.09	400.69	512.61
	Integrated Energy Consumption Per Output Value	Tonne (*)	1.16	1.50	1.55
	Integrated Energy Consumption Per Added Value	Tonne (*)	27.02	6.79	21.39

(\*) Tonnes of Standard Coal per RMB10,000

# **ESG Content Index**

KPIs	HKEx ESG Reporting Guide Requirements	Section / Remarks			
A. Environn	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 Environmental			
KPI A1.1	The types of emissions and respective emission data.	p.7 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).	To be disclosed next year			
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity	To be disclosed next year			
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity	To be disclosed next year			
KPI A1.5	Description of measures to mitigate emissions and results achieved	p.7 Exhaust Emission Control			
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	p.8 Waste Control			
Aspect A2	Use of resources				
General disclosure	Policies on efficient use of resources including energy, water and other raw materials.	p.8-10 Resource Consumption			
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.8-10 Resource Consumption			
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	p.11 Resource Consumption			
KPI A2.3	Description of energy use efficiency initiatives and results achieved.	p.8-10 Resource Consumption			
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.11 Resource Consumption			
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			

KPIs	HKEx ESG Reporting Guide Requirements	Section / Remarks
Aspect A3	The environment and natural resources	
General disclosure	Policies on minimizing the issuers' significant impact on the environment and natural resources.	p.11 Soil Protection
KPI A3.1	Description of the significant impact of activities on the environment and natural resources and the actions taken to manage them.	p.11 Soil Protection
B. Social		
Employmen	t and Labour Practice	1
Aspect B1	Working conditions	
General disclosure	<ul> <li>(a) the policies; and</li> <li>(b) compliance with relevant laws and regulations on compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunities, diversity anti-discrimination and other benefits and welfare.</li> </ul>	p.12 Employees Composition
KPI B1.1	Total workforce by sex, employment type, age group and geographical region.	p.12 Employees Composition
KPI B1.2	Employee turnover rate by sex, age group and geographical region.	p.12 Employees Composition
Aspect B2	Health and safety	
General disclosure	<ul> <li>(a) the policies; and</li> <li>(b) compliance with relevant laws and regulations on providing a safe working environment and protecting employees from occupational hazards.</li> </ul>	p.13-14 Employee Health Protection
KPI B2.1	Fatality number and rate.	To be disclosed next year
KPI B2.2	Lost days due to work injury.	To be disclosed next year
KPI B2.3	Description of occupational health and safety measures adopted and how they are implemented and monitored.	p.13-14 Employee Health Protection

KPIs	HKEx ESG Reporting Guide Requirements	Section / Remarks
Aspect B3	Development and training	
General disclosure	<ul> <li>(a) the policies; and</li> <li>(b) compliance with relevant laws and regulations on improving employees' knowledge and skills for discharging duties at work. Training refers to vocational training. It may include internal and external courses paid for by the employer.</li> </ul>	p.14-15 Training and Development
KPI B3.1	Description of training activities provided and if relevant, the percentage of employees trained sex and employee category (for example, senior management, middle management)	p.14-15 Training and Development
KPI B3.2	The average training hours completed per employee sex and by employee category.	p.14-15 Training and Development
Aspect B4	Labour standards	
General disclosure	<ul><li>(a) the policies; and</li><li>(b) compliance with relevant laws and regulations on preventing child or forced labour.</li></ul>	p.12 Employees Composition
KPI B.4.1	Description of measures to review employment practices to avoid child and forced labour.	p.12 Employees Composition
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	To be disclosed next year
Operating P	ractices	
Aspect B5	Supply chain management	
General disclosure	Policies on managing environmental and social risks of the supply chain	p.17 Supplier Management
KPI B5.1	Number of suppliers by geographical region.	To be disclosed next year
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.17 Supplier Management
Aspect B6	Product responsibility	
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 health and safety, advertising, labeling and privacy matters relating to products and services provided and methods of redress.	p.17-18 Quality Control
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	To be disclosed next year
KPI B6.2	Number of products and service related complaints received and how they are dealt with	To be disclosed next year
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	To be disclosed next year

KPIs	HKEx ESG Reporting Guide Requirements	Section / Remarks	
KPI B6.4	Description of quality assurance process and recall procedures	p.17-18	
		Quality Control	
KPI B6.5	Description of consumer data protection and privacy policies,	To be disclosed next	
	how they are implemented and monitored.	year	
Aspect B7	Anti-Corruption		
General	Information on:	p.14-16	
disclosure	(a) the policies; and	Discipline Inspection	
	(b) compliance with relevant laws and regulations that have a		
	significant impact on the issuer relating to bribery, extortion,		
	fraud and money laundering.		
KPI B7.1	Number of concluded legal cases regarding corrupt practices	To be disclosed next	
	brought against the issuer or its employees during the reporting	year	
	period and the outcomes of the cases.		
KPI B7.2	Description of preventive measures and whistle-blowing	p.14-16	
	procedures, how they are implemented and monitored.	Discipline Inspection	
Community			
Aspect B8	Community investment		
General	Policies on community engagement to understand the needs of	p.19	
disclosure	the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Community Care	
KPI B8.1	Focus areas of contribution (e.g. education, environmental	p.20-21	
	concerns, labour needs, health, culture, sport).	Targeted Poverty	
		Alleviation	
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	p.20-21	
		Targeted Poverty	
		Alleviation	