



石藥集團有限公司

CSPC PHARMACEUTICAL GROUP LIMITED

(Stock Code : 1093)



Corporate Social
Responsibility Report 2017





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"INNOVATIVE DEVELOPMENT, GRATEFUL RECIPROCATION"

"All for good medicine, all for mankind's health" forms the core of the Company's corporate philosophy. The Group has been upholding this philosophy and adhering to all key tasks in order to promote its business as well as the sustainable development of society.

UPHOLDING INNOVATIVE DEVELOPMENT TO BENEFIT THE PUBLIC WITH NEW DRUGS

Innovation is an indispensable element in the sustainable development of an enterprise. The objective of the Group's innovative efforts lies in "effectiveness and accessibility". In the initial stage of listing in 1994, the Group has been focusing on the bulk drugs business. Since the injection of new businesses in 2012, the rapid development of the innovative drug business was supported by the establishment of an independent R&D system, which has in turn accelerated the Group's business transformation and upgrade.

The year of 2017 marked an important year for the implementation and deepening of the reform plan for the medical and health system across the PRC. The Chinese pharmaceutical industry embraced profound changes, including the implementation of the new National Reimbursement Drug List under the limelight, the accelerated progress of product quality consistency evaluation, the acceleration of drug evaluation and approval, and the deepening of industry transformation and upgrade. Firmly grasping these historical opportunities, the Group has taken innovation as our point of breakthrough in the effort of living up to the social responsibility of "All for good medicine, all for mankind's health" through independent research and innovation.

UPHOLDING QUALITY DEVELOPMENT AND LIVING UP TO PRODUCT RESPONSIBILITY

As a pharmaceutical company engaged in the manufacture of drugs, the Group regards product quality and safety management as our first priority, so that patients would not only have access to good medicines but also would be using them with peace of mind. We place high importance on medication safety of the patients and quality assurance of the products, and have sequentially established a four-level quality management system and a comprehensive quality risk prevention and control system and a tracing and recall mechanism for quality and safety of drugs, in order to provide customers with quality supervision for the entire process. The Group's quality standards are currently comparable with highest international standards.

UPHOLDING GREEN DEVELOPMENT AND IMPROVING THE ECOLOGICAL ENVIRONMENT

Parallel to promoting innovation in full force, the Group also places considerable emphasis on the balance between corporate development and environmental protection, and resolutely eradicates the practice of sacrificing the environment for economic benefit. Over the years, the Group has incessantly increased its investments in environmental protection and has been committed to pollution management at the source and reduction of pollutant emissions, while constantly optimizing the energy management system to achieve regulated and systematic energy conservation supervision and management. In 2017, all major members of the Group have passed the ISO14001 environmental management system certification and obtained the first national pollutant emission permit with unified coding for the bulk drugs industry, positioning us at the forefront of the industry.



CHAIRMAN'S MESSAGE

UPHOLDING HARMONIOUS DEVELOPMENT AND GRATEFULLY RECIPROCATING SOCIETY

All along the years, the Group has never forgotten its corporate social responsibilities and has always devoted itself actively to social and community activities with gratitude. Through the platform of Hebei CSPC Pu'en Charity Foundation, we have commenced various charity activities in the areas such as helping the elderly, assisting the poor, aiding the sick, relieving the distressed and supporting the students. At the same time, we have spared no attention on talent development within our company and have established a human resource centre to strengthen and optimize the management for talent training, promotion channels and occupational health. Also, through maintaining close communications with various stakeholders via different channels, we have built a mutually beneficial and fair cooperation environment with trust and harmony.

Looking ahead, the Group will continue to uphold the above operating philosophies, with the objective of achieving its various social and governance tasks and creating a prosperous future jointly with its stakeholders.

CAI Dongchen

Chairman

Hong Kong, 19 March 2018



BASIS AND PRINCIPLES OF PREPARATION OF THIS REPORT

BASIS AND PRINCIPLES OF PREPARATION

This report is prepared by CSPC Pharmaceutical Group Limited (hereafter referred to as “CSPC” or “we”) in accordance with the Environmental, Social and Governance Reporting Guideline issued by the Hong Kong Stock Exchange Limited (“HKEx”), with an aim of reporting to its shareholders and stakeholders the Group’s efforts made in relation to corporate social responsibilities and sustainable development in the financial year of 2017. For details of corporate governance, please refer to the corporate governance report set out in the 2017 Annual Report of CSPC.

REPORT PERIOD AND RELEASE CYCLE

This report is the yearly report for 2017, and the report period is from January 1, 2017 to December 31, 2017.

REPORT SCOPE

The policy descriptions and data provided in this report encompass the Company and its subsidiaries. The scope of the report is the same as of the annual report.

DATA SOURCES AND RELIABILITY

The data and cases of this report mainly come from the Company’s internal statistical reports and the relevant institutional documents. We are committed to ensuring the reliability of the report data and the absence of any false and misleading statements. This report is published in both Chinese and English. The Chinese version shall prevail in case of any discrepancies between the two versions.

CONFIRMATION AND APPROVAL

After management review, this report was approved by the board of directors on 19 March 2018.



ABOUT CSPC

CSPC enjoys a leading position in the pharmaceutical industry in the People's Republic of China (the "PRC") and was listed on the main board of the HKEx in 1994. Being one of the renowned listed pharmaceutical companies in Hong Kong, CSPC is now one of the index constituent stocks of Hang Seng Composite Index, Hang Seng China Enterprises Index, Hang Seng Healthcare Index, Hang Seng Mainland Healthcare Index, Hang Seng Stock Connect Hong Kong Index and Hang Seng China (Hong Kong-listed) 100 Index.

CSPC and its subsidiaries (the "Group") have two main business segments, namely, finished drugs and bulk drugs, and are mainly engaged in the development, manufacture and sale of pharmaceuticals and related products. The finished drug products primarily include antibiotics, cardio-cerebrovascular drugs, antipyretic and analgesic drugs, digestive system drugs, oncology drugs and traditional Chinese medicines. Among which, "NBP(恩必普)", "Oulaining (歐來寧)", "Xuanning (玄寧)", "Duomeisu (多美素)", "Jinyouli (津優力)", and "Nuolining (諾利寧)" are the best selling innovative drug products of the Group in the PRC. Bulk drug products include antibiotics, vitamin C and caffeine series. The Group's main production base is located in Shijiazhuang, Hebei Province, the PRC.

Below are the development strategies of the Group's various business segments:

FINISHED DRUGS

- Focus the development of innovative drugs on the areas of cardio-cerebrovascular, oncology, neurology and metabolic diseases (such as diabetes)
- Continue to invest in R&D to further enrich our product pipeline and foster blockbuster drugs in key areas

BULK DRUGS

- Focus on the development of industry-leading bulk drugs business to achieve continuous expansion of market share, cost savings, ongoing development of high-quality customers in order to maintain its industry-leading position

INTERNATIONAL MARKET DEVELOPMENT

- Obtain overseas product certifications
- Establish international strategic partnerships to gain access to different resources such as technologies, products and overseas channels
- Achieve the bidirectional development of "bringing in" overseas drugs and "exporting" of our patent innovative drugs through overseas cooperation and mergers and acquisitions

INDUSTRY MERGERS AND ACQUISITIONS

- Reinforce our product portfolio within existing therapeutic areas, enter into new therapeutic areas, as well as to further enhance our sales and marketing capabilities through strategic mergers and acquisitions

Regarding the business development and review for 2017, please refer to the 2017 Annual Report of the Group. With the sustained fast development of our businesses during recent years, the Group deeply understands the greater social responsibilities on the shoulders of its subsidiaries. In 2017, the Group has made payments for various taxes amounting to approximately HK\$1,927 million in total, whereas its total staff costs amounted to approximately HK\$1,125 million, epitomizing the value the Group has brought to public finances and its staff during its course of active business development.



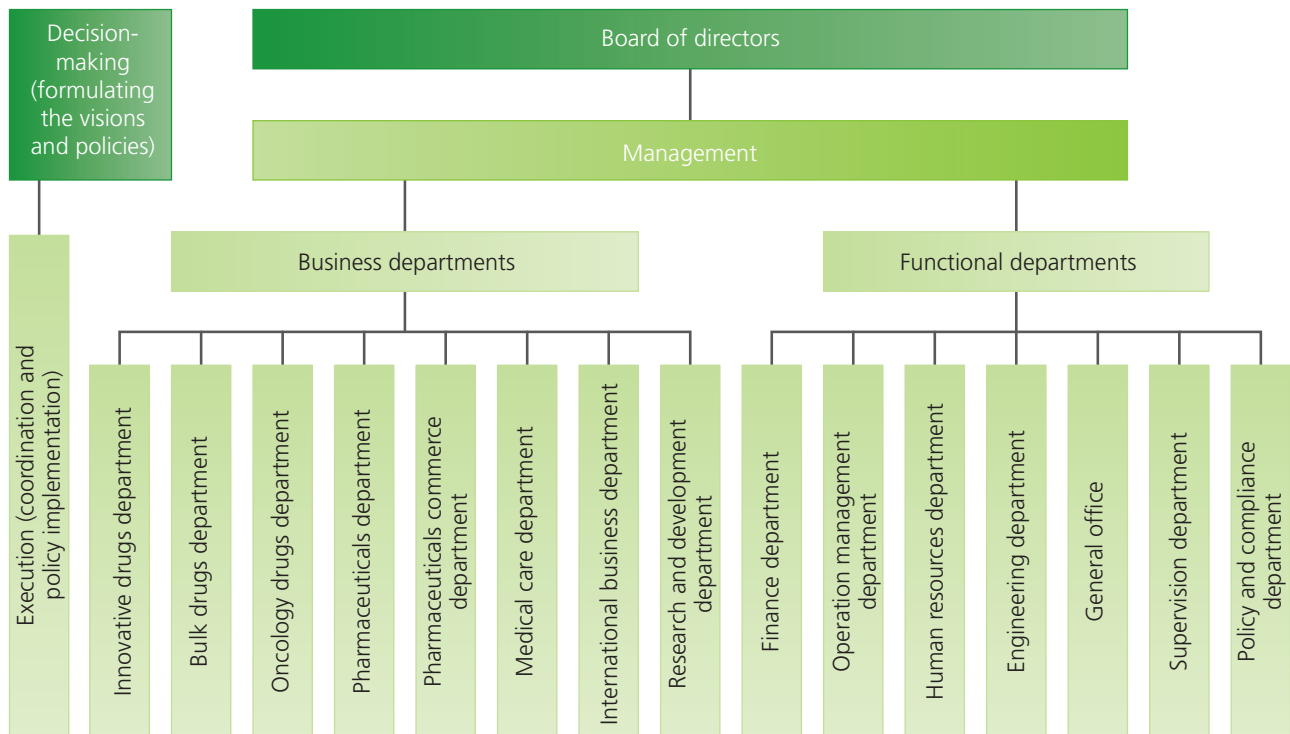
SOCIAL RESPONSIBILITY MANAGEMENT

CORPORATE MISSIONS AND VISION

Adhering to its own philosophies and integrity, CSPC has shaped a unique corporate culture. Upholding the corporate philosophy of “All for good medicine, all for mankind’s health” and the corporate ethics of “People-oriented & harmonious development”, the Group thrives to create the best humanity environment for the personal growth of its staff with care and trust, and gradually forms the cultural substance of “pursuing excellence with honesty, integrity, wisdom and faith” and “objectivity, fairness, diligence and altruism”. At the same time, the Group has earned a sound reputation for proactively taking part in public welfare undertakings in the effort of fulfilling its social responsibilities as a corporate citizen.

CORPORATE GOVERNANCE STRUCTURE

The Group has consistently and stringently abided with the relevant company laws and governance regulations for listed companies both in the PRC and overseas with the aim of enhancing the Group’s governance standards through incessantly refining its internal corporate governance structure and striving to improve its internal control system. Under the leadership of the board of directors and the chief executive officer, Mr. Cai Dongchen, the Group’s various functional departments and business departments coordinate to implement different environmental, social and governance tasks. The Group’s governance structure in relation to its social responsibilities is outlined as follows:





SOCIAL RESPONSIBILITY MANAGEMENT

STAKEHOLDER ENGAGEMENT

Listening to the opinions of various stakeholders helps us to objectively and comprehensively assess the Group's environmental, social and governance performance. We make use of different kinds of communication channels to listen to our stakeholders' views at the environmental, social and governance aspects, and communicate with our stakeholders on various environmental, social and governance issues. Our main stakeholders are shareholders and investors, employees, customers and consumers, suppliers, community and the public, the government and market regulators.

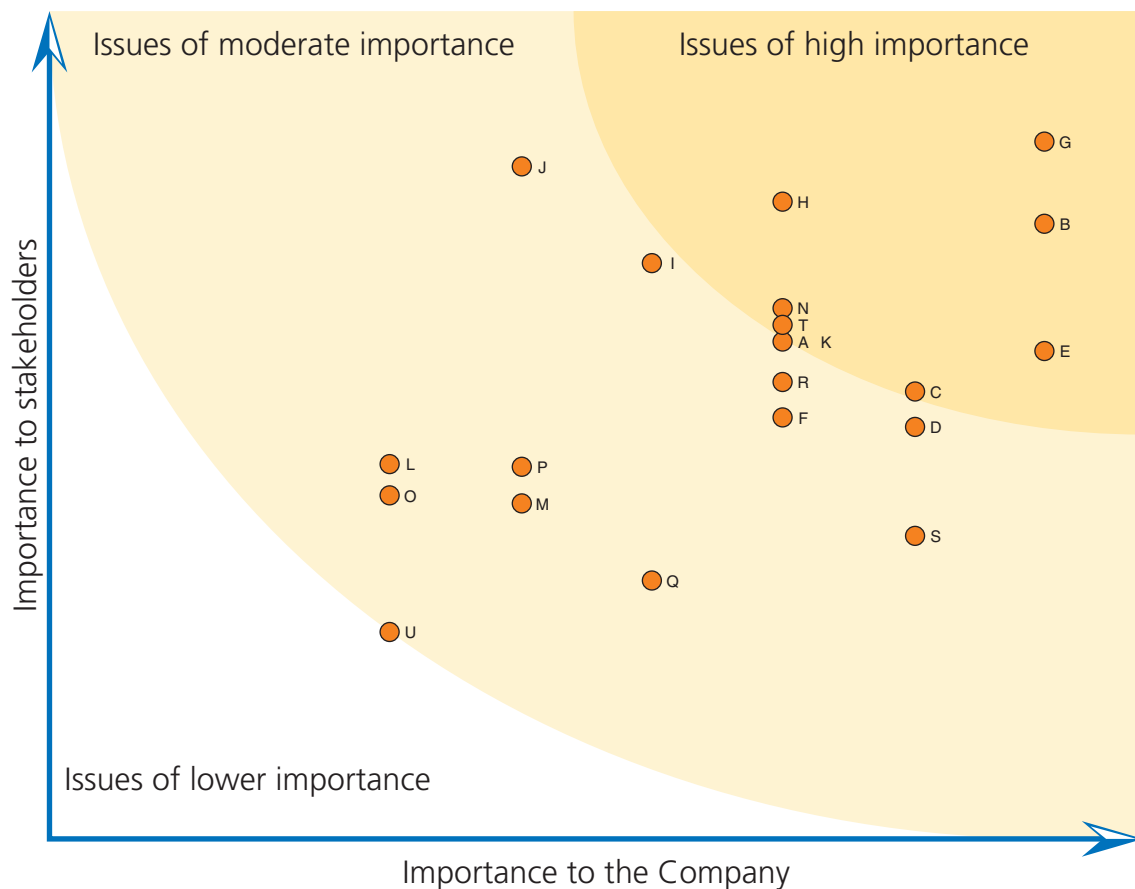
| Stakeholders | Main issues of concern | Means of engagement |
|----------------------------|---|--|
| Shareholders and investors | <ul style="list-style-type: none"> Compliant operation Risk management Anti-corruption Innovative operation Economic performance | <ul style="list-style-type: none"> General meetings Investor information sessions On-site visits Regular information disclosure of listed companies Investor visits and meetings Telephone and email enquiries |
| Employees | <ul style="list-style-type: none"> Employee health and safety Employee development and training Prevention of child labour and forced labour Economic performance | <ul style="list-style-type: none"> Daily communication between management and employees Employee opinion collection Employee activities Internal training and learning |
| Customers and consumers | <ul style="list-style-type: none"> Customer rights and privacy protection Quality of products and services Responsible marketing | <ul style="list-style-type: none"> Regular visits Forums Seminars Monthly sales analysis meetings Annual marketing seminars Customer satisfaction survey in the form of questionnaires Product complaint handling procedure Information exchange mechanism |
| Suppliers | <ul style="list-style-type: none"> Management of sustainable supply chain development Quality of products and services | <ul style="list-style-type: none"> Tender meetings Regulated supplier management procedure Annual supplier feedback and evaluation system On-site audit |
| Community and the public | <ul style="list-style-type: none"> Social and public welfare | <ul style="list-style-type: none"> Joint organisation of community activities |
| The government | <ul style="list-style-type: none"> Compliant operation Anti-corruption | <ul style="list-style-type: none"> On-site inspection and work reports preparation and submission for approval Government visits and guidance Engagement in the formulation of and recommendations for government policies Industry collaboration |
| Market regulators | <ul style="list-style-type: none"> Compliant operation | <ul style="list-style-type: none"> Consultation and information disclosure |



SOCIAL RESPONSIBILITY MANAGEMENT

IDENTIFICATION OF MATERIAL ISSUES

We conducted comprehensive analysis of different environmental, social and governance issues by the way of materiality assessment. Such materiality assessment was mainly based on two factors, i.e., results of stakeholder surveys and benchmarking analyses against outstanding industry players. With reference to “Environmental, Social and Governance Reporting Guideline” issued by the HKEx and the Sustainability Reporting Guidelines G4 released by the Global Reporting Initiative (GRI), coupled with benchmarking against outstanding industry players, we have identified 21 issues on sustainable development related to the Group’s operation. We have assessed the materiality of these 21 issues to the Group and our stakeholders through stakeholder surveys, and the relevant results are set out as follows:



| | | |
|------------------------------------|--|--|
| A Risk management | H Responsible marketing | O Mitigation of and adaptation to climate changes |
| B Compliant operation | I Customer communication and satisfaction | P Prevention of child labour and forced labour |
| C Anti-corruption | J Customer rights and information protection | Q Employee rights and welfare |
| D Economic performance | K Green manufacture | R Employee health and safety |
| E Innovative operation | L Utilisation of energy | S Employee development and training |
| F Product development | M Utilisation of water resources | T Management of sustainable supply chain development |
| G Quality of products and services | N Emissions management | U Social and public welfare |



PRODUCTS AND CUSTOMERS

MAKING GOOD MEDICINES IS OUR RESPONSIBILITY TO THE CUSTOMERS

Continual innovations as well as product quality and safety lay the foundation for the Group's sustainable development. From the independent research and development to the whole-process product quality management as well as honest operation, the Group is committed to doing its utmost in the details of every tasks in order to provide medicines at affordable prices for the safe use by the Chinese public.

RESEARCH AND DEVELOPMENT AND INTELLECTUAL PROPERTY

Under the circumstances of higher threshold on the R&D of new drugs and the enhanced patent protection, improving their independent innovative capabilities, promoting and implementing intellectual property strategies are the key issues all domestic pharmaceutical enterprises must face and think. By adhering to the corporate philosophy of "All for good medicine, all for mankind's health", the Group is dedicated to the development of high-quality medicines through constant exploration.

R&D and Collaboration

The Group has well-equipped scientific research facilities with an advanced clinical pharmacology research centre constructed in accordance with Good Laboratory Practice ("GLP") Standards and a Class II biosafety laboratory for viral drug research. The Group also established a high-quality clinical research team capable of undertaking all kinds of clinical research and completing phase I to IV clinical trial for Class 1 innovative drugs.

In addition, the Group has always placed importance on the cooperation and communication with domestic and foreign scientific research institutes, closely monitor the domestic and overseas development trend of advanced technology and establish good relationships with various domestic, European and America scientific research institutions. In order to make the scientific research cooperation network more systematic and sustainable, the Group employed a number of renowned domestic pharmaceutical R&D experts to form the "CSPC academic committee" to enhance our innovation capacity.



PRODUCTS AND CUSTOMERS



Research platform for antibody drugs

CSPC's research platform for antibody drugs currently represents the Group's key development and heavily invested research segment. The Group has set up a biologics innovation and R&D base in Shijiazhuang. The further expansion of the antibody drugs testing laboratory and the construction of a new pilot production line for antibody drugs will create better fundamentals for the R&D of oncology drugs in the future.



Exterior of CSPC's central drug R&D institute

In addition, in order to attract elite biopharmaceutical R&D talents from overseas, the Group has established antibody drugs R&D centres in California, Texas and New Jersey in the United States to build upon our existing biological R&D centre in Shijiazhuang. These R&D centres are responsible for (1) the screening of new targets for antibody drugs and the preliminary studies, (2) cell line construction and technological development of antibody drugs, and (3) site-specific antibody conjugate platform and development of antibody drug conjugates (ADC), whereas the Chinese R&D centre focuses on the industrialisation, production and research of bispecific antibodies.

The Group also has dedicated business development employees in the United States, who are responsible for the screening of cooperation with science and research institutes and technology companies for other potential new projects around the world, in order to identify new opportunities for cooperation.



Exterior of CSPC's R&D centre in California, U.S.

The Group continues to invest in the research and development of new products, and currently there are approximately 200 new products in the pipeline. During the year, the Group has submitted clinical trial or production applications for various new drugs to regulatory authorities in the PRC and overseas, including applications for product launch and clinical trials from the U.S. Food and Drug Administration ("FDA"). These products under research will lay a good foundation for the Group's sustainable viability in the future.

Intellectual Property Management

Intellectual property is the core strategic resources of an enterprise and also the core element essential for overall strength and competitiveness within the industry. The Group seized the opportunities arising from the intensification of national healthcare reform and the support on the development of independent innovation capability of pharmaceutical enterprises to continuously refine the pharmaceutical R&D system that integrates generics and innovative drugs and actively promote independent innovation system by capitalizing on our competitive advantage in R&D resources. The Group also works diligently to implement intellectual property strategies to lead our corporate development in order to enhance our R&D capabilities and core corporate competitiveness.



PRODUCTS AND CUSTOMERS

The Group conducted comprehensive diagnostic analyses on intellectual property from time to time, formulated patent application and protection strategies for the core products and had a dedicated department of intellectual property management responsible for strictly enforcing the monitoring system of patent application in compliance with the requirements of the "Patent Law of the PRC", the "Rules for the Implementation of the Patent Law of the PRC" and the "Enterprise Intellectual Property Management".

During the course of R&D project approval and investment, the Group focuses on the protection of the intellectual property rights in respect of R&D of its new products, formulates effective patent protection measures and performs patent searches at key R&D stages and makes early alerts analysis and risk prevention of intellectual property rights to avoid the risk of infringement. The intellectual property department will access to the domestic and foreign patent search and service systems for patent literature retrieval prior to filing patent application and undertake comprehensive analysis and evaluation on the status of patents involved in the technical areas of the on-going R&D projects before the preparation of patent search report and make patent application in accordance with relevant laws and regulations and implementing rules. Subsequent to the introduction of independent innovative products, the Group will closely monitor and regularly track the relevant patent information of comparable products and ensure that any violations of the Group's independent intellectual property rights could be timely identified.

Patents and achievements

In 2017, the Group's drug R&D segment has submitted a total of 22 patent applications in the PRC, while 2 international applications submitted under the Patent Cooperation Treaty (PCT) have entered the national phase. During the year, the Group has also obtained 19 patents in the PRC and 10 PCT patents.



In the Decision Regarding Grant of the 19th Chinese Patent Awards issued by the State Intellectual Property Office of the People's Republic of China in December 2017, the Group's self-developed biological product Jinyouli is the first long-acting PEG-rhGCSF injection in China, and its core patent has received "The 19th Golden Award for Outstanding Chinese Patented Invention", marking the second time for the Group to receive the "Golden Award for Outstanding Chinese Patented Invention" after butylphthalide.



PRODUCTS AND CUSTOMERS

PRODUCT RESPONSIBILITY

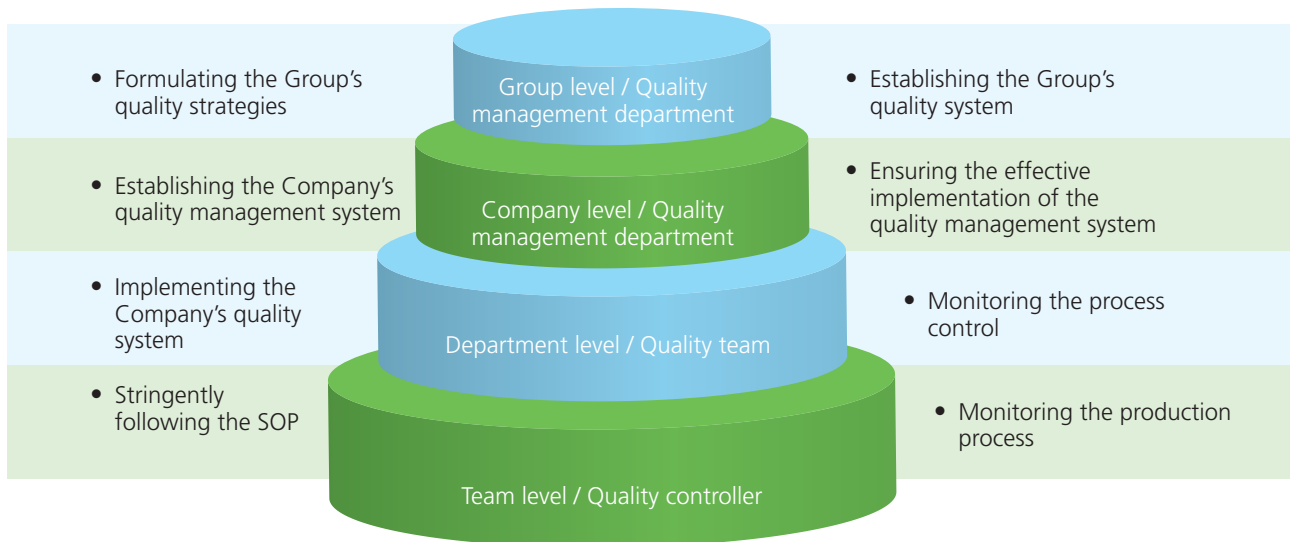
The Group strictly abides by the laws and regulations of the PRC relating to the product safety. The relevant laws and regulations mainly include:

- The Drug Administration Law of the PRC;
- The Regulations for the Implementation of the Drug Administration Law of the PRC;
- The Product Quality Law of the PRC (“Product Quality Law”);
- Law of the PRC on the Protection of Consumer Rights and Interests;
- Good Manufacturing Practice (China Food and Drug Administration); and
- The Measures for the Administration on Adverse Drug Reaction Reporting and Monitoring (Order of the Ministry of Health No. 81).

According to our domestic and overseas quality management philosophy, the Group gradually raises the quality management standard as well as the quality and safety risk analysis through the implementation of quality inspection and product recall management. After affirming the quality objective, the Group coordinates the quality, technical and production departments of subsidiaries to work together for the quality improvement of our pharmaceutical products and seeks to meet the domestic and foreign requirements for product quality.

Quality system

The Group has set up a four-level (group level, company level, department level, team level) quality assurance system as follows:





PRODUCTS AND CUSTOMERS

Each subsidiary has a dedicated department for quality control and quality assurance mainly responsible for formulating the related professional management in these two major areas:

Quality control department – Conducting inspection based on our quality standards for raw materials and finished products, ensuring that no defective products and materials would be released and used in our production while undertaking product stability research, impurity analysis as well as sampling observation and verification;

Quality assurance department – Exercising quality supervision and control, control on production modification and deviation management during the entire production process.

Our subsidiaries formulates rectification and prevention measures internally and reaches conclusion on the existing problems in respect of production quality, sales, complaints and services and proposes relevant improvement measures through the monthly quality analysis meeting and annual quality review.

Quality Management Certification

In recent years, the Group strives to improve our product quality standards, implement internationalisation strategies and implement quality management on the production in strict compliance with the requirements under various certifications. The followings are the Group’s major domestic and international certifications achieved in 2017:

| Certification | Authority | Details |
|--|--|---|
| New GMP Certification | National and Provincial Food and Drug Administration | All products and formulations passed the certification |
| New GSP Certification | Food and Drug Administration of each province (city) | The pharmaceutical wholesale enterprises of the Group passed the certification |
| ISO9001 Certification | Third party authority | All of our production subsidiaries of the Group passed the certification |
| U.S. FDA Certification | U.S. Food and Drug Administration | 28 products passed the certification |
| EU Certification | Drug Administrations of member countries of European Union | 4 products passed the on-site inspection of European Union and its member countries |
| Certification of Suitability to the Monographs of the European Pharmacopoeia (“CEP”) Certification | European Directorate for the Quality Control of Medicines | 13 products obtained CEP certification |



PRODUCTS AND CUSTOMERS

In addition, certain subsidiaries of the Group also passed the GMP certification of the drug administrations in Australia, Peru, South Africa, Columbia, Philippines, Ethiopia, Sudan, Korea and Japan.

Drug Standard Management

The Group currently has two major product series, namely bulk drugs and finished drugs, of which the finished drugs include powder injection (including lyophilized powder injection), small volume injections, large volume injections, capsules (hard capsule and soft capsule), tablets, granules, dry suspensions, oral preparations, oral solution preparations and Chinese medicines. Apart from the strict implementation of national statutory standards for all products, the exports are also required to comply with the international pharmacopoeia standards, including the European Pharmacopoeia (EP), the United States Pharmacopoeia (USP), the British Pharmacopoeia (BP) and Japanese Pharmacopoeia (JP). Therefore, the Group developed stringent internal control standards that its products must meet the internal control standards before selling to domestic and foreign markets.

Product Quality Commitment

Over the years, the Group constantly improves quality management and makes the following commitments to ensure the medication safety and the patients' interests:

1. Strictly following and implementing the requirements of relevant laws and regulations and ensuring the integrity in our business operations. Abiding by law with integrity and being not deceptive or even fraudulent during the course of production and processing, sales, brand promotion and after-sales service;
2. Ensuring our products meet the quality requirements as well as laws and regulations in accordance with the established standards set out in relevant national pharmacopoeia;
3. Establishing a sound quality management system in accordance with the requirements under "Good Manufacturing Practice in respect of pharmaceutical products" and GB/T19001-2016 (ISO9001-2015) quality management system, continuously refining and improving the file management of product quality and making strict quality control and measurement inspection on the key processes;
4. Promoting the enhancement of our quality management standard through internal assessment and management evaluation;
5. Ascertaining the measurement tools and equipment used for product inspection are calibrated (by qualified calibration institute) to make all quality inspection activities stringent and effective and ensuring the records of relevant quality management are traceable;
6. Implementing product serial number management with the help of the ERP and SAP management system; and
7. Focusing on customers, improving after-sales service management system, practically striving for good after-sales services and taking customer satisfaction as our code of conduct.

In order to effectively fulfil the above quality commitments, the Group has established quality management and inspection teams consisting of management staff with master and bachelor's degree or above qualifications, implemented the Group's quality management system and prepared the documents covering various aspect of management. In terms of hardware, the Group monitors its production process through the use of domestic and foreign advanced equipment to ensure the entire production chain between the input of raw materials and the output of finished products at the factory is under control.



PRODUCTS AND CUSTOMERS

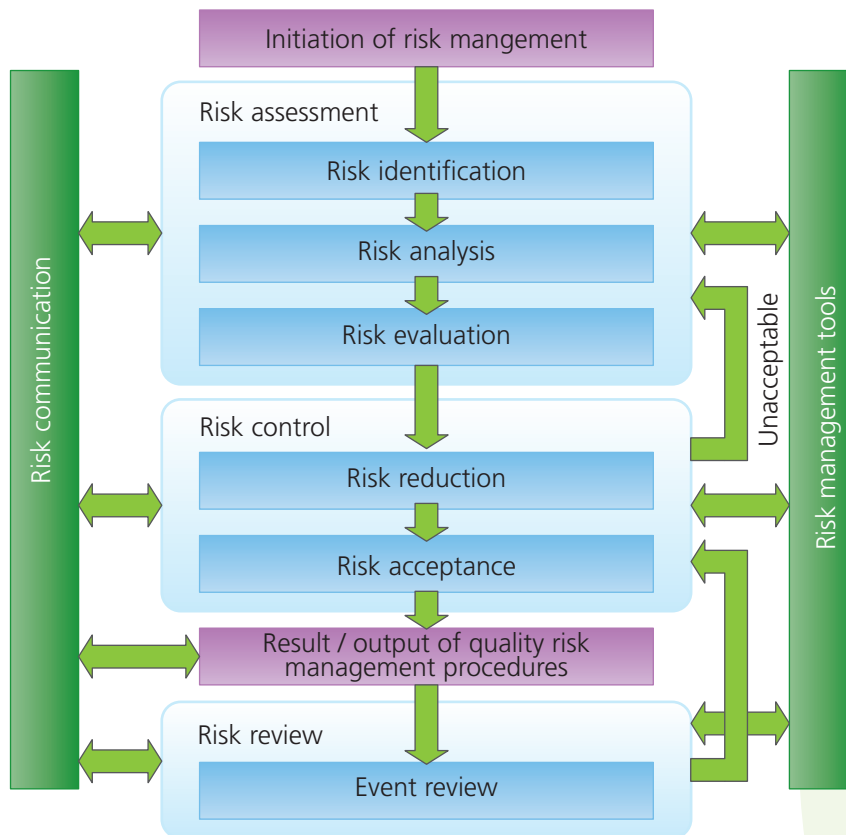
Quality and Safety Risk Management

CSPC highly values the medication safety of patients and is committed to the sound management on quality and safety.

Risk Prevention and Control System

The Group formulates management system and operational menu of “Quality and Safety Risk Precautionary Plan” and “Management Procedures for the Supervision, Evaluation and Precaution of the Quality Risk” and clearly sets out the quality and safety risk assessment process, management as well as prevention and control measures according to the certification requirements such as GMP and U.S. FDA, in combination with the guidance provided by the World Health Organization (WHO), the International Society for Pharmaceutical Engineering (ISPE) and the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH).

In addition, the Group has also established a comprehensive quality risk prevention and control system to collect and segregate information from multiple perspectives. During the process of risk assessment, the department of quality supervision uses various evaluation and analysis tools, such as Failure Mode, Effects Analysis and Fishbone Diagram to carry out risk assessment of various drugs and production procedures while implementing classified management to formulate corresponding solutions based on the evaluation results.



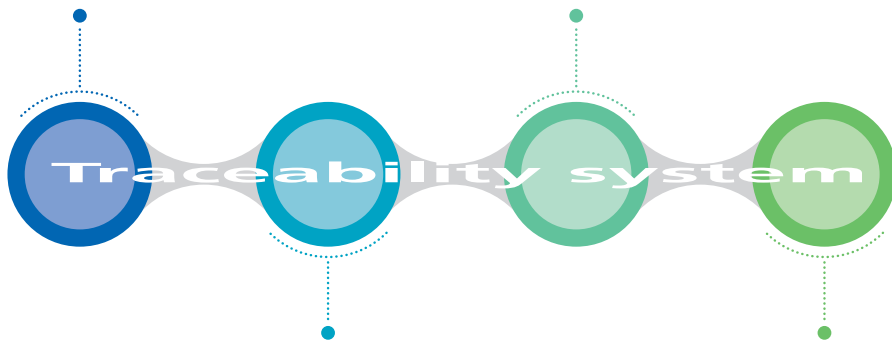


PRODUCTS AND CUSTOMERS

Drug quality and safety traceability and recall system

**Batch number traceability
within record**

LIMS inspection



MES within the production process

**Electronic supervision code within
the circulation process**

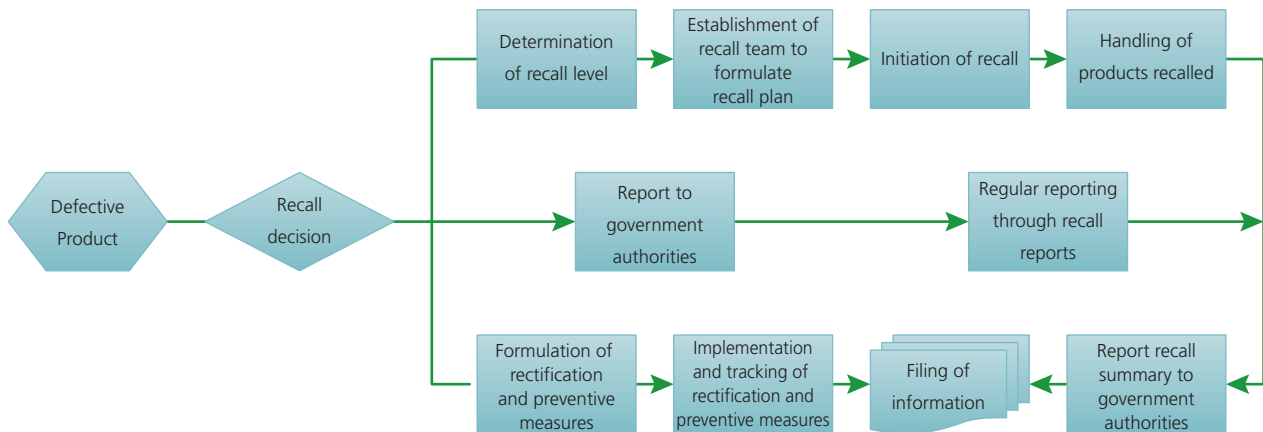
The Group has built a quality and safety tracing system for the life cycles of drugs at various stages, ranging from material procurement, pharmaceutical production and finished product inspection to sales and delivery. The Group has also formed a drug quality and safety committee responsible for the collection of day-to-day adverse reaction, the strict implementation of relevant laws and regulations under “The Measures for the Administration on Adverse Drug Reaction Reporting and Monitoring” and the annual update and submission of regular drugs safety report.

Meanwhile, the Group has formulated regulations for the administration on reporting and monitoring of adverse drug reactions and emergency treatment plan for mass adverse reactions to ensure that emergency measures can be promptly initiated in the occurrence of adverse reaction events and the reporting to the China Food and Drug Administration and Hebei Province Adverse Drug Reaction Monitoring Centre would be made in a timely manner.

For the defective product recall, the Group has a “Product Recall Management System” that clearly determines the responsibilities of the quality and sales departments and establishes relevant procedures for product recall. Product recall drill is regularly arranged for all companies to ensure the effectiveness of the product recall system.



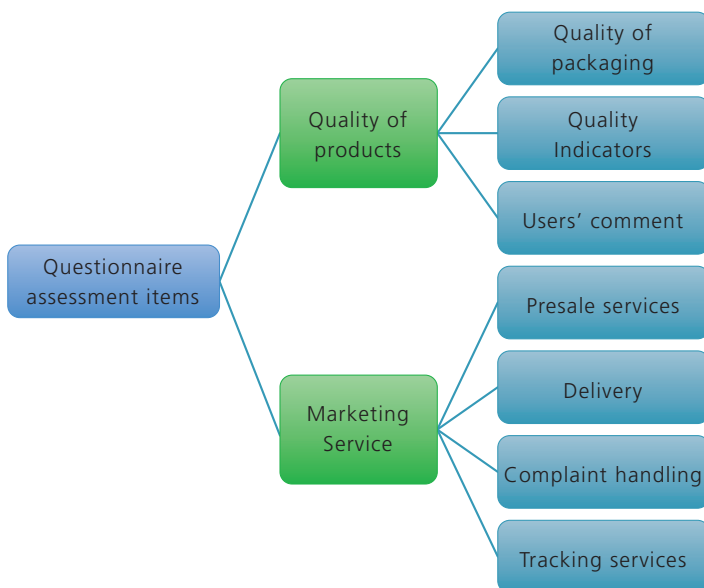
PRODUCTS AND CUSTOMERS



Product Complaint Handling

At present, the Group’s sales network covers numerous provinces, cities, counties and towns in the PRC. The subsidiaries set up offices in each large and medium-sized city for the provision of comprehensive pre-sale consultation, sales and after-sales service in the surrounding markets by the after-sales service personnel. Each of the sale systems has its customer service centre and corresponding marketing services response system as well as service hotline for the prompt handling of customer consultation and complaints.

By adopting a product complaint handling process, the sales department will get in touch with the customers as soon as possible upon the receipt of their complaints and provide a reply and an explanation to the customers subsequent to a detailed investigation and inspection. The Group conducts an annual survey on customer satisfaction through questionnaire and performs evaluation, aggregation and analysis on the indicators of product quality and marketing services. The comprehensiveness and effectiveness of the complaint channels and feedback mechanism is assessed through customer visits, forums, symposiums, monthly sales analysis meetings and annual marketing seminars.





PRODUCTS AND CUSTOMERS

COMPLIANT MARKETING

Honesty and trustworthiness is the first and foremost interpretation of the image of our management team among the Group's corporate culture. The Group has long been operating in good integrity and has in place an integrity supervision mechanism to employ professional legal counsel to regularly arrange training about legal knowledge, such as Contract Law, Product Quality Law and Law of the PRC Against Unfair Competition, for the management and business departments, so that relevant personnel can keep abreast of relevant laws and regulations to ensure strict compliance in executing and performing contracts. In the course of product sales and marketing, the Group also strictly complies with the Advertising Law of the People's Republic of China, the Provisions on the Administration of Pharmaceutical Directions and Labels, and other laws and regulations related to advertising and label administration, in order to ensure operation in good integrity and prevent falsehoods.

At the same time, the Group establishes an internal credit management system in accordance with relevant requirements under the Contract Law. The Group also develops the "CSPC's Integrity Management Standards" with detailed terms of operation with integrity. Harsh and punitive measures will be taken to the units and individuals in breach of the integrity management standards to ensure that integrity management has a "legal basis" by firmly opposing and resisting commercial bribes in all forms. The Group complies with the market rules and sticks to our marketing philosophy, requiring the employees to win the market and gain credibility from customers with high-quality products and sincere service.



EMPLOYMENT AND LABOUR PRACTICES

SOUND TALENT MANAGEMENT IS OUR RESPONSIBILITY TO THE EMPLOYEES

While talent is the most crucial capital of an enterprise, CSPC deeply understands the importance of sustainably growing hand-in-hand with our talents, and we are committed to fostering a sound working environment for our talents in order to pool different talents for our mutual growth with our employees.

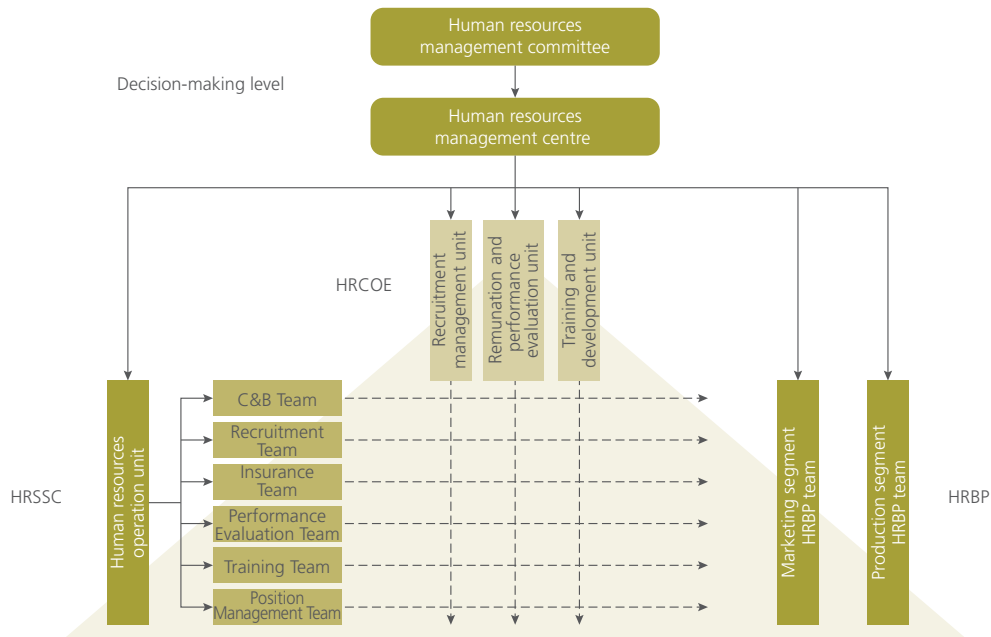
The Group's development benefited from the decent management team with advanced management philosophy and our excellent research and development ("R&D") team with the capability on technological innovation.

The Group has established various human resources management systems to specify the employees' interests and related regulations on labour relations and is committed to building a corporate culture with integrity and observance. "Rely on talent, foster talent and thrive on talent" has always been the Group's talent development philosophy. Under the guidance of such philosophy, the Group has gradually established a comprehensive staff remuneration, training and development mechanism to design and build a full range of career development and promotion channels for managements, professional technical personnel and operational staff.

In 2017, the Group re-designed its existing structure of human resources management and established a human resources management committee. The human resources management committee is aimed at reinforcing and regulating the human resources management, as well as promoting the standardisation and systematisation of decision-making, which in turn would further enhance the level of human resources management. With the objectives of increasing the efficiency of human resources management, reducing the Company's operating costs and strengthening the Group's control, the Group intends to abolish the human resources management units of all departments and companies and replace them with a three-pillar human resources management system centralised under the Group. Under the new system, the original human resources management units would be abolished and replaced by the newly established human resources centre that oversees a recruitment management unit, a remuneration and performance evaluation unit and a human resources business partner (HRBP) management unit. The organisational structure is shown as follows:



EMPLOYMENT AND LABOUR PRACTICES



As the business nature and the staff of the production segment and the sales segment vary widely, leading to significant discrepancies in the human resources issues of the two, the Group has therefore set up two HRBP teams for the sales and the production segments respectively. The HRBP teams are mainly responsible for actively identifying and shaping the needs of the segments, and to coordinate different resources to provide professional solutions to the business segments and enhance the roll-out and implementation of the solutions (see below figure for the specific responsibilities).





EMPLOYMENT AND LABOUR PRACTICES

Upon establishment of a new human resources system, the Group will implement enhancements of human resources system as follows:

1. Enhancing staff re-designation across business segments and companies to expedite staff allocation;
2. Adding appraisal of the HRBP head of the production and marketing segments teams to expand the scope of coordination of staff vacancies within the segments and to enhance the effort to coordinate staff within the segments;
3. Achieving resource sharing (especially amongst companies with more fluctuations in their productions or operations) and coordinating staff diversion across different companies in order to reduce the staff costs;
4. Increasing the support to the R&D clinical centre. To complement the establishment of the clinical centre, the human resources centre provides professional support from staff designation to establishment of remuneration system and the introduction of high-end talents to bring the function of the three-pillars system into full play;
5. Enhancing the introduction of high-end talents in a continuous manner and organising no less than two interviews with doctoral degree holders and external experts; and
6. Establishing the remuneration system for the clinical centre and formulating the remuneration standards in different regions in line with the local market standards, in order to ensure the introduction of high-end talents.

TALENT STRUCTURE

As of the end of December 2017, the Group has 11,206 employees, increased by 677 as compared to the level as of the end of 2016, in which male and female employees accounted for 5,774 (51.5% of the total) and 5,432 (48.5% of the total) respectively. During the year, the Group continued to optimise its employee structure and adhere to the guidelines mentioned below for improving talent structure to support our business transformation in recent years.

Staff Rejuvenation: The Group attaches importance to the rejuvenation of staff and the formation of a new generation of talent to better align its employee structure with the future business development, through which an increasing number of young people will take up core positions and become backbone force. As of the end of December 2017, the total number of employees aged 30 years or below is 4,746, which accounted for 42.4% of the Group's total headcount.

| | Age | Aged 30 and below | Aged 30-50 | Aged 50 and above |
|------------|--------|-------------------|------------|-------------------|
| Headcounts | 11,206 | 4,746 | 6,095 | 365 |

Upgrade of Academic Background: The Group recruits a pool of outstanding talents each year and attracts staff with higher academic level while cultivating backup personnel of the Company. As of the end of December 2017, the number of employees holding academic qualification of bachelor degree and above accounted for 35.3% of the Group's total headcount.

| | Academic qualification | Doctoral degree | Master degree | Bachelor degree | Academy | Below academy |
|------------|------------------------|-----------------|---------------|-----------------|---------|---------------|
| Headcounts | 11,206 | 44 | 604 | 3,304 | 3,636 | 3,618 |



EMPLOYMENT AND LABOUR PRACTICES

The Group clearly defines the functions and responsibilities of positions at all levels and allocates our staff through a combination of internal referral and external recruitment to effectively carry out human resource management, such as recruitment and training.

STAFF EMPLOYMENT AND RIGHTS

Lawful Employment

The Group strictly abides by the provisions of relevant regulatory requirements of the “Labour Law of the PRC” (the “Labour Law”) and the “Law on Labour Contract of the RPC” (“Law on Labour Contract”) and safeguarded the legitimate rights and benefits of the employees to exert full efforts to build a harmonious and stable labour relations, and therefore was awarded the “Hebei Province’s AAA Harmonious Labour Relations Enterprise” and the “National Advanced Enterprise for Employment”. The Group’s subsidiaries have always adhere to the following employment principles to ensure that employees have the best legislative protection:

1. Implementing an integrated collective contract system. Through negotiation on an equal footing to constantly improve the effectiveness of collective contracts and focus on the quality of formulation and performance of collective contracts in order to build a harmonious labour relations between enterprises and employees;
2. Employing labour legally and signing labour contracts with all employees to ensure that both parties execute, amend, resolve and terminate the labour contracts in accordance with national laws and regulations and the relevant rules of the Company and make contribution to the social insurance lawfully;
3. Establishing regulations on recruitment and strictly and properly carrying out the recruitment management to ascertain that new recruits be aged 18 or above in compliance with the age requirement as set out in the Labour Law so as to ensure the legitimacy of recruitment and prevent and control the relevant legal risks;
4. Implementing the statutory paid annual leave system. The Group forbids the use of forced labour and respects the employees’ right to rest so that our employee’s work-life balance is guaranteed;
5. Protecting the legitimate rights and interests of female staff. The Group takes appropriate and reasonable care of female staff during the three specific periods (pregnancy, perinatal and lactation) and arrange appropriate positions for them;
6. Engaging the labour union to arrange various kind of activities like employee contest, employee rights protection, recreational activities and staff retreat to combine their work and life together and establishing the labour congress as the basic form of a democratic management system;
7. Establishing a sound wage distribution and payment system to make timely and full payment of wages and adhering to sharing the fruits of enterprise success with our employees that the employees’ wages will increase together with the Group’s growing profits.

Talent Recruitment

A team of technical experts in the industry comprising high-end talents is prerequisite for the development and product innovation of an enterprise. The Group determines the objectives, directions and focuses of the talent recruitment, adopts an effective and open policy for the talent recruitment, makes every efforts to attract local and overseas innovative talents irrespective of geographical locations and uses talent without sticking to one pattern after the recruitment. After years of nurturing and cultivation, the Group has an advanced R&D team to serve as the Group’s strong engine for scientific research with an aim to being among the best in domestic pharmaceutical industry through the strong capabilities in R&D of new drugs.



EMPLOYMENT AND LABOUR PRACTICES

At “The Third National High-tech Zone Biopharmaceutical Cluster Synergy and Innovation Work Congress-cum-China Biopharm Parks Innovation and Cluster Development Congress-cum-Innovation and Startup Express Train Program” held in Shijiazhuang in 2017, the Group has kicked off a national training centre program for pharmaceutical engineering postgraduates, which is targeted to attract more outstanding master degree postgraduates through the training centre and to nurture professional talents who are more suited to the Group’s development.

The Group has been improving its recruitment system. The human resources centre implemented the Beisen’s recruitment management system to achieve the informatisation of business workflows and data collection for recruitment information publication, collection of resumes and accumulation of talent pool. On the other hand, the human resources department can process its recruitment works on the go with WeChat in order to increase the related work efficiency, enhance the recruitment quality and to lower the recruitment costs by leveraging on the new recruitment platform.

During the year, the Group has continued to attract students from different institutes to visit and work at its subsidiaries, which forms an important base for internship of these institutes. The Group has signed strategic cooperation framework agreements with Tsinghua University and Hebei Medical University. The parties will cooperate closely in talent cultivation and scientific research and development, and step up training of new talents based on the corporate needs, providing the Group with a constant supply of professional and technical talents of all kinds for the future development.

DEVELOPMENT AND TRAINING

Professional Training

The Group emphasises on the professional training of talents and manages on-the-job training and technical improvement of its employees by adopting approaches that enable the employees to grow along with the enterprise so as to gradually establish a talent pool for various kinds of management and key technical positions and carry out the talent cultivating program for employees with high potentials to provide talent for corporate sustainability.

Following the Group’s development direction of reinforcing innovation and management in combination with integrating the external environment and internal circumstances, the human resources centre has formulated an enhanced training solution that provides training courses corresponding to the professional areas and levels and reinforces the mentor scheme establishment and management within the corporate. The Group selects leading officials from different subsidiaries to form a mentor team. At the same time when constructing the internal course system, we are committed to building a training system for staff at different stages. The training system covers new employee training, new employee tutor system, staff management training for promotion, Master of Business Administration/Executive Master of Business Administration (“MBA/EMBA”) competency training, English training, overseas working, regular domestic and overseas academic exchanges and post-doctoral workstations, etc.



EMPLOYMENT AND LABOUR PRACTICES

Case Study: Organizing Dedicated FC200-1 Training to Accelerate Development of New Staff

In September 2017, the Group invited some senior management officials of the production and sales systems to organise a dedicated FC200-1 training for 302 outstanding graduates (including 6 doctoral degree holders, 65 master degree holders and 231 bachelor degree holders) who have joined the Group from 2014 to 2016, at the same time when assessing its participants during the trainings through both “occupational assessments” and “comprehensive written test” to select talents with high potentials. Through the subsequent corporate assessments and written tests, and conducting talks with top performers, the Group adjusted the job positions to better cultivate the staff with high potentials.

Our existing employees are required to receive specialised training annually from their departments in relation to relevant technical and regulatory knowledge in safety, quality, environmental protection and labour regulations to effectively promote common legal knowledge and corporate governance. Moreover, the Group has established connections with Peking University, Tsinghua University, Shenyang Pharmaceutical University and China Pharmaceutical University. Each year, the Group will select certain outstanding talents to pursue further study in these universities.

Development and Incentive

The Group has been creating a working environment that can attract, cultivate and motivate the growth of talents and is committed to providing a platform for fair competition to ensure that all employees have equal opportunities for development and growth so as to strive to retain talents with sincerity and career development opportunities. The subsidiaries also organise new staff forum on a regular basis to understand the working and living conditions, the needs of new hires, and provide a variety of supports and services accordingly, in hopes of building an employment mechanism that places importance on both morality and performance.

In order to effectively select the management team, the Group adopts a human resources development and management model based on the principle of competency, establishes an evaluation and selection system for relevant management personnel and proactively promotes the “Successor Program” within the Group for building a pool of quality talents for its development, so that the Group can effectively cultivate and select a large number of young and outstanding management talents over the years. With regard to establishing a professional technical team, the Group has gradually constructed the “Professional Tier and Qualification Management System”, under which regular assessment and evaluation will be conducted on the professional capabilities and core competencies of our professional technical personnels. Appropriate technical duties and remuneration will be given to encourage the professional technical personnels to consistently make assiduous effort in their technological studies.

In addition, the Group has designed an attractive remuneration system to highlight the contribution of a particular position and fully reflect the incentive pay. Under the remuneration system for our management and professional technical staff, the Group adopts a broadband salary structure based on position, capability and performance to reduce the number of salary grades and increase the salary range floating within the same grade. With the evaluation on competency and qualification, the Group regularly adjusts the pay rise for promotion and raises the salary level, so that competent talents can achieve a full development within the enterprise.



EMPLOYMENT AND LABOUR PRACTICES

HEALTH AND SAFETY

The Group considers production safety as a fundamental point of production management and adheres to the production safety approach of “Safety first, Prevention Foremost and Comprehensive Management” with thorough implementation of the relevant law and regulations of the “Law on Production Safety of the PRC”. Every employee in each subsidiary is encouraged to strictly perform their respective safety responsibilities in their own positions, conscientiously promotes the responsibility system for production safety and realise full participation during the entire course of production safety management.

The Group is always committed to enhancing its safety incident response plan and organising different kinds of drills, and has amended the related systems and procedural documents such as the “Safe Production Responsibilities Management System” and “Occupational Hazards Warnings and Alerts System”. In 2017, each of the Group’s subsidiaries achieved the target for occupational health and safe management – “Five Zero and One Low” (zero case of death, serious injuries, multiple injuries, occupational diseases and poisoning incidents as well as low incident rate of minor injuries). Moreover, there was no loss of working days due to serious injuries and no incidents of occupational death.

Production Safety

The Group establishes a sound production safety management system dedicated to the promotion of OHSAS18001 Occupational Health and Safety Management System and the implementation of the “Framework for Occupational Health and Safety Management System” and requires the production department of its subsidiaries to take occupational health and safety into account during the establishment and formulation of production procedures. Each of the manufacturing subsidiaries possessed various conditions for safe production, passed relevant certification for occupational health and safety management and safety standardisation assessment, and obtained safety production permit.

The Group’s operation management department leads the safety management of each business unit and subsidiary. It organises monthly regular meetings on production safety which allow key managers of each subsidiaries to report the operation of occupational health and safety management system, the current progress of the occupational health and safety projects, the hidden danger investigation and rectification for production safety. The key managers also propose the arrangement and specific views on the next phase of the production safety work. In 2017, the subsidiaries of the Group continued to operate in a steady manner in strict compliance with the management handbooks and procedural documents, and further refined the method of internal assessment through holding monthly safety environment meetings to inspect the status of target completion by different departments.

In terms of the production technique management, the Group developed a technique risk analysis system detailing the control of preparation, review and usage, and the rules on safety training processes, content, frequency and record management for production operation regulation. The Group upgrades its existing old production processes and equipment from time to time according to the Company’s needs for technological transformation, improves the operating practices that do not fulfill the production safety requirements and progressively eliminates the backward production processes and equipment while reducing and removing the production processes generating hazardous substances to lower the occupational risks and improve the working environment.



EMPLOYMENT AND LABOUR PRACTICES

For the avoidance of injuries and fatalities caused by the equipment, the technical transformation and equipment departments of our subsidiaries carry out comprehensive and professional inspection on all equipment of various kinds on a regular basis and prepare and approve the equipment overhaul plan of all subsidiaries to ensure the proper functioning of our dust-proof and gas-proof protective equipment and labour protection facilities. In case of any equipment failure, each department will immediately collaborate with the investigation unit to carry out investigation and evidence collection, provide remedies and accurately report the incident in a timely manner as required.

Occupational Health

The Group has a sound occupational health surveillance system to ensure the implementation of surveillance work related to occupational health and strengthen the management in prevention and control of occupational disease. The major departments and workshops constantly optimise the occupational health management proposal according to occupational health target. The Group's operation management department conducts regular inspections and evaluations on the occupational health situation in various departments to ensure that all departments can accomplish our pre-determined targets.

In accordance with the requirements of the "Law of the PRC on Prevention and Control of Occupational Diseases", the Group provides occupational health examinations for employees in the positions exposed to occupational disease hazards and appoints the testing organisations with relevant qualifications to carry out occupational risk detection for those positions. The occupational health surveillance records are updated and properly kept from time to time to effectively monitor the occupational health conditions of our employees transferred out of and leaving the positions.

In the event that the workers are diagnosed with occupational diseases, our subsidiaries will make timely arrangements for their treatment or convalescence in accordance with the opinion given by the occupational disease diagnosing institution. If the employee is confirmed to be not suitable for his/her original position subsequent to the treatment or convalescence, the department will transfer him/her to other suitable position.

The subsidiaries of the Group also perform continuous re-identification and re-assessment of hazard sources and environmental factors of each department in accordance with "Hazard Source Identification, Risk Assessment and Risk Control Procedures" and "Environmental Factors Management Procedures" with the aim of effectively controlling the major hazard sources. In addition, the dedicated department of the Group adopts the LEC assessment method to identify all the hazard sources in the course of operating activities of the subsidiaries, which evaluates the risk of injuries and death related to operational staff based on three factors, namely L (likelihood, the likelihood of incident occurrence), E (exposure, the frequency of staff's exposure to hazardous environment) and C (consequence, the consequence which may be resulted from incident occurrence).

The hazardous chemicals used in the workshops (such as methanol and propanol, etc.) bear safety labels. Associated equipment and facilities are required to be operated in an enclosed area to prevent leakage. Safety technical manual is provided to our operating staff while labour protection equipment in compliance with the national regulations is offered to employees for free. In the area for the production and storage of toxic or hazardous chemicals, a yellow warning line and safety warning signs will be displayed with first aid facilities and cautionary description that clearly sets out the types, consequences, precautions and emergency treatment of the hazardous chemicals.



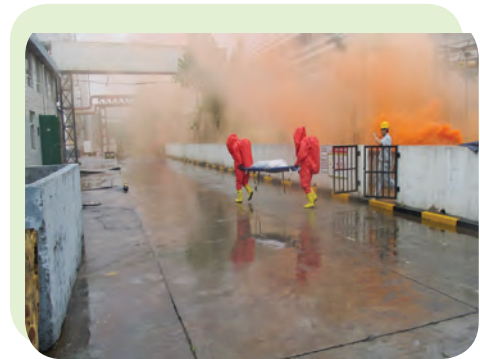
EMPLOYMENT AND LABOUR PRACTICES

Safety Training and Education

The Group issues regulatory information on production safety, internal news on occupational health and production safety as well as other notifications and information related to production safety such as knowledge and technique about fire safety to various departments from time to time.



Our subsidiaries have established a three-tier (company-level, workshop-level and position-level) training programme and regularly arranged operating personnel to attend on-the job safety training covering safe operation of related positions, hazard source identification, qualifications of safety surveillance, knowledge about fire safety and the usage of fire equipment, as well as the special education on new production processes, new technology, new equipment and new materials for different positions. Operating personels are not allowed to perform duties before passing the safety education and traning.

Each year, our major subsidiaries organise annual emergency drills, including specific drills for incidents such as the leakage of hazardous chemicals, poisoning, electric shock and fire. The production departments also carry out different forms of on-the-job emergency drills and medical care activities for all teams of production process each month as planned.



Each major subsidiary held a “Safety Month” activity and launched a series of emergency drills, warning education for all employees as well as hidden danger investigation and handling to encourage all departments to actively enhance the ways of preventing accidents and strengthen the awareness of self-protection during the accidents and their operational capacity for using the firefighting facilities.

The followings are the highlights of safety production management performed by the Group's subsidiaries during 2017:

| Name of Subsidiary | Working Agenda |
|----------------------------|--|
| Weisheng Pharmaceutical | <p data-bbox="424 1407 1430 1515">Formulating detailed emergency drills at team-level and position-level to ensure all staffs take part in at least 1 drill every half year. A total of 29 organisational drills were performed in January, which greatly enhanced employees’ emergency response capability.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="424 1569 898 1966"> <p data-bbox="424 1569 820 1597">Safety drill during the Safety Month</p>  </div> <div data-bbox="959 1569 1430 1966"> <p data-bbox="994 1569 1259 1597">Emergency drill at night</p>  </div> </div> |



EMPLOYMENT AND LABOUR PRACTICES

| | |
|-------------------------------------|--|
| <p>Ouyi Pharmaceutical</p> | <ol style="list-style-type: none"> 1. Carrying out a wide range of safety promotion activities during the Safety Month, including various promotional and educational events, talent competition with safety as the theme and fire safety skill competition; 2. Evaluating and ranking the performance in respect of safety measures of different teams and positions every quarter; encouraging each position to do the safety activities and hidden danger investigation of the team; 3. Implementing the measures as set out in "Implementation Guidance on Hidden Dangers Investigation and Eradication of Hazardous Chemicals for Enterprises", performing hidden dangers investigation at each and every level and establishing hidden dangers investigation network to eliminate hidden dangers; |
| <p>Shengxue</p> | <ol style="list-style-type: none"> 1. Occupational Promotion Week: organising a series of promotional and educational activities around the theme of the Promotion Week to promote the knowledge regarding laws and regulations as well as the basic knowledge of occupational illness prevention and control, in order to increase the overall staff awareness of occupational illness prevention and control; 2. Production Safety Month: conducting campaigns with the theme of "Safety Everywhere (平安在身边)" to develop a strong atmosphere of safe production; 3. Fire-fighting Month: enhancing staff awareness of fire prevention and strengthening self-protection capabilities; |
| <p>Zhongrun Production Base</p> | <p>To strengthen fundamental safety management and strictly regulate occupational safety, the Company formulated and implemented "Pointing with fingers and Saying with Mouth" safety confirmation approach. By placing notecards containing the key points of operational procedures and safety of respective positions at working places, staff will become familiar with the operational mantra through thinking, reading, pointing and saying, which eventually cultivates a strong learning atmosphere.</p> |





ENVIRONMENTAL PROTECTION

STRIVE FOR EXCELLENCE IN ENVIRONMENTAL PROTECTION AS PERFORMANCE OF OUR RESPONSIBILITIES TO THE ENVIRONMENT

It is vital to strike a balance between corporate development and environmental protection. The Group recognises environmental protection as an essential part of its social responsibility in economic development. Driven by such belief, the Group has spared no efforts in optimising environmental protection, energy conservation and emission reduction, with the dedication to minimise the impact of its business development on the environment and natural resources.

ENVIRONMENTAL MANAGEMENT SYSTEM

CSPC actively builds a sound environmental protection and management system, sets up dedicated departments for the supervision and management of environmental protection and occupational health and safety, and adopts a management approach under which head office and subsidiaries will be responsible for the efficiency supervision and daily operation, respectively. The operation management department at the Group's head office is responsible for monitoring the overall management of environmental protection while subsidiaries also have specific environmental protection departments. In 2017, the Group's major subsidiaries were awarded the ISO14001 Environmental Management System Certification.

The Group is committed to the identification of hazardous sources and risk management and enhances the environmental protection performance through continuous assessment and review of various performance indicators. In order to better fulfil the requirements of laws and regulations, the Group enhances awareness of the existing laws and regulations from time to time, conducts extensive studies on the new and revised laws and regulations in a timely manner and undertakes comprehensive compliance assessment to ensure amendments can be timely made on relevant policies and procedures. Meanwhile, through the intranet, training programs and meetings before and after duty in the production workshop, the subsidiaries of the Company disseminate the knowledge in relation to environmental protection policies and regulations to relevant departments and employees so as to improve their understanding on applicable national laws and regulations and local standards so as to increase corporate environmental protection awareness.

The Group has set up a contingency mechanism for environmental emergencies and formulated "Environmental Emergency Response Plan" based on the situation of each subsidiary to ensure that the emergency measures can be implemented quickly and efficiently to minimise the damages to the environment caused by environmental emergencies and the loss of the business operations. In addition, the Group has established an accident investigation mechanism for environmental protection and occupational health and safety and created a database on accident information to compare, evaluate and forecast various accident, thereby, formulating practicable precautionary measures based on the investigation and analysis.



ENVIRONMENTAL PROTECTION

Pollutant Emissions

The Group strictly complied with the following laws and regulations on pollutant emission and the relevant regulations and amendments issued by Hebei Province and Shijiazhuang:

- Environmental Protection Law of the People’s Republic of China (the “PRC”);
- Law of the PRC on the Prevention and Control of Environment Pollution Caused by Solid Waste;
- Law of the PRC on the Prevention and Control of Water Pollution;
- Law of the PRC on the Prevention and Control of Atmospheric Pollution; and
- Law of the PRC on the Prevention and Control of Pollution from Environmental Noise.

Each subsidiary identifies the law and regulations and other requirements applicable to the Company and prepares a summary of applicable provisions every year. At the end of the year, each subsidiary also performs annual compliance evaluation on their pollutant discharge, prepares operation report for the environmental management system and assessment form for the compliance with environmental laws and regulations to identify and correct the deficiencies based on the analysis results, and amends the management system for waste water discharge and solid waste treatment from time to time.

In addition, all the subsidiaries set up pollution emission automatic monitoring systems in accordance with the requirements of governmental environmental protection departments to ensure that they can pass the conformity assessment on relevant laws and regulations of governmental supervision departments and obtained “Pollutant Discharge Permit of Hebei Province” issued by the Hebei Provincial Environmental Protection Bureau in 2017. The Group also conducts internal review on the environmental management system on a regular basis and prepares non-compliance reports to formulate corrective actions for the workshops with non-compliance items and to monitor and verify the effectiveness of those measures.

Case study:

By completing the installation of QR code information board and mega screen publishing environmental protection information at the main emission site, Weisheng Pharmaceutical fulfilled the administration requirements from governmental environmental protection departments regarding informatisation management through QR code and disclosure of major pollutant details to the public.



The Group attaches great importance to the impact of the production process on the surrounding environment. In 2017, the Group continued to strengthen the surveillance of atmospheric pollutants, sewage and industrial solid wastes generated from various workshops, timely track and respond to any excessive pollutant emission and continuously reduce the overall pollution emissions so as to ease the pressure at first line.



ENVIRONMENTAL PROTECTION

Exhaust Gas

Atmospheric environmental protection is closely associated with the fundamental interests of the people and the sustainable and healthy development of the economy. At present, China's atmospheric pollution situation is grim. The regional atmospheric environmental problems characterised by the respirable suspended particulates (such as PM2.5) become increasingly prominent, causing damages to people's health and affecting social harmony and stability.

The Group actively manages exhaust gas emissions generated during the production process. In addition to the enclosed collection of exhaust gas emissions, the Group also constructs various advanced exhaust gas absorption devices (such as carbon fibre absorption in the collection system, alkaline spray and active carbon absorption and UV photocatalytic technology, etc.) to ensure that all the subsidiaries can meet the requirements of emission standards for industrial enterprises.

Greenhouse gases

The Group's greenhouse gas emission mainly comes from carbon dioxide generated during the production process, electricity consumed by the equipment at workshops and steam required for heating equipment. In accordance with the "Guidelines for Accounting and Reporting Greenhouse Gas Emissions for Other Industrial Industries in Hebei Province (Trial)" issued by Hebei Provincial Development and Reform Commission, the Group's subsidiaries compiled greenhouse gas emissions reports, containing details of general emission and greenhouse gas emissions of the Company, emission factors and data and sources description, as well as an audit of greenhouse gas emission in 2017. The Group will pay close attention to the development of national carbon-trading market, actively understand the audit method and reporting requirements for greenhouse gas emissions and strengthen the related data management.

Waste Water

The industrial waste water discharged into the pipes by our subsidiaries containing pollutants (such as chemical oxygen demand ("COD") and ammoniac nitrogen) is pre-treated by the internal sewage treatment station of the factories before being discharged into the municipal sewage treatment system to ensure that the outward-discharged waste water can meet the national integrated wastewater discharge standard. Sewage treatment station adopts multi-level biological treatment processes, including advanced Internal Circulation ("IC") anaerobic process, membrane biological reactor ("MBR") film technology and high-efficiency composite microbial technology, to effectively reduce the pollutants contained in the waste water before the decomposition process.

In order to ensure stable operation of the environmental protection facilities throughout the year, our environmental protection professionals adhere to the "Standard Operating Procedures for the Processing System in Environmental Protection Station", pursuant to which 24-hour shift inspection and test on water discharge will be conducted and regularly spot-checked by the competent departments, and timely take emergency measures upon discovering any deviations in the sewage discharge. During 2017, subsidiaries of the Group strictly implemented the "Management System for Sewage Discharge in New Parks" and the "Standard Operation Procedures of Treatment System at Waste Water Treatment Plant", and intensified inspection on waste water discharge of workshops.



ENVIRONMENTAL PROTECTION

Solid Waste

Industrial solid waste can be broadly categorised as non-hazardous or hazardous waste. The Group appointed dedicated personnel to manage the hazardous wastes which are collected and classified according to National Catalogue of Hazardous Wastes. The packaging and storage areas of hazardous wastes are labeled for proper storage. After the hazardous wastes have been centrally collected, qualified company will be engaged to carry out centralised detoxification treatment to ensure that the hazardous waste disposal fulfills the compliance requirement. The environmental protection departments of each subsidiary make further suggestions on the compliance management of hazardous waste in accordance with the amendments to National Catalogue of Hazardous Waste from time to time and organise staff training on the implementation of the relevant environmental protection policies. Domestic and non-hazardous solid waste is collected by the municipal environmental hygiene department.

ENERGY CONSUMPTION

The Group established and continuously optimised its energy management system, implemented standardised and systematic energy-saving supervision and management, supported the promotion of energy conservation and energy efficiency improvements in accordance with the requirements of “Law of the PRC on Conserving Energy” so as to promote a well-coordinated and sustainable development of the economy and society.

The production department imposes quotas on various types of energy consumption in the production workshop to promote energy measurement management. Subject to semi-annual revision and adjustments under special circumstances, the energy consumption quota is determined by the production departments according to production operating conditions. The workshop of each subsidiary then sets the consumption quota for each production process and major energy-consuming equipment in the workshop based on the top down targets. The production department is also responsible for the statistical analysis on energy consumption and energy use by conducting monthly check on energy consumption quota in each workshop and reviewing daily and weekly energy reports of the workshops. The production department also establishes “Energy Purchase and Use Ledger” to account for and compile statistics on the classified data of various types of energy consumption to ensure that the energy consumption statistics are true and complete.

In 2017, the Group rolled out intelligent energy conservation management for enterprises in the integrated park. The actual daily energy consumption data of each workstation was sent to energy management centre for comparison and analysis of information in the auto-generated daily data, weekly data and monthly data report against indicators, and based on which intelligent adjustment to energy consumption was made automatically. On the other hand, the workshops also made good use of the energy measurement platforms to monitor the operation conditions (including temperature, pressure and capacity etc.) of different energy generation systems in real time, and adjust the total capacity of energy generation systems with reference to the energy consumption of workshops to effectively manage the opening and utilisation efficiencies of equipment at the workshops.

The Group continues to pay attention to the major energy-consuming equipment in its workshops. According to the operational status of the equipment, production demand and criteria for energy consumption classification, the Group screens out the key facilities with higher energy consumption (including electricity, steam and water). The workshops step up energy conservation management on these key energy facilities in accordance with the principle of rational use of energy, put forward recommendations or plans for energy-saving measures, as well as provide regular energy-saving education and on-the-job energy-saving training.



ENVIRONMENTAL PROTECTION

The followings are the details of the Group's pollutants emission and resources usage during 2017:

| Pollutants emission | | |
|----------------------------|--|--|
| Type of pollutants | Emission | Intensity |
| Greenhouse gas | 1,108,844.97 tonnes of CO ₂ emission (tCO ₂ e) | 7,171.17 (tCO ₂ e/HK\$100 million income) |
| Other exhaust gases | | |
| — Sulfur dioxide | 61.96 tonnes | |
| — Nitrogen oxides | 73.90 tonnes | |
| Solid Waste | 53,566.61 tonnes | 346.43 (tonnes/HK\$100 million income) |
| — Hazardous waste | 9,019.27 tonnes | |
| — General industrial waste | 44,547.34 tonnes | |
| Waste water | 6,208,800 tonnes | |
| Including: | | |
| — COD | 678.73 tonnes | |
| — Ammonia nitrogen | 86.39 tonnes | |
| Resources consumption | | |
| Type of resources | Quantity of Consumption | Intensity |
| Electricity | 630.1297 million kwh | 407.52 (million kwh/HK\$100 million income) |
| Steam | 1,293,803.71 tonnes | 8,367.35(tonnes/HK\$100 million income) |
| Coal | 7,082.57 tonnes | 45.80(tonnes/HK\$100 million income) |
| Water | | |
| Freshwater: | 7,305,306.26 m ³ | 47,245.22 (m ³ /HK\$100 million income) |
| — underground water | 1,951,239.00 m ³ | |
| — municipal water | 5,354,067.26 m ³ | |
| Packaging materials | 17,965.34 tonnes | 116.19 (tonnes/HK\$100 million income) |



ENVIRONMENTAL PROTECTION

Clean Production

The Group strictly complies with relevant provisions under the “Law of the People’s Republic of China on Promoting Clean Production” and has been dedicated to further reduce pollutant emissions and extend its governance on industrial pollution sources. During 2017, the Group continued to actively promote clean production and strengthen industrial pollution control and improve its production process design while using clean energy and materials and employing advanced workmanship, technology and equipment. The Group truly understands that pollution reduction at source and improvement on the resource efficiency are the only ways to reduce or avoid the generation and discharge of pollutants during the production process and mitigate or eliminate the threats against surrounding community environment and the residents’ health.

Furthermore, the Group has set up a leading group for clean production and energy management to coordinate clean production reviews involving different departments, as well as the implementation of different clean production projects. The team is also responsible for developing the annual work plan for clean production and executing the rewards or punishments in accordance with the “Clean Production Appraisal System”. Review on clean production is a dynamic and continuous process. Each workshop is managed in accordance with the established clean production procedures to continuously improve the Group’s performance in clean production.

The workshops of each subsidiary have also set up bulletin boards for clean production to promote clean production knowledge and development, formulated the training programmes and prepared the training materials for clean production at the beginning of the year with an intent to increase staff awareness of clean production through a series of clean production trainings and campaigns.

The production departments of the subsidiaries understand the requirements on clean production imposed by the government and environmental protection bureau from time to time. At present, all subsidiaries strive to promote the following five technological transformation projects for energy conservation and emission reduction:

- Emission reduction at source: reducing chemical oxygen demand (COD), waste water, exhaust gas and solid waste emission;
- Water conservation: saving water resources;
- Energy conservation: saving energy, such as steam and electricity, etc;
- Consumption reduction: lowering the consumption of raw and supplemental materials;
- Improvement of technical indicators: enhancing the output, input and production yield of products or other production indicators.



ENVIRONMENTAL PROTECTION

The Group prioritises the investment in environmental governance as well as energy conservation and emission reduction to ensure that the production process meets the increasing regulatory requirements of the environmental protection policy and the relevant national pollutant emission standards. In recent years, the Group's investment in energy conservation and emission reduction has been mainly used for the improvement of sewage treatment facilities and recycling processes, upgrade of infrastructure and environmental protection technologies. The followings are the case studies of the Group's efforts in clean production:

Case study:

(1) Water conservation

In 2017, to thoroughly implement the water conservation initiatives rolled out by the Central Government, the Hebei Provincial Government stepped up its efforts in water conservation in the communities and enterprises, proactively addressed the problem of water shortage and tightened the control on the over-exploitation of underground water in the province.

The Group has also strived to reduce the consumption of underground water and municipal water. During the year, subsidiaries of the Group have increased investments on various reclaimed water projects, through which reclaimed water from the water systems was collected and used as recycled water, which in turn enhanced the rate of recycled water utilisation. Weisheng Pharmaceutical has organised full-staff participation in the establishment of itself as a water-saving enterprise, and received the title of "Water-saving Enterprise in Hebei Province in 2017" from the Water Resources Department of Hebei Province during the year.

Ouyi Pharmaceutical also procured each workshop to organise a water conservation and reasonable recommendation activity for all staff, focusing on saving every drip of water and collecting water conservation advice to reduce water consumption.

(2) Energy Conservation

During the year, NBP and Ouyi Pharmaceutical spent strenuous efforts in pushing forward the implementation of intelligent energy conservation management projects with an aim to realise intelligent management of energy measurement of integrated parks using the software platforms at the energy management centre. Currently, the energy measurement data of a number of workstations, automatic stereoscopic warehouses and integrated buildings are able to be uploaded to the software platforms of energy management centre and various types of reports can be produced through such platforms, which set out the daily energy consumption indicators for each type of energy of every workshop. Paralleled to the implementation of this intelligent energy conservation project, Ouyi Pharmaceutical continued to invest and promote different energy conservation projects, such as the installation of solar energy shower systems at the newly completed projects in two park zones, and the promotion of usage of LED lighting system. Other subsidiaries also adopted and improved the solar energy system and energy conservation lighting systems at their respective facilities.



ENVIRONMENTAL PROTECTION

(3) Emission reduction

The Group has always been committed to investing in the improvement projects on reducing emissions from the sources so as to minimise pollutant emission at source.

In accordance with the “Technical Specification for Application and Issuance of Pollutant Permit Pharmacy Industry — Active Pharmaceutical Ingredient Manufacturing” issued by the Ministry of Ecology and Environment in September 2017, the bulk drugs production base of Zhongnuo Pharmaceutical, namely Zhongrun production base, under the Group submitted its filing for emission permit application pursuant to the related law and regulations, and passed the audit by Ministry of Ecology and Environment for emission permit issuance, upon which the Group becomes the first enterprise which obtains the new pollutant emission permits for bulk drugs manufacturing in the PRC. The table below highlights of environmental protection efforts made by Zhongrun production base during the year:

| Environmental Protection Facilities Enhancements | Emission Reduction at Source Enhancements | Highlights of Environmental Protection Management | Environmental Protection Activity with full-staff participation |
|---|---|---|---|
| Composite Biological Scrubber | Reduction of Chlorine Water Discharge | Thorough Treatment for Exhaust Odour | The “5 June Environmental Day” Environmental Promotion Campaign |
| Upgrading and improving odour treatment plants by installing composite biological scrubber. The newly installed biological scrubber made of fibre-reinforced plastic removes hydrogen sulfide through bacteria domestication to increase the removal efficiency and cost-effectiveness of the plants. | Production workshops use chlorinated wash water instead of purified water for sodium chloride projects. Chlorinated wash water is used to replace purified water for production of sodium chloride in order to reduce chlorinated wash water discharge. | Conducting thorough treatment for exhaust emission through various technical processes of odour treatment including collection system, alkaline washing tower, oxidation treatment reaction tower as well as scrubber and absorption tower to effectively comply with the lower emission standards. | The campaign comprised different elements such as advertisement boards of environmental protection knowledge and various staff activities with promotional banners was made by each workshop. The awareness of environmental protection and so as the capabilities in the same regards were enhanced through the campaign. The environmental protection beliefs and achievements were shared with the staff through various activities to encourage environmental protection by all staff in joint efforts. |



ENVIRONMENTAL PROTECTION



Composite Biological Scrubber



Thorough Treatment for Exhaust Odour

In addition, the detoxification technology of fungi residue for Vitamin C of Weisheng Pharmaceutical was granted the first class award of technology innovation by the Hebei Pharmaceutical Profession Association.

CSPC Yinhu Pharmaceutical. Co., Ltd strictly followed the requirements of air pollution prevention and control. Apart from the investment in and execution of upgrade and improvement projects of boiler system for desulphurisation and dust removal (including the addition of pre-treatment systems, improvement of water circulation system, addition of bag filters for dust removal and full closing of linking corridors for coal transportation for improvement), it also significantly reduced the intensity of sulphur dioxide emission and smoke and dust emission through sophisticated management measures such as online supervision of smoke and gas emission.





SUPPLIER MANAGEMENT

STRIVE FOR EXCELLENCE IN PROCUREMENT TENDER MANAGEMENT AS PERFORMANCE OF PRODUCT QUALITY RESPONSIBILITIES

Sound procurement management is crucial for maintaining the quality of the Group's products, given the Group's increasing scale and diversifying variety of procurement as its sales and production expand.

The Group established a sound supplier management system to clearly determine the responsibilities and authorities of relevant management departments, including procurement department, production department and quality department. The principles and basis for the classification of materials have been formulated to implement the categorisation of all materials and set out the details of all material categories, such as raw materials, ancillary materials and packaging materials used in production.

After the long-standing business relationship with suppliers, the Group has established a long-term and stable strategic partnerships with the core suppliers to share information, seek win-win results with mutual benefit and jointly bear the risks. In order to meet the customer demand, the Group helps key suppliers to improve their workmanship and provides them with technical support which enables them to develop a supply risk management in line with the Group.

In 2017, in light of increasing attention on environmental protection and safety by the PRC government, some of the suppliers' production and material transportation were affected and limited. The centralised procurement centre ("Centralised Procurement Centre") has always put supply guarantee as the top priority of the year. Through various measures including exerting efforts in developing new qualified suppliers and expanding supply channels, coordinating and enhancing the inventory management at its production bases and increasing the frequency of on-site monitoring of suppliers, stable production was secured at all production bases during the year.

PROCUREMENT MANAGEMENT SYSTEM

The Group has set up the centralised procurement centre to coordinate the procurement needs of its subsidiaries in order to reduce the procurement cost and continuously optimised the supply risk management procedures through composite tender, centralised price negotiation and the development of new suppliers. The Centralised Procurement Centre also assesses and minimises the impact of a single supplier on the stable material supply from time to time so as to adopt mitigating measures timely when the supplier becomes the primary target for surveillance and supervision of the government or environmental protection departments.

In 2017, the Centralised Procurement Centre continued to reinforce procurement contract management and streamline procurement management system. Paralleled to the optimisation of the existing system, new systems were issued in accordance to the actual situation of current procurement, including systems regarding research and development material procurement, contingency plan for procurement and internal supervision and audit, among which the new internal audit management system deepens the promotion of ethical procurement.



In respect of information system construction, the Group has office automation (OA) system and enterprise resources planning (ERP) system in place to enable a platform for sharing procurement information, which supports real-time exchange and information sharing for effective decision-making of procurement tenders. During the year, the Centralised Procurement Centre has proactively advanced the construction of informatisation infrastructure, realising automatic organisation of procurement plan within the system and full surveillance over the procurement process after the roll-out of the low-cost, consumable procurement planning software. Upon the approval of procurement plan, the information system automatically outputs counterfeit contracts and converts the format of the files for record keeping. Some back office matters such as monthly performance and fee approval can also be approved online. All these informatisation infrastructure construction efforts enable the immediate availability and tracking of procurement business, whilst online approval resolves the difficulties of dispersed offices and working during business trips, all of which notably increase the working efficiencies and refine the approval process for each procedure of procurement process.

The Centralised Procurement Centre formulates rules for materials procurement management and regularly prepares procurement plan for production materials with each department and subsidiary according to the production plan of user department. Our procurement officers select the appropriate pricing methods for material purchase under the procurement plan and are required to actively seek potential suppliers during the procurement process so as to ensure that not less than two suppliers are involved in the tender and request for quotations. The tender team members or the procurement department heads from subsidiaries are responsible for the price negotiation with qualified suppliers.

The procurement department makes comprehensive evaluation on qualified suppliers in various aspects such as qualification, reputation, quality and price and strictly follows the procurement principle of comparing both quality and price to make procurement approval in accordance with the requirements of established approval procedure for procurement tendering and comparison of quotations in the manner of "Comparing the quality of the same materials, the price of materials with the same quality and the reputation at the same price level".

SUPPLIER EVALUATION MECHANISM

The Group created a management mechanism for the introduction and elimination of suppliers of production materials (including raw materials, ancillary materials and packaging materials) to ensure a reasonable and effective supplier structure while constantly regulating suppliers' performance management and optimising the supplier portfolio to reduce the procurement risk on an on-going basis.

The Group has in place strict inspection standards for all procured materials. Only materials which have passed the inspections are allowed for production use. Should there be any problems about the quality of the material and service discovered during the course of use, the relevant user departments must provide feedback to the procurement department which would then resolve the problems by communicating with the suppliers. They also need to report in a timely manner to the supplier administrator on the name of the supplier who has been disqualified due to the quality issue of their product for record purpose.

The quality management department regularly organises quality assessment on our material suppliers, reviews and analyses the results of material quality inspection and examines the investigation records of the complaints about the suppliers' quality and disqualification. The quality management department also eliminates the suppliers who failed to meet the requirements of our quality assessment or annual evaluation on suppliers each year.



QUALITY AUDIT

The Group sets up a supplier audit team with quality management department as the core member to perform audit on the overall quality management system of material suppliers and formulates an audit plan for the quality audit on suppliers in which the detailed requirements for duties, content, procedures and standards in the course of assessment are stipulated. The supplier audit is conducted in two forms: questionnaires and field audit. The supplier audit team formulates annual audit plan and conducts quality audit on major material suppliers in collaboration with relevant departments. Suppliers not passing the audit would be disqualified.

Field Audit

Field investigation plays a key role in the course of supplier quality audit and supply risk management. The investigation covers basic information on the suppliers (such as Good Manufacturing Practice (“GMP”) certification and other quality certification), their environmental protection and safety status as well as their financial condition.

In terms of environmental protection, the supplier audit team checks whether the supplier has a report on environmental impact assessment; whether the supplier obtains an emission permit and meets the emission standards for exhaust gas and waste water; whether the supplier has environmental protection issues (mainly concerning the complaints about odour and solid waste disposal methods) and corresponding environmental protection facilities. Furthermore, the Group is also concerned about the suppliers’ performance in the management of production safety and assesses the effectiveness of suppliers’ management or precautionary measures against hidden dangers and problems for safety, ensuring that all suppliers establish personal safety training files for all employees, prepare safety training programs and provide training as required.

To further regulate the supplier audit procedures and build an impartial and strict corporate image for the Group, the supplier audit team strictly abides by the “Supplier Audit Discipline of CSPC” while requiring the suppliers to complete a “Letter of Undertaking for the Acceptance of Field Audit by CSPC” in 2017 and establishes a sound whistleblowing mechanism to ensure the impartiality, authenticity and effectiveness of the audit results in order to avoid any audit staff from corruption.

Procurement Integrity Management

Integrity and credibility is the foundation for the long-term cooperation between the Group and its suppliers. Thus the Group has been committed to the establishment of a fair, impartial and transparent procurement mechanism and imposing high standards of integrity on our employees. In 2017, the Group continued to regularly organise training to hold a detailed briefing on the definition, importance, public relations with suppliers and countermeasures of ethical procurement, and arranged the procurement staff to learn from different organisations. Procurement staff is required to take part in the training and talks about integrity upon first entering into the position in order to clearly understand the Group’s requirements on the conduct of procurement staff.

The Group strictly implemented the “Administration Measures on Code of Conduct for Procurement Staff and Accountability” and forbade the receipt of cash or other gifts during holidays. For inevitable gifts, employees are required to register within half a month since the receipt of the gift for centralised process. The Centralised Procurement Centre has also set up a hotline for complaints. It will affix responsibility in accordance with the established system for any breach of these Administration Measures. To increase the employees’ awareness of compliance with related regulations, the Group has also required each procurement staff to fill in a declaration form of interest to ensure no occurrence of misconduct or irregularity affecting the fairness prior to or during the performance of duties. The declaration items of interest mainly relate to the existence of interest between procurement staff or its family members and suppliers.

Apart from the above, the Group also requires its suppliers to maintain their integrity and self-discipline and disseminates the messages in respect of clean procurement by letter to clearly express that non-compliance with rules and regulations and unfair competition are prohibited. The Group will terminate the business relationships with the supplier if the supplier has no integrity and does not comply with laws and regulations.



ANTI-CORRUPTION

STRIVE FOR EXCELLENCE IN INTEGRITY BUILDING AS PERFORMANCE OF ANTI-CORRUPTION RESPONSIBILITIES

The CSPC Group places great emphasis on anti-corruption and takes anti-corruption management, integrity building and supervision as our strategic tasks.

The Group's independent supervision department is dedicated to procuring our staff to perform their duties and functions with integrity and credibility and has adopted a binding system to prevent our employees from corruption, thereby establishing our clean image and developing our corporate culture of "Being proud of integrity and shameful of corruption".

In order to safeguard the order of the Group's business operations and procure all employees of the Group to conscientiously comply with the PRC laws and regulations and the Group's various procedures and systems, the Group continued to strengthen the internal discipline inspection system in 2017 by formulating a series of internal policies and regulations in relation to anti-corruption, including the "CSPC's Employee Code of Conduct on Integrity and Honesty", the "CSPC's Rules on Administration of Gifting", the "CSPC's Management System on Counterparties' Integrity" and "Management System on Audit on Resignation of Management Personnel and Key Personnel". These policies cover various periods and aspects of employment from induction to resignation. The Group's major efforts in relation to anti-corruption and internal discipline inspection are highlighted as follows:

1. COMMENCING EFFICIENCY SUPERVISION

To enhance the supervision and audit in respect of discipline inspection of the Group and its members, the Group has established a comprehensive and full-process supervision system for internal operation to prevent and eliminate various operating risks, as well as to improve the performance and management efficiencies of the Group. In March 2017, the Group commenced a series of supervision and audit works on specific efficiencies, and carried out rectifying actions in a timely manner for issues identified, as well as further regulated the related procedures. In addition, audit on efficiency supervision enabled us to impose more specific requirements on operating skills of discipline inspection personnel, which strengthen the problem-identifying and problem-solving capabilities of discipline inspection personnel during supervision and inspection, laying a crucial foundation for further improvement of supervision and inspection.

2. PROMOTING INTEGRITY AND SELF-DISCIPLINE

With the aim of strengthening integrity education and developing a sound atmosphere of lawful operation and integrity, the supervision and safeguard department carried out an integrity and self-discipline educational activity at group level in the beginning of September 2017, which included the issuance of the "Notice of Strict Compliance on Integrity and Self-Discipline Requirement during Mid-Autumn Festival and National Day" that required all key personnel to sign the "Undertaking of Integrity and Risk Prevention", with 100% signing rate.



3. OPTIMIZING SUPERVISION FUNCTIONS FOR PROCUREMENT TENDER

In the pursuit of effective regulation of procurement tender in the Group, the supervision and safeguard department has established a dedicated team to supervise procurement tender and step up contract audit and payment inspection, in order to ensure the standardisation of tender-related work. The supervision department performs specialised inspection on production operation, marketing system, finance expense of centralised procurement centre, execution of travelling standards as well as cost and expenses, and rectify issues identified during the inspection in a timely manner.

In addition, in an effort to optimise the whistleblowing channels and enhance the internal capability for processing whistleblowing, the Group has set up a hotline and email address dedicated to handling such whistleblowing, with designated personnels responsible for picking up phone calls and checking emails.



COMMUNITY INVESTMENT

STRIVE FOR EXCELLENCE IN CHARITIES WORKS AS PERFORMANCE OF OUR RESPONSIBILITIES TO THE SOCIETY

Since its establishment, the Group has always regarded its social responsibilities as the starting point of all business practices. The Group has infused the word "Responsibility" into every part of its business operations, corporate mission and value and contributed to the society with gratitude.



Mr. Cai Dongchen, the chairman of the Group officiated the opening ceremony of Hebei CSPC Pu'en Charity Foundation

With an aim to make contribution to our home country and society, the Group has been adhering to the corporate tenet of "All for good medicine, all for mankind's health" for a long period of time and bearing in mind our corporate social responsibility to actively participate in social charitable activities such as book and medicine donations, student aids, victims' visits, environmental protection and people's wellbeing improvement. The Group has organized a series of social charitable services and taken actual action to help the society with full efforts.

To better achieve our works in charitable services, Mr. Cai Dongchen, the Chairman of the Group, together with CSPC Holdings Company Limited (an affiliated company of the Group) established the Hebei CSPC Pu'en Charity Foundation (the "Foundation") in late 2015. The service scope of the Foundation includes: 1) giving assistance to the sick, poor, depressed and senior citizens in the underprivileged groups, including those in serious diseases, poor families and their children, severely injured people due to accidents, the disabled, orphans and elderlies; and 2) organizing charity events for natural disasters.



COMMUNITY INVESTMENT

Since the inception of the Foundation two years ago, the Group has proactively held charitable events in the fields of “helping the elderly, assisting the poor, aiding the sick, relieving the distressed and supporting the students”, including making donation to the employees in poverty within the Group and organising activities, such as financial assistance to students, visit to children in poverty, poverty alleviation in rural areas and elderly care. The table below sets out the activities in various fields during the year:

| 1. Supporting the students | |
|----------------------------|---|
| June 2017 | Donated to primary schools in rural areas for funding construction of improvement projects on the quarters for teachers and students, aiming to provide study opportunities for children in rural areas |
| August 2017 | Together with the last “Subsidizing Education for Dreams” programme targeted at university students, the latest two programmes successfully helped more than 100 outstanding students in poverty who entered undergraduate courses to receive subsidies for two consecutive years |
| November 2017 | Commenced the “Sunlight Action — Enjoying Childhood with Picture Books” co-organised picture books donation activities, particularly for the kindergartens in rural areas of Xingtai, the most severely affected areas during the flooding disaster on 19 July 2016, and joined hands with kindergartens teachers from immediate institutions of the same province, to organise spectacular seminars with the theme of “Growing together with Picture Books”, with a view to alleviating poverty in rural areas in the most direct way. |
| 2. Aiding the patients | |
| July 2017 | The CSPC Group and the Stroke Prevention Project Committee of National Health and Family Planning Commission jointly initiated the “Healthy Walking for Cardiovascular Health” in Chengde, together with the “Twenty-thousand Action” organised by the sub-department of Neurology under Chinese Medical Doctor Association. More than 20 renowned experts from various provinces and cities of Chengde, Beijing, Tianjin and Jiangsu, gave academic seminars regarding stroke and free medication consultation at the communities of Ignot Mountain in Chengde City, as supported by local hospitals in Chengde. On the day of the event, over 300 people received free medication consultation and promotion of healthy knowledge, as well as free distribution of pharmaceuticals worth hundreds of thousands dollars. |
| December 2017 | Assisted a six-years old child in Handan with hearing impairment to recover hearing ability. The Foundation arranged the child to receive medical checks and expert’s consultation at provincial hospitals, and completed cochlear implant operation. After the surgery, the child received trainings at professional training centre. We successfully helped a needy child with hearing impairment to start a new life. |
| | Joined hands with the Red Bracelet Volunteers Service to provide body checks, dangerous factors screening, free medical consultation and health management consultation, release scientific data and hold seminars with the focus on stroke patients, thereby helping stroke patients to have a better understanding of prevention and treatment of stroke. |



COMMUNITY INVESTMENT

3. Helping the elderly

| | |
|----------------|--|
| September 2017 | Organised an elderly care activity of “The Best Sunset of Chung Yeung Festival”, during which volunteers paid a visit to elderly care centres and arranged a wide range of activities, including activities related wellness knowledge, health exercise for hands and self-directed and self-acted performances, giving a warm festival for the elderly. |
|----------------|--|

4. Assisting the poor

| | |
|--------------|---|
| March 2017 | In response to the national spirit of poverty alleviation, the Foundation initiated poverty alleviation charity event, namely the “Sending Warmth, Sending Wellness”, and walked into impoverished provinces to provide 350 residents in the Wan Jia Village of Zhanhuang with products including anti-influenza drugs, masks and moisturising hand creams, as well as daily necessities including rice, noodles and oil. |
| October 2017 | Members of the Foundation visited 46 impoverished households in Da Si Gou Village, He Kou Town, Pingshan Province and gave out rice, noodles, oil and daily necessities for free. |



COMMUNITY INVESTMENT



Donation to primary schools in rural areas



Subsidising education for achieving dreams



Sunlight action — Enjoying childhood with picture books



Donations for poverty alleviation



Visits to impoverished households



Elderly care activities



COMMUNITY INVESTMENT

In addition, the Foundation has proactively assisted the Group's employees in distress and provided assistance to a total of more than 30 employees. Various forms of assistance included monetary assistance, visits during festivals and student aids for college entrance examinations. Besides, hospital visits were arranged in accordance with the actual situation to accompany and take care of employees in distress, and to help them to solve problems they face.

In 2018, the Group will continue to leverage on the social charitable platform provided by the Foundation to actively explore various channels to develop innovative forms of donation as the means for carrying out different kinds of assistance efforts, with the relevant details set out as below:

- To negotiate and jointly develop the "Charity Assistance Programme for Tumour Patients in Provincial Cancer Hospital" with Jilin Provincial Cancer Hospital, Charity Federation of Jilin Province and other reputable organisations. The Foundation will donate charity assistance funds to this charity assistance programme for 5 consecutive years. Target recipients include tumour patients, such as those with breast cancer, cervical cancer and ovarian cancer, from poor families in the urban, rural and agriculture areas in Jilin Province.
- To sponsor the commencement of the "Early Screening of Breast Cancer in Hebei", which mainly covers the programme of early diagnosis and treatment of breast cancer implemented by the Screening Base for Breast Cancer in Hebei Province and the Medical Centre for Breast Diseases in Hebei Province. This charity programme includes activities such as promoting the science of cancer prevention and recovery in Hebei Province and early cancer diagnosis and treatment technology, exploring the factors for the high incidence rate of breast cancer in Hebei Province, and decreasing the incidence rate.
- To implement a long-term mechanism for the student assistance programme "Sunlight Action", with the assistance coverage expanding from university students to include high school and junior school students, and to continue expanding the assistance coverage.
- To conduct the assistance programme for the Group's employees in distress as usual under the "CSPC as a Family" programme to substantively implement the assistance and support efforts.
- To carry out the "Precise Assistance and Targeted Implementation" in relation to the elderly care activities continually, with the aim of helping the elderly in need in a pragmatic manner.
- To focus on providing assistance to the children living in the impoverished areas with major illnesses in the area of aiding the patients and disabled.

Looking ahead, the Group will be committed to charity works and inheritance of social responsibilities to demonstrate the Group's social values throughout the transmission of love and exemplify the determination of the Group in promoting social harmony and economic development.



INDEX TO THE ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORTING GUIDELINE

| Aspects/General Disclosures/KPIs | Descriptions | Disclosure Sections |
|--|---|--------------------------|
| A. Environment | | |
| 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 | Environmental Protection |
| KPI A1.1 | The types of emissions and respective emissions data | Environmental Protection |
| KPI A1.2 | Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity | Environmental Protection |
| KPI A1.3 | Total hazardous waste produced (in tonnes) and, where appropriate, intensity | Environmental Protection |
| KPI A1.4 | Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity | Environmental Protection |
| KPI A1.5 | Description of measures to mitigate emissions and results achieved | Environmental Protection |
| KPI A1.6 | Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved | Environmental Protection |
| Aspect A2: Use of Resources | | |
| General Disclosure | Policies on the efficient use of resources, including energy, water and other raw materials. | Environmental Protection |
| KPI A2.1 | Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity | Environmental Protection |
| KPI A2.2 | Water consumption in total and intensity | Environmental Protection |
| KPI A2.3 | Description of energy use efficiency initiatives and results achieved | Environmental Protection |
| KPI A2.4 | Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved | Environmental Protection |
| KPI A2.5 | Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced | Environmental Protection |
| Aspect A3: The Environment and Natural Resources | | |
| General Disclosure | Policies on minimising the issuer's significant impact on the environment and natural resources | Environmental Protection |
| KPI A3.1 | Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them | Environmental Protection |



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| | | |
|-------------------------------------|--|--|
| B. Social | | |
| 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 | Employment and Labour Practices |
| KPI B1.1 | Total workforce by gender, employment type, age group and geographical region | Employment and Labour Practices |
| KPI B1.2 | Employee turnover rate by gender, age group and geographical region | No disclosures |
| 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 relating to providing a safe working environment and protecting employees from occupational hazards | Employment and Labour Practices (Health and Safety) |
| KPI B2.1 | Number and rate of work-related fatalities | Employment and Labour Practices (Health and Safety) |
| KPI B2.2 | Lost days due to work injury | Employment and Labour Practices (Health and Safety) |
| KPI B2.3 | Description of occupational health and safety measures adopted, how they are implemented and monitored | Employment and Labour Practices (Health and Safety) |
| Aspect B3: Development and Training | | |
| General Disclosure | Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. | Employment and Labour Practices (Development and Training) |
| KPI B3.1 | The percentage of employees trained by gender and employee category | No disclosures |
| KPI B3.2 | The average training hours completed per employee by gender and employee category | No disclosures |
| 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. | Employment and Labour Practices (Lawful Employment) |
| KPI B4.1 | Description of measures to review employment practices to avoid child and forced labour. | Employment and Labour Practices (Lawful Employment) |
| KPI B4.2 | Description of steps taken to eliminate such practices when discovered. | No occurrence |
| Operating Practices | | |
| Aspect B5: Supply Chain Management | | |
| General Disclosure | Policies on managing environmental and social risks of the supply chain. | Supplier Management |
| KPI B5.1 | Number of suppliers by geographical region | No disclosures |
| 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 | Supplier Management |



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| 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, labelling and privacy matters relating to products and services provided and methods of redress | Product and Customer (Product Responsibility) |
| KPI B6.1 | Percentage of total products sold or shipped subject to recalls for safety and health reasons | No disclosures |
| KPI B6.2 | Number of products and service related complaints received and how they are dealt with | Product and Customer (Product Responsibility) |
| KPI B6.3 | Description of practices relating to observing and protecting intellectual property rights | Product and Customer (Research and Development and Intellectual Properties) |
| KPI B6.4 | Description of quality assurance process and recall procedures | Product and Customer (Product Responsibility) |
| KPI B6.5 | Description of consumer data protection and privacy policies, how they are implemented and monitored | Product and Customer (Compliant Marketing) |
| Aspect B7: Anticorruption | | |
| 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 bribery, extortion, fraud and money laundering. | Anti-corruption |
| KPI B7.1 | Number of concluded legal cases regarding corrupt practices brought against the organisation or its employees during the reporting period and the outcomes of the cases | No occurrence |
| KPI B7.2 | Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored | Anti-corruption |
| Community | | |
| Aspect B8: Community Investment | | |
| General Disclosure | Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests | Community Investment |
| KPI B8.1 | Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport) | Community Investment |
| KPI B8.2 | Resources contributed (e.g. money or time) to the focus area | Community Investment |