

(Stock Code: 1093)



2019 Corporate Social Responsibility Report

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## **F**OREWORD

The major social responsibility of a pharmaceutical enterprise is innovation. In 2019, our investment in research and development amounting to approximately RMB2 billion cover six major therapeutic areas including cardio-cerebrovascular, oncology, diabetes, anti-infection, psychological and neurological as well as autoimmunity. CONJUPRI (Xuanning) was granted new drug approval by U.S. FDA, and became the first Chinese domestic innovative drug granted full approval by FDA. We uphold our philosophy of "All for good medicine, all for mankind's health" and strive to speed up the process of launching more new drugs to the market, so that the innovative achievements can be more widely applied for the benefit of global human health.

At the same time, we also put a lot of emphasis on the accessibility of essential medications. We actively follow up the government's consistency evaluation. During the year, we successfully won three drug tenders in the national centralized procurement, so that patients can have access to high quality drugs with lower prices which reduces the economic burdens for individuals as well as the society.

We also understand the foundation of innovation lies in talents. Through measures such as large-scale talent recruitment, professional training, development and incentives, CSPC Pharmaceutical Group has realised a talent environment in which "everyone, regardless of background, can fully utilise his/her potentials", by creating the best platform for personal development of the employees and encouraging the employees to achieve good performance and realise self-values. In 2019, we were honoured to be included in the list of "World's Best Employers" by Forbes again.

Product quality has always been the core strategy of the Group's development. We focus on benchmarking international high-end quality standards and carry out quality control works in all aspects strictly in accordance with the requirements of various certifications. The Group attaches great importance to the safety of patients' medications, and is committed to quality and safety risk management, while making great effort to establish a pharmacovigilance system.

In the course of enterprise development, we are committed to maintaining the balance of environmental protection, by taking "pursue green development and create a better living" as corporate belief in regard to environmental protection. With a main focus on improving the efficiency of resource utilisation, we carry out comprehensive resource management through strengthening technological upgrade.

While providing patients with safe and high-quality products, we are also actively giving back to the society. In addition to participating in charitable activities such as helping the elderly, the poor, the sick and the distressed as well as providing education aid through the public welfare platform "Hebei CSPC Full Grace Charity Foundation" (河北省石藥普恩慈善基金會), the Group also contributes to the society by making donations in forms of money or medicines.

Looking ahead, it is clear that the trend of the industry is going toward the direction of innovation. With the official implementation of the "Healthy China Initiative (2019-2030)", we will have more innovative practices and public welfare activities to demonstrate our goodwill in contributing to the global human health.

## BASIS AND PRINCIPLES OF PREPARATION OF THIS REPORT

#### BASIS AND PRINCIPLES OF PREPARATION

This report is prepared by CSPC Pharmaceutical Group Limited (the "Company") and its subsidiaries (hereafter collectively referred to as "CSPC" or "we" or the "Group") 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 2019. For details of corporate governance, please refer to the corporate governance report set out in the 2019 Annual Report of CSPC.

#### REPORT PERIOD AND RELEASE CYCLE

This report is the yearly report for 2019, and the report period is from 1 January 2019 to 31 December 2019.

#### **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 that 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 relevant regulatory documents. We are committed to ensuring the reliability of the report data and the absence of any false or 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.

## **ABOUT CSPC**

CSPC enjoys a leading position in the pharmaceutical industry in the People's Republic of China (the "PRC"). It was listed on the main board of the HKEx in 1994 and became a constituent stock of the Hang Seng Index in June 2018. Being a renowned listed pharmaceutical company in Hong Kong, the Group is currently also 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.

The Group has two main business segments, namely, finished drugs and bulk drugs, and is mainly engaged in the development, manufacture and sale of pharmaceutical or its 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)", "Ailineng(艾利能)", "Nuolining(諾利寧)" and Kaili(克艾力) 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 City, Hebei Province, the PRC.

Regarding the business development and review for 2019, please refer to the 2019 Annual Report of the Group. With the fast development of our businesses during recent years, we deeply understand the greater social responsibilities borne by the Group's subsidiaries. In 2019, the Group has made payments for various taxes amounting to approximately RMB2,583 million in total (2018: RMB2,256 million), whereas its total staff costs amounted to approximately RMB2,062 million (2018: RMB1,433 million), epitomizing the value the Group has brought to public finances and its staff during its course of active business development.

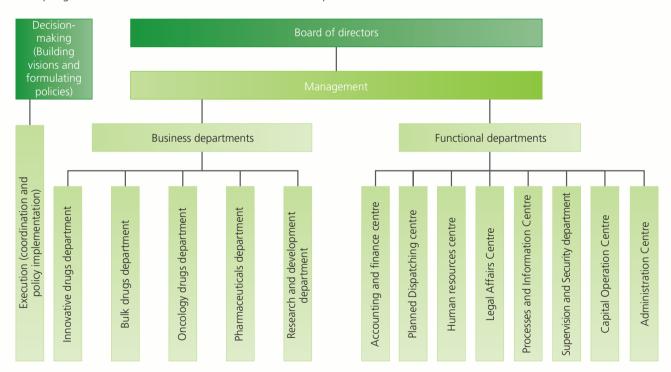
#### **CORPORATE MISSION AND VISION**

Continuously upholding the corporate value of "All for good medicine, all for mankind's health", we strive to create the best environment for the personal growth of the staff. At the same time, the Group proactively took part in public welfare undertakings in an effort to fulfill its social responsibilities as a corporate citizen and contribute to the society.

#### **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 and implement different environmental, social and governance tasks.

In 2019, we carried out an organizational adjustment for the Group's functional departments, after which the Group's governance structure in relation to its social responsibilities is shown as follows:



Taking into account the increasing importance of environmental, social and governance practices to us, the Group will continue to review the current working structure and the scopes of responsibilities of relevant functional departments in the future.

#### STAKEHOLDER ENGAGEMENT

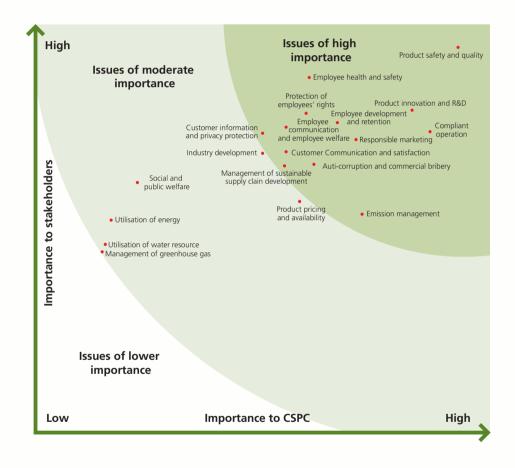
The Group has been using different kinds of communication channels to listen to our stakeholders' views at the environmental, social and governance aspects and communicate with them on various environmental, social and governance issues on an ongoing basis. We always believe that listening to the opinions of various stakeholders helps us to objectively and comprehensively assess the Group's environmental, social and governance performance.

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> <li>Compliant operation</li> <li>Risk management</li> <li>Anti-corruption</li> <li>Innovative operation</li> <li>Economic performance</li> </ul>	<ul> <li>General meetings</li> <li>Investor information sessions</li> <li>Site visits</li> <li>Regular information disclosure of the listed company</li> <li>Investor visits and meetings</li> <li>Telephone and email enquiries</li> </ul>
Employees	<ul> <li>Employee health and safety</li> <li>Employee development and retention</li> <li>Prevention of child labour and forced labour</li> <li>Protection of employees' rights</li> </ul>	<ul> <li>Daily communication between management and employees</li> <li>Employee opinion collection</li> <li>Employee activities</li> <li>Internal training and learning</li> </ul>
Customers and consumers	<ul> <li>Customer rights and privacy protection</li> <li>Quality of products and services</li> <li>Responsible marketing</li> </ul>	<ul> <li>Regular visits</li> <li>Forums</li> <li>Seminars</li> <li>Monthly sales analysis meetings</li> <li>Annual marketing seminars</li> <li>Customer satisfaction survey in the form of questionnaires</li> <li>Product complaint handling procedure</li> <li>Information exchange mechanism</li> </ul>
Suppliers	<ul> <li>Management of sustainable supply chain development</li> <li>Quality of products and services</li> </ul>	<ul> <li>Tender meetings</li> <li>Regulated supplier management procedure</li> <li>Annual supplier feedback and evaluation system</li> <li>On-site audit</li> </ul>
Community and the public	Social and public welfare	Joint organisation of community activities
The government	<ul><li>Compliant operation</li><li>Anti-corruption</li></ul>	<ul> <li>On-site inspection and work reports preparation and submission for approval</li> <li>Government visits and guidance</li> <li>Engagement in the formulation of and recommendations for government policies</li> <li>Industry collaboration</li> </ul>
Market regulators	Compliant operation	Consultation and information disclosure

#### **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 based on the results of stakeholder surveys and benchmarking analysis with excellent companies in the industry as the two main sources. We refer to "Environmental, Social and Governance Reporting Guideline" issued by the HKEx and the "G4 Sustainability Reporting Guidelines" released by the Global Reporting Initiative (GRI), coupled with benchmarking against outstanding industry players. To understand the concerns of various stakeholders so that we can respond to their focused issues in the Environmental Social and Governance Report, we conducted targeted communication with stakeholders including shareholders, investors, employees, suppliers and customers in form of questionnaire survey in 2019. The results of quantitative analysis on substantive issues in 2019 are presented in the following matrix:



According to the quantitative analysis on substantive issues, issues of high importance to both stakeholders and the Group include:

Product safety and quality	Product innovation and R&D	Compliant operation	
Employee health and safety	Protection of employees' rights	Employee development and	
Employee health and safety	Frotection of employees rights	retention	
Employee communication and	Responsible marketing	Customer information and privacy	
employee welfare	Responsible marketing	protection	
Customer communication and	Anti-corruption and commercial	Management of sustainable	
satisfaction	bribery	supply chain development	
Emission management			

In addition to product safety and quality, we fully understand that there is growing attention of the stakeholders to the issues of the Group's employees' rights, development and retention, as well as compliant operation (including our responsibility to the customers and anti-corruption management), and therefore it is most important for the Group to do a good job on the relevant management works.

#### 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 operation with integrity, the Group is committed to doing its utmost in the details of every task.

#### **DEVELOPMENT STRATEGY**

In 2019, the Group continued with its development strategies in various business segments through active innovation and promotion of international development, so as to respond to the various opportunities resulted from external changes.

#### **Finished Drug Business**

- Focus primarily on the research and development of innovative drugs in areas including cardio-cerebrovascular diseases, oncology, psychiatry and neurology, metabolic diseases (such as diabetes) as well as anti-infection
- Continue to invest in research and development, enrich the product portfolio and develop blockbusters in focused areas

#### **Bulk Drug Business**

• Continue to develop the bulk drug business with which we enjoy a leading position in the industry, make effort to maintain market share and achieve cost-efficiency, as well as to develop quality source of customers to maintain our advantage as a leader in the industry

#### **International Development**

- Obtain international product certifications
- Establish international strategic partnership to acquire resources such as technology, products and overseas distribution channels
- Through overseas cooperation, mergers and acquisitions, achieve two-way development by introducing new drugs from overseas and bringing our innovative drugs abroad

#### **Mergers and Acquisitions**

• Through strategic mergers and acquisitions, optimise our product portfolio in the existing therapeutic areas and enter new therapeutic areas, further strengthening our marketing and sales capabilities

#### RESEARCH AND DEVELOPMENT AND INTELLECTUAL PROPERTY

CSPC has always adhered to the corporate philosophy of "All for good medicine, all for mankind's health", constantly increasing its investment in the development of high-quality medicines and providing affordable medicine to the patients. Currently, we have established an integrated research and development system that spans across domestically and internationally, with research and development and clinical centres in Shijiazhuang, Beijing and Shanghai, as well as clinical offices in eight cities, including Wuhan and Shenyang. We have also set up 4 research and development centres in California, Texas and New Jersey in U.S.A.. Our annual investment in R&D expenses exceeded RMB2 billion.

At present, the Group has about 300 projects on innovative drug products, including more than 50 new target macromolecular drugs, more than 40 small molecule new drugs, more than 20 new preparations and more than 50 clinical research projects. In 2019, the Group carried out the layout of antibody production, including the establishment of Robust Sun Bioworkshops Company (康日百奥公司), the completion of the construction and operation of the Shijiazhuang Biological Pilot Test Transformation Centre, and the commencement of the construction of Shijiazhuang and Yantai biological commercial production bases.

CSPC is a "National Innovative Enterprise" recognized by three ministries and commissions including the Ministry of Science and Technology of the People's Republic of China (the "Ministry of Science and Technology"). In addition to a well-established research facility and an advanced clinical pharmacology research centre constructed in accordance with the Good Laboratory Practice ("GLP") standards, the Group has also established a Level II biosafety laboratory which can be used for the research of viral drugs. On 23 December, the General Office of the National Development and Reform Commission released the results of the 2019 evaluation of the National Enterprise Technology Centres. Among the 1563 enterprises, CSPC was evaluated as "Excellent" with a score of 91.3, ranking among the best in the industry.

The assessment of CSPC as a National Enterprise Technology Centre 2019 is a recognition of the Group's innovation capabilities. In the future, the Group will continue to strengthen proprietary innovation and redouble its effort to become an innovative pharmaceutical enterprise that is highly influential and respected in the world!

#### **Experimental animal management**

We place great importance on animal management in laboratories during clinical research. The Group strictly follows national and Hebei Province's laws and regulations and standards related to experimental animals in the construction and management of animal laboratories, including Regulations for the Administration of Affairs Concerning Experimental Animals (《實驗動物管理條例》), Good Laboratory Practice for Non-Clinical Laboratory Studies (《藥物 非臨床研究質量管理規範(GLP)》), National Standard on Laboratory Animal — Requirements of Environment and Housing Facilities of the People's Republic of China (《中華人民共和國實驗動物環境及設施國家標準》), Measures of Hebei Province on Administration of Affairs Concerning Experimental Animals (《河北省實驗動物管理辦法》) and Measures of Hebei Province on Administration of Affairs Concerning Authorization for Use of Experimental Animals (《河北省實驗動物使用授權管理辦法》). We have installed various instruments in actual animal laboratories including smart anemometer, dust particle counter and noise meter to ensure the laboratories comply with the requirements of various environmental indicators.

In order to guarantee the effective implementation of animal welfare management, the Group has established an Experimental Animal Ethics Committee which is responsible for all ethical reviews on animal experiments. The Group advocates and upholds the "3R" principle in the development of plans on animal experiments:

- Replacement: Before carrying out animal laboratory research, we will first carry out in vitro experimental evaluation on the drug and verify with a small number of animals, actively replacing animal experiments with other methods;
- Reduction: All animal experiment projects must submit an experimental animal ethical review form. Experimental animal usage and experiment frequency are reduced through ethical review and day-to-day supervision. When purchasing experimental animals, the Group also strictly controls the variety and quantity of animals;
- Refinement: The animal laboratories conduct rigorous management on feeds quality and provide good feeding and living environments for the animals used. We give full consideration to animal welfare in experiments and try our best to minimize the pain of the animals.

We have set up corresponding management system and operation procedures according to the actual conditions of animal laboratories, and make detailed instructions on health and safety of laboratories, ethics and welfare of experimental animals and the responsibilities and training of operating personnel. Moreover, we arrange for laboratory animal practitioners to attend training programme and examination organized by the Association for Laboratory Animal of Hebei Province and choose personnel of high technical standard to carry out animal experiments.

#### Industry exchange and cooperation

The Group always values the cooperation and communication with domestic and international research institutions, closely follows the development trends of advanced technologies at home and abroad, and have established good co-operations with many domestic and foreign scientific research institutions. The Group actively sought various cooperation opportunities in 2019. To further supplement the pipeline of products under development, the Group signed cooperation agreements with a number of partners during the year, including product licensing and commercialization agreement for erlotinib with Shanghai Acebright Pharmaceuticals Group Co., Ltd..

In January 2019, the Group acquired the entire equity interest in JMT-Bio in Shanghai. This company is mainly engaged in the research and development of new monoclonal antibodies related to targeted tumor antigens and various cancer immunotherapy. At present, it has obtained clinical study approvals for the JMT101 and JMT103 projects from the National Medical Products Administration and the relevant clinical research works are underway. In addition to the above-mentioned research projects which are already in clinical research stage, JMT-Bio also possesses independent intellectual property right in obtaining mammalian host cell lines with high-level expression ADCC-enhanced antibody through the biallelic knockout technology of a target gene, as well as an innovative immunomodulatory bispecific antibody screening platform which has been patented and successfully screened out several preclinical drug candidates. During the year, the Group also signed strategic cooperation agreements successively with 6 hospitals to promote the development of clinical research projects. These include Tianjin Cancer Hospital, Henan Cancer Hospital, Guizhou Cancer Hospital, Chongqing Cancer Hospital, Xuzhou Medical University Affiliated Hospital, and the Second Xiangya Hospital of Central South University.

Looking ahead, the Group will continue to look for acquisition targets with strong R&D capabilities in the bio-pharmaceutical industry. The future acquisitions will be mainly focused on drugs of new small molecule and macromolecule which are close to product approval and commercial launch so as to increase and supplement the pipeline of product launch as soon as possible in the next few years, and fully leverage the Group's strong marketing and market development capabilities to achieve rapid growth of new products. Meanwhile, the Group is also screening new projects in cooperation with research institutes and technology companies around the world through its dedicated business development staff in the United States.

#### INTELLECTUAL PROPERTY MANAGEMENT

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

The Group has set up a dedicated department of intellectual property management, which conducts comprehensive diagnostic analyses on intellectual property from time to time, formulates patent application and protection strategies for core products in accordance 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 through formulating effective patent protection measures and performs patent searches at key R&D stages to makes early warning analysis and risk prevention of intellectual property rights so as to avoid the risk of infringement. The intellectual property department will access 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 ongoing 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 launch of innovative products, the Group will closely monitor and regularly track the relevant patent information of comparable products and ensures that any violations of the Group's intellectual property rights could be timely identified.

During the year, by taking the opportunity of certification for the intellectual property rights management system, the Group formulated and optimised a number of intellectual property right management mechanisms and procedures in accordance with the "Enterprise Intellectual Property Management". On 24 December, the certification was approved, contributing to the uplifting of the Group's level of intellectual property rights management and the lowering of the risks of intellectual property rights.

#### **Patents and achievements**

During 2019, the drug research and development segment of the Group (including projects licensed in) filed 148 new domestic patent applications, 21 international patent cooperation treaty (PCT) patents and 55 foreign patents, and successfully obtained 52 domestic patents and 8 foreign patents. As at 31 December 2019, the Group has been authorised a total of 392 domestic patents and 186 foreign patents accumulatively.

As members of China Intellectual Property Society, Patent Protection Association of China and Chinese Pharmaceutical Association's Pharmaceutical Intellectual Property Research Professional Committee, CSPC actively participated in the exchange with experts in the industry's intellectual property rights as well as research works on the formulation of laws and regulations on intellectual property rights. In addition, we also took the lead in establishing the China Intellectual Property Development Alliance (Hebei) Biomedicine Professional Committee, which was approved by the China Intellectual Property Development Alliance in January 2020.

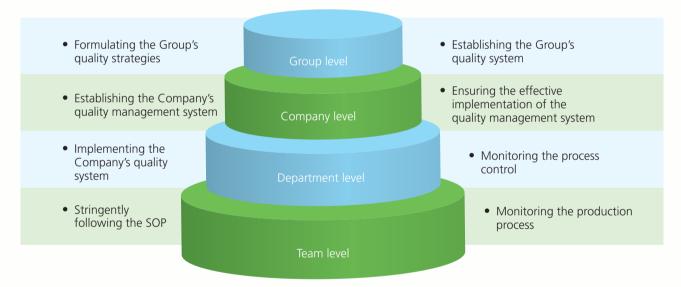
#### PRODUCT RESPONSIBILITY

#### Quality system

The Group upholds its corporate philosophy, which is "All for good medicine, all for mankind's health", and has taken the pursuit of quality as the core strategy for corporate development. The Group has always been strictly abiding by the following laws and regulations of the PRC in respect of product safety:

- 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
- The Law of the PRC on the Protection of Consumer Rights and Interests
- Good Manufacturing Practice (National Medical Products Administration)
- The Measures for the Administration on Adverse Drug Reaction Reporting and Monitoring

The Group practices the four-level (group level, company level, department level, team level) quality assurance system, and has a professional quality management team, which is specifically responsible for the management of quality control and quality assurance of all subsidiaries.



Quality Control personnel at all levels periodically review and update the current quality control system, and coordinate with other departments in improving the quality of pharmaceutical products and making good analyses on the risks of quality and safety, with an objective to meet the latest product quality requirements, both domestically and internationally. The Group has established a sound and comprehensive training system. Each subsidiary formulates an annual training plan and evaluates the training results every year, and conducts quality-related training for all employees strictly according to the training plan to ensure that all new employees, existing employees and transferred employees will receive adequate training for their jobs.

Through a monthly quality analysis and an annual quality review, all subsidiaries summerise the problems encountered in terms of production quality, sales, complaints and services, and formulate corresponding improvement measures. To step up the intensity of supervision and inspection, the Group has revised the quality control plans for all subsidiaries, including the implementation details of various designated inspections and quarterly inspections, in order to identify shortfalls timely and track the progress of rectification measures.

During 2020, the Group will strengthen the implementation of hierarchical management of quality systems as well as the supervision, inspection and guidance of subsidiaries at different levels, in order to improve the overall quality systems of the Group continuously.

#### **Drug Standard Management**

The Group currently has two major product series, namely finished drugs and bulk drugs, of which the finished drugs include powder injection (including lyophilized powder injection), small volume injections (including new preparations containing PEGylated drugs, liposomes, etc.), 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 exporting products 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 stipulated stringent internal control standards to ensure that its products meet the internal control standards before selling to the domestic and foreign markets.

#### **Quality Management Certification**

In recent years, CSPC has been focusing on improving its product quality standards, implementing internationalisation strategies and launching various quality management works in strict compliance with the requirements under various certifications. In 2019, the Group obtained 9 domestic GMP certifications, 3 FDA certifications from the U.S. and 2 certifications from European Union ("EU") or its member countries. The followings are the Group's major domestic and international certifications achieved by the end of 2019:

Certification	Certification Authority	Details
New GMP Certification	National and Provincial Medical Products Administration	All products and formulations passed the new GMP certification
New GSP Certification	Medical Products Administration of each province (city)	The pharmaceutical wholesale enterprises of the Group passed the new GSP certification
ISO9001 Certification	Third party authority	All of the production subsidiaries of the Group passed the certification
U.S. FDA Certification	U.S. Food and Drug Administration	Passed the FDA certification for a total of 21 times
EU Certification	Drug Administrations of member countries of European Union	Passed the on-site inspection of European Union and its member countries for a total of 6 times
Certification of Suitability to the Monographs of the European Pharmacopoeia ("CEP") Certification	European Directorate for the Quality of Medicines	7 products obtained CEP certifications

In March 2019, we vigorously promoted a comprehensive gap analysis on hardware and software conducted by the subsidiaries in accordance with the compliance guidelines of the Current Good Manufacturing Practice (cGMP). Based on the specific features of the Group's products, we completed the compilation and distribution of the cGMP inspection standard in June.

#### **Product Quality Commitment**

The Group's quality management and inspection teams possess numerous management staff with bachelor's degrees and master's degrees or above who effectively implement various quality management work of the Group. In order to safeguard the safety of medication and the interests of patients, we have been adhering to the following quality commitments:

- 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 restrained from deceptive or fraudulent practices 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" 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; ensuring all quality inspection activities are stringent and effective with traceable records of relevant quality management;
- 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 terms of hardware, the Group monitors the pharmaceutical production process through the use of advanced instruments at home and abroad to ensure that the entire production process from raw materials to finished products is controlled. In addition, in order to explore the international market, we have invested in a number of new drug industrialisation and preparation internationalisation projects in the past few years, and actively carried out benchmarking work with foreign standards in terms of quality standards and quality management systems.

In 2019, the Group launched the monthly quality programme, multiple quality management group activities and a number of quality research projects, and also arranged technical personnel of the whole group to conduct internal audits and special supervision and inspection on each subsidiary according to the internal audit plan.

#### The Approval Process of Material Receipt and Good Issue

Material Receipt: All materials are procured from qualified suppliers that have already been approved. Materials received by the plants must be checked and accepted before storage in accordance with specific storage requirements with labeling indicating that the materials are to be inspected. Only after passing the sampling inspections by the quality management department that the materials can be labelled as "passed" and delivered to the workshops.

Production: After the materials are received by the workshops, production is completed in accordance with the technical specifications and the standard operating procedures of the relevant positions. After sampling retrieval by the quality management department, the finished products are transferred to the warehouse for subsequent inspection.

Good Issue: The quality control department issues qualification reports on finished products that have passed the inspection. The product can only be released after it has been reviewed and approved by the quality assurance department with the issue of a release certificate.



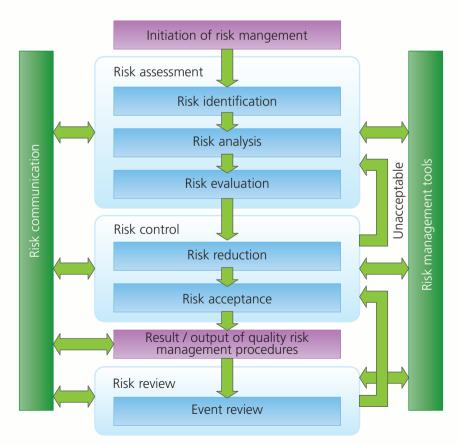
#### **Quality and Safety Risk Management**

CSPC highly values the medication safety of patients and is committed to the sound management on quality and safety risk. During the year, the Group vigorously promoted the construction of the pharmacovigilance system, and optimised the management system and procedures of the Drug Safety Committee, contributing to the successful implementation of the new system in the formulation subsidiaries during the year.

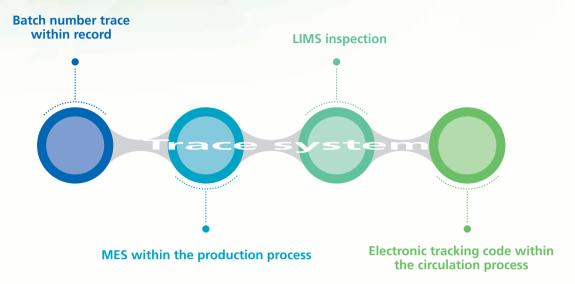
#### **Risk Prevention and Control System**

In accordance with the requirements of GMP and FDA certifications, the Group reviews the current "Quality and Safety Risk Precautionary Plan" and "Management Procedures for Quality Risk Monitoring, Evaluation and Warning" from time to time, by referencing the guidelines of the World Health Organization (WHO), the International Society for Pharmaceutical Engineering (ISPE) and the International Conference on the Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH), etc.

With a comprehensive quality risk prevention and control system, we have clearly established the assessment procedures and the corresponding preventive and control measures for quality and safety risks. During the risk assessment process, the quality supervision department uses risk assessment methods such as Failure Mode, Effects Analysis and Fishbone Diagrams to conduct risk assessment of various drugs and production procedures while implementing classified management to formulate corresponding mitigation measures based on the evaluation results.



Drug quality and safety tracing and recall system



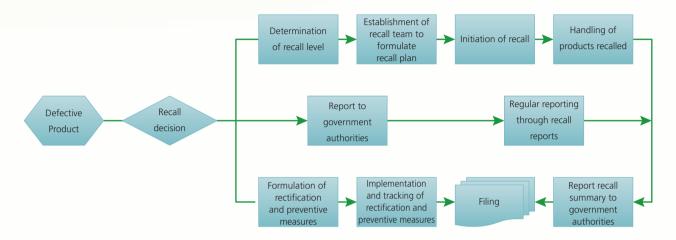
The effective operation of the quality and safety tracing system requires the designated departments to supervise all aspects of the entire drug life cycle, ranging from material procurement, drug production, finished product inspection to sales and shipment, etc. We pay close attention to the data related to adverse drug reactions, and quickly grasp the specific information of such reactions as well as their trends, so as to prevent the occurrence of mass and serious adverse reactions.

#### Pharmacovigilance System

The Group's headquarter has established an impeccable pharmacovigilance management mechanism, which guides the subsidiaries in setting up reliable pharmacovigilance management system, and supervises the operation status of the pharmacovigilance systems of various drug preparation companies. The Group has also established a drug safety committee responsible for the handling of major drug safety incidents at Group level. The subsidiaries are responsible for the maintenance and execution of the pharmacovigilance system for the drugs at the company level, as well as the establishment and improvement of relevant procedures in collecting, reporting and handling of adverse drug reactions. In addition to a designated person in charge of the adverse drug reaction monitoring department, each of the subsidiaries also employs appropriate number of designated adverse drug reaction monitoring personnel according to the respective production scale for the effective execution of pharmacovigilance management system.

With the effective execution of the Group's pharmacovigilance management system, drug safety commission management system as well as the major drug safety incident emergency response system, rapid response measures and timely reporting to relevant authorities (including National Medical Products Administration and Hebei Province Adverse Drug Reaction Monitoring and Evaluation Centre) are ensured when there are incidents of mass and major adverse drug reactions. Meanwhile, the Group also updates and submits a periodic drug safety report annually in accordance with the requirements of the Provisions for Adverse Drug Reaction Reporting and Monitoring.

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. In 2019, there was no case of product recall due to reasons of safety or health for any products sold or shipped by the Group.



#### **Product Complaint Handling**

By adopting a product complaint handling process, the sales department will get in touch with the customers as soon as possible upon 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 and summary analysis on the indicators of product quality and marketing services. The comprehensiveness and effectiveness of the complaint channels and feedback mechanism are assessed through customer visits, forums, seminars, monthly sales analysis meetings and annual marketing seminars.



At present, the subsidiaries of the Group have set up offices in large and medium-sized cities in provinces across the country. After-sales service personnel provide comprehensive pre-sales consultation and after-sales services to the surrounding markets. Customer service centres and service hotlines are set up in all marketing systems to facilitate immediate access by the customers in getting consultations and filing complaints.

#### **COMPLIANT MARKETING**

Integrity and trustworthiness are the first and foremost requirements of our management team in the Group's corporate culture.

The Group has long been operating in good integrity and has in place an integrity supervision mechanism that constitutes professional legal counsel to regularly arrange trainings 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. Apart from these, we also attach great importance to the privacy of our customers, and according to the terms and conditions of sales contracts, guarantee that customers' data will not be lost or leaked during the sales process.

At the same time, the Group establishes an internal management system in accordance with relevant requirements under the Contract Law. 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 briberies in all forms. The Group complies with the market rules and sticks to the marketing philosophy of integrity and trustworthiness, requiring the employees to win the market and gain credibility from customers with high-quality products and sincere service.

#### SOUND TALENT MANAGEMENT IS OUR RESPONSIBILITY TO THE EMPLOYEES

CSPC deeply understands the importance of a sustainable development achieved by the corporation and its talents together. Hence, we are committed to fostering a sound working environment for the growth with our employees.

CSPC's development and success rely on talents. In 2019, the Group promoted the idea of "giving values to talents and capable people to achieve our goals and develop their full potentials", making the development of individual's career closely linked with the development of the enterprise. We hope to encourage employees to achieve performance and enhance self-worth with "making success and achieving personal goals" as the objective they pursue through creating the best environment for the personal growth and development of employees. To this end, the Group's human resources center adjusted its focus on top of the original organizational structure in 2019 as set out below:

- 1. By taking recruitment planning as top priority, improved the recruitment process and hiring channels of high-calibre talents, and equiped the R&D, clinical, sales and overseas R&D teams with high-calibre talents to support the rapid development of business;
- 2. Carried out organizational optimization and set up a talent pool, clearly defined the criteria for talents and closely monitored the situation of the talent pool in order to accumulate resources for subsequent development;
- 3. Established competitive compensation and incentive policies by benchmarking with the industry compensation standards, and completed the compensation reform and adjustment for the management level, mid-level and entry level personnel during the year;
- 4. Optimized the matching of people with the organization's functions and roles to improve employees' productivity level and competitiveness;
- 5. Carried out an upgrade of the human resources information system, refined the performance appraisal standards together with optimization and streamlining of workflow, with an aim of building a highly efficient team progressively using big data over the information network;
- 6. Strengthened the improvement of the employees' professional abilities by organizing 1 human resources seminar and 2 professional trainings, covering a total of 259 participants.
  - Team discussion jointly defined the missions, visions and values of CSPC's human resources

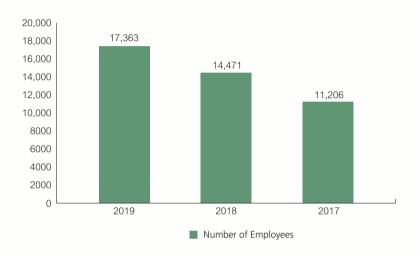
    Professional training provided systematic training of practical tools and methods for various modules;

    harnessed the methods of evaluation, selection and development of reserve talents according to the situation of the corporation, in order to enhance the professionalism of human resources work.

According to the deployment of the Group's reform work in "further streamlining the organization and business processes, promoting a substantial increase in corporate work efficiency and economic benefits, and guiding all employees to enhance their work styles and work attitudes", the Group launched its organizational restructuring and employee optimization in May, in order to optimize the business processes of various departments and improve work efficiency. Meanwhile, the appointments of management staff were made through fair competition, with improvement of person-role compatibility and overall management personnel's qualities.

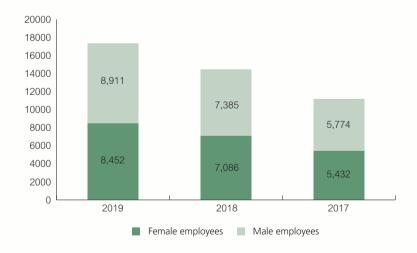
#### **TALENT STRUCTURE**

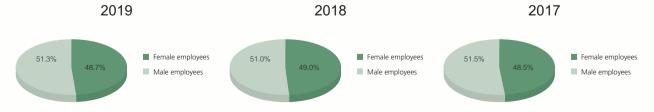
As at the end of December 2019, the Group had 17,363 employees, representing an increase of 2,892 employees as compared with that at the end of 2018. In particular, 17,278 were employees based in the PRC (2018: 14,408 employees). During the year, the Group continued to optimize its employee structure and adhere to its objective of recruiting young talents who were more internationalized and professional, in order to cope with our business transformation in recent years.



#### Gender

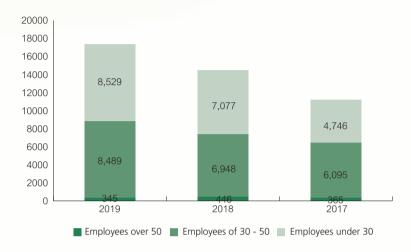
The Group always treats every employee fairly and justly, and emphasizes the importance of gender equality by maintaining similar proportion of men and women employees.

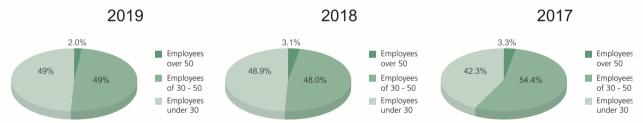




#### Age

The Group is committed to the rejuvenation of talents and the construction of a new generation of talents for its personnel structure to match with the Group's future business development. More and more young people are taking up the Company's core positions and making up the backbone of the Company.





#### **Academic qualifications**

Each year, the Group recruits a large number of outstanding talents into the organization, not only to fill entry-level positions but also to recruit more knowledgeable and experienced talents with high academic qualifications. As at the end of December 2019, personnel with undergraduate degrees and above accounted for 43.5% of the total number of employees of the group, representing an increase as compared with the previous two years.

	Doctorate	Master degree	Bachelor degree	Diploma	Below diploma
■ 2017	44	604	3,304	3,636	3,618
■ 2018	67	759	4,543	4,990	4,112
■ 2019	131	1,260	6,161	6,176	3,635



#### **EMPLOYMENT AND LABOUR INTERESTS**

#### **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 adhered 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 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 kinds of activities like employee contest, employee rights protection, recreational activities and staff travel activities 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 employees that the employees' wages will increase together with the Group's growing profits.

#### **Talent Recruitment**

Talents are the core competitiveness of an enterprise. Corporate development and product innovations require the contributions from a team of industrial technology experts made up of a large number of high-caliber talents with strong capability to learn. The Group carries out analysis of the current human resources conditions and relevant positions from time to time, and after determining the objectives and requirements for talent recruitment, it enlists all kinds of talents of various backgrounds with a combination of full time and flexible employments.

During the year, the Human Resources Center further optimized the high-calibre talents recruitment process and channels by entering into cooperation agreements with the top 10 recruitment agencies in the country including Liepin and Risfond, which provide a channel for the recruitment of high-calibre talents. We hope to attract talents through our corporate vision and professional development plan, so as to ensure the steady progress of the Group's strategic development.

In 2019, the Group put efforts in recruiting talents for the middle and high levels, with positions distributing mainly in strategic marketing department, processes and information centre, engineering management center and clinical development department. To enhance the Group's overall capabilities in research and development, clinical development and product marketing, the Group's R&D business department, clinical development business department and NBP sales team recruited a total of 43 employees with doctorate in 2019.

#### **DEVELOPMENT AND TRAINING**

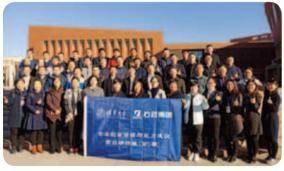
#### **Professional Training**

Following the acceleration of knowledge and technological upgrades, enterprises need to carry out staff trainings constantly to sustain innovation and the embrace of new ideas. During 2019, the Group pushed forward the construction and optimization of the talent pool, defined standards and organized various kinds of training courses, including new recruits' orientations, SDM office manager training, pharmacy courses, Tsinghua courses (Session 2), etc. By focusing on the Group's business needs and the trainees' development needs within the organization, Human Resources Centre designed training programs for different levels and different professional areas, creating an ideal ecological environment for the nurturing of talents. The following are the statistics of the average number of training hours for the Group's employees:

(Unit :hours)

	2019	2018
By employee type		
Top management staff	52	49
Middle management staff	68	41
Junior staff	94	88
By gender		
Female	93	84
Male	93	85







In 2019, we were committed to pushing ahead with training for the entire staff, by providing relevant trainings to all employees, male or female, at different levels and in different regions. At Group level, the Human Resources Centre organized a total of 66 training sessions, covering 47 types of specialized courses and 7,284 participants during the year. Annually, the subsidiaries also provided their employees at all levels with trainings in technical, laws and regulations relevant to their respective departments, which were effective in promoting the employees' general legal knowledge and relevant works in corporate governance.

# Case Study 1: CSPC-Tsinghua University – Corporate Innovative Management and Capability Building Advanced Level Seminar (Session 2)

In view of the excellent training results of Session 1 in 2018, Human Resources Center continued to cooperate with Tsinghua University to launch the 2019 "CSPC Corporate Innovative Management and Capability Building Advanced Level Seminar, with an objective to build a team of talents who possess innovative minds and the ability to lead transformation under the new management style. The training course was divided into 4 times, which took 4 months to complete. The training contents covered four modules including scientific leadership and innovation, corporate management and leadership acumen, team building and talent echelon construction as well as communications management. Through this training, the participants experienced in-depth reflection of themselves, simulating their motivation in learning as well as in exploration of innovative ideas. They had their problem solving skills enhanced by taking a higher-up perspective, which is helpful for team building and talent development, thus facilitating corporate cohesion and shaping an excellent corporate culture.

#### Case Study 2: 2019 CSPC SDM Office Manager Overall Capability Enhancement Training Camp

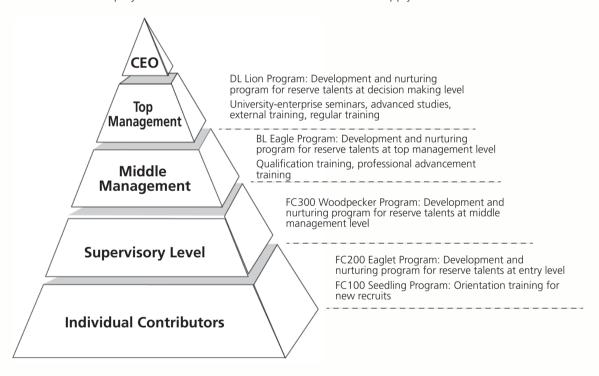
With rapid development of the Group's various business segments, the number of front-line sales personnel demonstrated a surge, and fast expansion of the market share was used as an important measure to win the competition. At the forefront of tactical implementation and to achieve targets, the SDM Office Manager plays an important dual role in both tactical execution as well as team management in the entire company's business chain. The Group conducted in-depth study of over 500 office managers which discovered eight business requirements of the office managers (including achievement of targets, resources consolidation, regional planning, major client management, team motivation, staff coaching, training and guiding of subordinates as well as recruitment interviews). These, together with the competence level of the management position, formed the three aspects for setting the training objectives of the program. From the beginning of the first training session of the first to the tenth training session of the third course, the training camp lasted for more than 4 months, with 511 participants, of which 198 were from oncology business division and 135 were from common generics business division. There were a total of 30 training sessions for the whole camp.

#### **Development and Incentive**

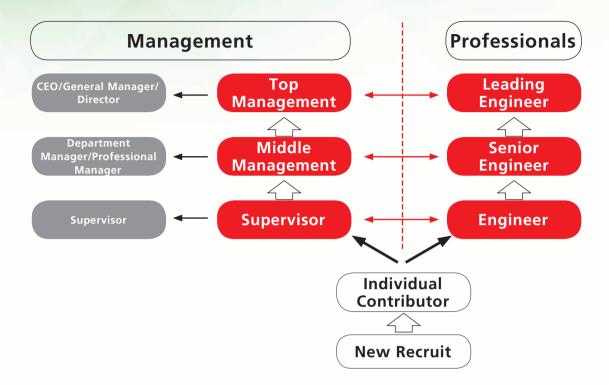
With a visionary mind, an open attitude and an accommodating style, CSPC attracts talents of different strengths. During recruitment, we look for not only an applicant's academic qualifications, background or age, but also his/her integrity, capability and performance. In the use of talents, the Group welcomes cultural diversity and brings out greater value from each talent by taking advantage of his/her strengths and avoiding the weaknesses.

Human Resources Center commenced a talent inventory count in April 2019 to get a clear picture of the Group's talent situation, so as to identify high-potential talents to cope with the Group's strategies. From the inventory count for the top, middle and entry levels in April and May, we have obtained the number and the distribution of high-potential talents within the Group (with counting results adjusted according to inputs from job and function description meetings), which formed a new foundation for personnel optimization as well as appointment and deployment of managers.

CSPC adopts a human resources development and management model based on the principle of employees' competence. A management evaluation and selection system was established and a talent development plan catered for all levels of employees was formulated to ensure a sustainable supply of different talents.



The Group has established a sound mechanism for employees' performance appraisals. According to the results of the performance appraisals at the end of each year, salary adjustments will be made for employees whose performances are rated as "excellent" or "good". As for the construction of the professional and technical teams, the Group has completed the construction of "the Professional Sequencing and Competence Management System" and will periodically conduct assessments and evaluations of professional competence as well as general core competence on promoted employees, in order to achieve the dual development path of professional and technical skills.



In 2019, the Group improved the remuneration system and appraisal mechanism and completed the design and implementation of compensation and incentive program for employees of top level, middle level, general management and operation staff. The average salary adjustment targets for the Group's employees at middle level and below as well as employees of various subsidiaries were determined by benchmarking industries and referencing the salary standard of peers within the provinces. According to business nature, the Group has completed the formulation and setting of broadband remuneration standards for sales, production and functional top management, and at the same time has formulated and implemented quarterly assessments for top management in sales and annual growth bonus packages, so as to provide top management in sales department with short-term and long-term incentives.

In addition, we have made refinements to the management of middle level and below as well as the broadband compensation principles and requirements for technical personnel. We have also reviewed the grade mapping methods and grade mapping results from various subsidiaries. Following the approval by the Board, the broadband remuneration scales of management and technical personnel at middle level and below were implemented since January.

#### TALENT RETENTION

The Group is committed to maintaining a stable employee turnover rate by strengthening the incentives for our employees, improving their remuneration and benefit packages and organizing various cultural and public welfare activities. The staff turnover rate for the year 2019 was 12.2%. An analysis of the turnover rate is shown as below:

	Employee Turnover Rate (%)
By Age	
Employees over 50	13.8%
Employees from 30 to 50	8.4%
Employees under 30	15.7%
By Gender	
Female employees	12.3%
Male employees	12.2%
By Region	
Mainland China	12.2%
Overseas, Hong Kong, Macau, and Taiwan Districts	14.1%

In order to enhance the level of employees' happiness and to maintain a team of stable frontline workforce, which will in turn add value to our corporate social responsibility, the Board of the Group decided to adjust the frontline employees' salaries in 2019. Human Resources Center formulated the "Salary Adjustment Plan for the Company's Operating Employees of Production", and established grading for various positions, completed employee evaluation and standardized the salary levels, benefit programs and remuneration structure for the Group's operating staff.

In 2019, two apartment buildings (Talents' Apartment and High-tech Zone Single Apartment) of the Group for the accommodation of single employees were put into use, providing 1,000 and 360 beds respectively. The single apartments are equipped with living and sports facilities such as canteens, gyms and libraries, ensuring the employees can live happily and work without distractions. In addition, the Group has also put a High-tech Zone Experts' Apartment into use during the year, providing an ideal residence for the high-calibre talents recruited.

#### **HEALTH AND SAFETY**

CSPC adheres to the production safety approach of "Safety first, Prevention Foremost and Comprehensive Management", and follows the occupational health and production safety philosophy of "people-orientation and regarding employees as the most treasured asset of the corporation", "believing that all accidents can be avoided". By building an enterprise with specific safety standards and striving to raise the level of safety quality, we consistently look for improvements and achieve excellence. We thoroughly implement the relevant law and regulations of the "Law on Production Safety of the PRC". All subsidiaries are requested to timely identify and update information in respect of relevant regulations each year to ensure that their respective occupational safety management systems operate effectively in accordance with the relevant laws and regulations. Each employee should strictly perform the safety responsibilities in the respective position, and conscientiously promote the responsibility system for safe production, with an aim to achieve full participation in the production safety management for the entire process by all employees.

In 2019, the Group carried out an overall upgrade on its organization structure and constructed an environmental, health and safety management framework based on the standards of ISO14001 and OHSA18001 management systems and under the guiding principles of CSPC's corporate culture. We facilitated the improvements on EHS management through pilot scheme of gap analysis based on the management framework and also the action plans formulated for continuous improvements. Over the years, each of the Group's subsidiaries achieved the target for occupational health and safety management – "Five Zeros 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 has established a sound production safety management system and are 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". The production department of its subsidiaries are also required to take the relevant works of occupational health and safety into account during the establishment and formulation of production procedures. Each of the manufacturing subsidiaries has already possessed various conditions for safe production, passed relevant certification for occupational health and safety management and safety standardisation assessment, and obtained safety production permit. In 2019, with the main objective of implementing a safety production responsibility system on all employees, CSPC consistently strengthened the fundamental management measures for on-site operation, promoted the dual prevention mechanism which encompassed risk classification control as well as potential hazards inspection and mitigation, with effective integration into EHS system. It also promoted the construction of EHS culture with characteristics of CSPC culture, to ensure the high quality development of the Company. In 2019, Ouyi Pharmaceutical was honoured with the title of "Municipal Safety Culture Demonstration Enterprise".

In order to avoid injuries or fatal incidents caused by equipment, all technical equipment departments of subsidiaries periodically carry out comprehensive and professional inspections on all types of equipments of the Company, prepare and approve the equipment overhaul plans of the Company to ensure the effective use of protective equipment for prevention against dust and poisonous materials as well as labour protection facilities. In the event of any equipment failure, the departments will immediately conduct investigation, obtain evidence, propose solutions



and implement rectification as required. During the year, we continued to strengthen risk management in respect of production safety, and established a risk management system, encompassing end-to-end process including project initiation, design, implementation, operation as well as review and rectification.

The Group has also placed great emphasis on the following works:

- Supported the policy of "Three Simultaneous" construction for occupational health and production safety, and actively pushed forward a number of projects through simultaneous requirements in the design, inspection and acceptance processes;
- Established a preliminary risk database at company-level for the accumulation of risk management experience,
   which would be effective in guiding risk management during production processes;
- Adopted an approval/permit system for safety management of special operational processes, by including
  working at heights, hot works, operation with temporary use of electricity, confined space operation and
  blind plate operation as critical areas for close monitoring. A total of over 5,000 permits were processed,
  which effectively lowered the impact of special operations risks on production safety.

#### **Safety Execution**

During the year, CSPC has actively fostered the culture of safety execution by guiding the execution, inspection and assessment of the safety system and at the same time promoting the development of safety leadership. The management team vigorously practiced typical safety behaviors and promoted corporate culture, with senior management members including the Group's CEO, general managers of subsidiaries participating in safety inspections.



The Group vigorously promoted the enhancement of ability in executing safety policies which encompassed risks, responsibilities, capability and evaluation, and specifically implemented tasks such as work-related risks notifications, public notices regarding points of hazards, responsibility acceptance, safety management abilities and monthly assessments.



#### **Work-related Risks Notifications**





#### **Safety Contingency Management**

Over the years, we have been optimizing the emergency management mechanism and strengthening the construction of the emergency rescue system in order to improve the ability in preventing and responding to accidents. The Group has already established a preliminary three-tier contingency management mechanism comprising the company level, subsidiary level and workshop level of responses.





In 2019, the Company set up a total of 5 dedicated response teams with a total of 66 persons, as well as 16 part-time response teams with a total of 350 persons. With a total of 20 comprehensive emergency drills and 90 special emergency drills conducted, the emergency response capabilities of the team have been greatly enhanced.

#### **Occupational Health**

Under the guiding principle of "People Orientation", CSPC puts a lot of emphasis on the protection of employees' occupational health, and occupational health protection facilities of all subsidiaries have passed acceptance testing. In 2019, over 10 occupational health protection upgrade projects were implemented to strengthen the Group's occupational health protection capability.





The Group has established a sound occupational health monitoring system, and provides occupational health examinations for employees in the positions exposed to occupational disease hazards in accordance with the requirements of the "Law of the PRC on Prevention and Control of Occupational Diseases". In addition, we have also engaged third party institutions to carry out occupational hazard factors detections for all positions of the subsidiaries which are subject to exposure of dust and toxic materials. The occupational health monitoring records are updated to provide employees of relevant positions with effective monitoring and preventive measures. In 2019, the

Group provided regular occupational health checks to more than 20,000 employees at 240 identified positions with occupation health hazards, and continued to maintain an excellent performance of zero report of occupational disease.

The subsidiaries of the Group also constantly perform continuous re-identification and re-assessment of risks from 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 production and operation of the subsidiaries. This method 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 acetone, 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 (such as protective masks at positions exposed to hazardous or harmful gas and dust) 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 notes that clearly set out the types, consequences, precautions and emergency treatment of the hazardous chemicals.

#### Fully enclosed powder extraction operation (for prevention of dust hazard) at Zhongrun Production Base



#### **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. The subsidiaries of CSPC also carry out training and education for all employees and related parties in accordance with the requirements of national laws and regulations. These include different types of specialized trainings including Environmental Health and Safety Education for new employees, job transfer education, safety operation, emergency training and fire prevention training. In 2019, a seminar was set up jointly by all the subsidiaries and CSPC University, providing professional, technical and management trainings in the aspects of Environmental Health and Safety (EHS).

During the year, each major subsidiary held a "Safety Month" activity and launched a series of emergency drills, safety education for all employees as well as potential hazard 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.

#### Safety knowledge training at Ouyi Pharmaceutical Co. and NBP Pharmaceutical Co.



# EMPLOYMENT AND LABOUR PRACTICES

The followings are the highlights of safety production management performed by the Group's subsidiaries during 2019:

Name of Subsidiary	Working Items
Innovation Pharmaceutical Co. ("XNW")	The local emergency management authority designated XNW as one of the two enterprises in Luancheng District for corporate safety culture pilot-program. The Occupational Health and Safety Department formulated a safety culture implementation plan and commenced a compliance evaluation based on the requirements of production safety standards and corporate safety culture. During the year, XNW established and optimized 11 items on the safety management system and carried out corporate culture training for all staff, and in October 2019, it successfully passed a review and won the honorary title as a Safety Culture Demonstration Enterprise in Shijiazhuang City.
Zhongrun Production Base	<ol> <li>The "Management Standards for the Announcement of Safety Risks Assessment and Undertaking" was prepared in accordance with the "Notice from the Ministry of Emergency Management on the Announcement System in Relation to the Full Implementation of Safety Risks Assessment and Undertaking by Enterprises Engaged in Hazardous Chemicals". Signage for the Announcement of Safety Risks Assessment and Undertaking was also prepared;</li> <li>The "Safety Education Management Standards" was amended in accordance with the "Regulations and Practices for Safety Training by Production and Operating Enterprises in Hebei Province". Efforts were also made to improve employees' safety training records.</li> </ol>
Ouyi Pharmaceutical, Zhongnuo Production Base	<ol> <li>A large variety of safety activities (including safety publicity and education, talent competition on the theme of safety and fire prevention techniques competition, etc.) were organized during the Safety Month;</li> <li>Ranking of contributions to safety construction by position and team were prepared quarterly, and everyone was reminded to competently carry out safety activities and hazard inspection;</li> <li>According to "the Regulations on Hebei Province's Production Safety Risk control and Potential Hazard Management", risk classification was implemented in risk management and control such that potential hazards could be inspected and prevented based on such classifications. A potential hazard network was also established to mitigate safety hazards.</li> </ol>
Baike Shandong	During this 18 <sup>th</sup> anniversary of Safety Month, safety activities with the theme of "Promoting Safety Culture and Improving Safety Quality" were organized. A series of activities including publicity and training on laws and regulations, production safety incidents case studies, collecting "Video Clips of Safety Quotes from Family Members", inviting professional medical personnel to CPR demonstration and training as well as production safety knowledge competitions were launched, which further enhanced the emergency handling skills of the whole staff.

# EMPLOYMENT AND LABOUR PRACTICES

# **Safety Management Performance**

In 2019, the Group adhered to high management standard in EHS. The following are numbers relevant to Occupational Health and Safety Assessment Series (OHSAS) standard:

No. of safety inspections	755 times
No. of potential safety hazards	14,027 items
No. of rectifications for safety hazards	13,927 items
Safety hazards rectification ratio	99.29%
No. of persons exposed to causes of occupational diseases who required medical examinations	2,383 persons
No. of persons exposed to causes of occupational diseases who actually took medical examinations	2,383 persons
No. of persons covered by safety training	5,150 persons
Total duration of safety training	170,873 hours
Duration of safety training per person	33.18 hours

# GOOD ENVIRONMENTAL PROTECTION PRACTICE AS CORPORATE RESPONSIBILITY TO THE ENVIRONMENT

It is vital to strike a balance between corporate development and environmental protection. We fully recognise environmental protection as an essential part of the social responsibility in economic development and therefore have been dedicated to mininising the impact of business development on the environment and natural resources.

CSPC upholds the core corporate value of "All for good medicine, all for mankind's health" and maintains the balance between corporate development and environmental protection, incorporating "Green development to create a prosperous life" as the corporate's philosophy for environmental protection. The Group actively relieves the burden of the environment in the process of product manufacturing, contributing to the sustainable development of the society. During the year, Zhongnuo's Zhongrun Production Base has been listed as the first batch of ecological and environmental-positive strategic emerging enterprise in Shijiazhuang City, whereas Zhongnuo's Taizhou green factory construction project has obtained the title of "Green Factory" after being assessed by the Ministry of Industry and Information Technology of the PRC.

# Environmental Targets 2025

In 2019, CSPC formulated a 5-year plan (namely "Environment 2025") using 2017 baseline, and strived to achieve the following targets by 2025:

- reducing carbon emission by 20%,
- reducing nitrogen oxides emission by 20%;
- reducing sulphur dioxide emission by 20%;
- reducing general solid waste emission by 10%, and achieving 100% detoxification treatment on hazardous waste;
- reducing COD waste water emission by 20%, and ammonia nitrogen by 20%;
- decreasing energy consumption per unit of operating revenue by 5%;
- decreasing water consumption per unit of operating revenue by 5%.

# **ENVIRONMENTAL MANAGEMENT SYSTEM**

CSPC's management of environmental protection follows the management principle of "prioritising whole process control over prior control, prior control over in-event control, and in-event control over subsequent control" to strengthen the focus on evaluation management of the environmental impact. The environmental protection management will focus on environmental evaluation management, assessment management, the compliance with pollutants standard, energy conservation and emission reduction in the whole process of production. In 2019, all the Group's major subsidiaries passed the ISO14001 Environmental Management System Certification.

The Group is committed to the identification and management of environmental protection risks and to enhancing 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 that amendments can be timely made on relevant policies and procedures.

Meanwhile, the Group has set up a contingency mechanism for environmental emergencies and formulated "Contingency Plan In Response To Environmental Emergency" 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.

### POLLUTANT PREVENTION AND CONTROL

The Group strictly complied with the laws and regulations on pollutant emission and the relevant regulations and amendments issued by Hebei Province and Shijiazhuang. Each subsidiary identifies the applicable laws and regulations and other requirements and annually establishes the indicators for pollutant discharge in with the focus on the entire process of declaration, monitoring, and treatment of hazardous wastes.

Furthermore, each subsidiary is required to apply for a pollutant emission permit from the government authorities and takes the initiative to receive the supervision of governments and third party institutions. Each subsidiary also needs to install online monitoring system for major water and atmospheric pollutants so that the emission of these pollutants can be monitored constantly. The Group attaches great importance to the impact of the production process on the surrounding environment. 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 total volume of pollution emissions so as to ease the pressure of control at the output end.

### **Exhaust Gas**

The Group's exhaust gas mainly comes from boilers, production processes, and exhaust gas produced in waste water treatment. Exhaust gas is generally handled by absorption and catalytic combustion.



SNCR Denitrification



Two-level Wet Spray Absorption Tower



Wet Static Dedusting and Mist-eliminating Purifiers



Online Monitoring System for Smoke and Gas Emission

The Group actively manages exhaust gas emissions generated during the production process. In addition to the enclosed collection of exhaust gas emissions, the Group has also installed 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.

## Treatment of Volatile Organic Compound (VOC)

VOC is collected and handled by methods such as active absorption, combustion, absorption degassing, condensation collecting, and biological treatment, in order to reduce VOC emission and improve odor pollution in the plant sites.

### **Ecological Environmental Treatment Systems**



**VOC Treatment System** 



VOC Collection Piping System



Exhaust Gas Treatment Facility at 102 Workshop of Ouyi Production Base







VOC Online Monitoring System of Ouyi and NBP



Online Monitoring of COD and Ammonia Nitrogen Discharge

### **Greenhouse Gas**

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 Auditing and Reporting Greenhouse Gas Emissions for Industrial or Other Industries in Hebei Province (Trial)" issued by Hebei Provincial Development and Reform Commission, the Group's subsidiaries compiled greenhouse gas emissions reports which contain 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. The Group will pay close attention to the audit method and reporting requirements for greenhouse gas emissions and strengthen the related data management work.

#### **Waste Water**

The Group's waste water treatment mainly adopts biodegradation, together with the best combination options of physical and chemical processes. Each subsidiary has established its waste water treatment centre and treatment station, thus ensuring waste water discharge complies with the standard through real-time monitoring.

The industrial waste water discharged into the pipes by our subsidiaries containing pollutants (such as chemical oxygen demand ("COD") and ammoniac nitrogen) need to be pre-treated by the internal sewage treatment station of the factories before being discharged into the municipal sewage treatment system to ensure that the discharged waste water can meet the national integrated waste water 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.

Zhongnuo New Waste Water Treatment Facilities







IC Tower

NBP and Ouyi Joint Environmental Protection Centre



Exhaust Gas Treatment Facility at 102 Workshop of Ouyi Production Base

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, to ensure that the sewage discharge would consistently meet the standards. The Group's subsidiaries are required to strictly implement the "Management System for Sewage Discharge" and the "Standard Operation Procedures of Processing System at Sewage Processing Centre" and carry out strict inspection on waste water discharge of workshops.

#### Solid Waste

Industrial solid waste can be broadly categorised as non-hazardous or hazardous waste. Having always been following the principle of "reduce, utilize and detoxify", the Group firstly adopt various measures to reduce the production and emission of solid wastes from its source and secondly recycle all possible reusable resources and energy. Lastly, detoxification treatment is carried out to reduce the hazardous pollution of solid waste. Domestic and non-hazardous solid wastes are collected by the municipal environmental hygiene department.

# Measures to reduce the volume of solid wastes

1. Reducing the ultimate volume of solid wastes emitted to the environment through more efficient use of resources:

Through resource recycling, we transfer wastes generated from daily living and production (such as bottles, cans, waste paper, waste packaging materials, etc.) to recycling companies for reuse, thus reducing the volume of ultimate emission to the environment.

In addition, the Group cooperates with fertilizer production enterprises to transform fermentation waste residue into raw materials for production of organic fertilizers, and returns activated sludge to environmental protection facilities or transfers to professional agents for further treatment after dehydration.

2. Strictly controlling work process to reduce the generation of solid wastes

All subsidiaries put efforts in improving production processes every year and
strictly control and reduce the generation of solid wastes from production
processes.

The Group appointed dedicated personnel to manage the hazardous wastes and makes further suggestions on the compliance management of hazardous waste in accordance with the amendments to "National Catalogue of Hazardous Waste" from time to time. Each subsidiary periodically declares to the government authority and establishes corporate's hazardous waste warehouses to enhance the management and monitoring processes of the storage of hazardous waste. After the hazardous waste has been transferred to the qualified companies, they will be engaged to carry out centralised detoxification treatment to ensure that the hazardous waste disposal fulfills the compliance requirement.

### Warehouse for hazardous wastes and record keeping at Ouyi





### **ENERGY UTILISATION**

The Group has established a sound 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 quota management on various types of energy consumption in the production workshops 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 assigned 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 recent years, the Group rolled out intelligent energy conservation management for enterprises in the integrated zone. The actual daily energy consumption data of each workstation is sent to energy management centre for comparison and analysis of information in the auto-generated daily data, weekly data and monthly data reports against indicators, based on which intelligent adjustment to energy consumption will be 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 start 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 consumption facilities in accordance with the principle of rational use of energy, put forward recommendations or plans for energy-saving measures and provide regular energy-saving education and on-the-job energy-saving training.

The following are the details of the Group's pollutants emission and resources usage during 2019:

Pollutants emission				
Type of pollutants	Emission		n Intensity	
	2019	2018	2019	2018
Greenhouse gas	925,863.14 tCO2e	981,708.42 tCO2e	4,189 tCO2e /RMB100	5,541 (tCO2e /RMB100
Other exhaust gases			million income	million income)
<ul><li>— Sulfur dioxide</li><li>— Nitrogen oxides</li></ul>	1.91 tonnes 13.15 tonnes	37.50 tonnes 93.92 tonnes		
Solid Waste  — Hazardous waste  — General industrial waste	50,377.05 tonnes 10,846.59 tonnes 39,530.46 tonnes	54,213.72 tonnes 9,321.77 tonnes 44,891.95 tonnes	228 (tonnes/RMB100 million income)	306 (tonnes/RMB100 million income)
Waste water Including: — COD	11,310,000 tonnes 860 tonnes	7,040,000 tonnes 917 tonnes		
— Ammonia nitrogen	68 tonnes	98 tonnes		
Resources consumption				
Type of resources	Quantity of	Consumption	Inte	nsity
	2019	2018	2019	2018
Electricity	516,686,700 kWh	630,151,300 kWh	2,340,000 (kWh/ RMB100 million income)	3,560,000 (kWh/ RMB100 million income)
Steam	943,862.266 tonnes	1,314,397.56 tonnes	4,270 (tonnes/RMB100 million income)	7,419 (tonnes/RMB100 million income)
Coal	0 tonne	8,216.44 tonnes	0 (tonne/RMB100 million income)	46 (tonnes/RMB100 million income)
Water				
Freshwater:  — underground water  — municipal water	8,823,427 m <sup>3</sup> 79,723 m <sup>3</sup> 8,743,704 m <sup>3</sup>	7,738,817 m <sup>3</sup> 193,851 m <sup>3</sup> 7,544,966 m <sup>3</sup>	39,919 (m³/RMB100 million income)	43,681 (m³/RMB100 million income)
Packaging materials	44,750 tonnes	38,279 tonnes	202	216

Benefited from the conservation effect brought by the electricity and gas conservation projects, the Group's total electricity and steam consumption during 2019 has significantly decreased as compared to last year. Moreover, Yinhu Pharmaceutical launched the natural gas boiler clean energy alternative project in 2018 and therefore natural gas was used instead of coal for the whole year of 2019. As a result, the Group has completely phased out the use of coal as fuels and has increased the usage ratio of natural gas, reducing the reliance on traditional energy sources and lowering the emission of atmospheric pollutants.

### **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 strengthen its governance on industrial pollution sources. During 2019, 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 craft, technology and equipment. The Group deeply 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.

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, 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 materials and excipients; and
- Improvement of technical indicators: enhancing the output, input and production yield of products or other production indicators.

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.

## **Recycling and Utilisation of Resources**

CSPC adheres to the approach of "attaching equal importance to exploring revenue resources and saving costs with a focus on frugality" to increase the utilisation efficiency of resources, and carries out comprehensive management of resources utilisation through enhancing the degree of technological transformation and strengthening the overall control and reuse of resources.

## **Recycling and Utilisation of Solvents**

Solvents recycling is the key process in bulk drugs production as it directly affects the quality and cost of products and also impacts environmental issues such as waste water treatment and exhaust gas emission. Therefore, adopting new advanced technology on recycling processes, increasing solvents efficiency, and reducing the energy consumption in solvents recycling are important tasks for a pharmaceutical company. Each subsidiary has been devoted to recycling and reusing of solvents, and through various methods and processes, the recycled solvents have achieved an utilisation rate of more than 80%.

### Solvents Recycling Workshop of Zhongnuo Liangcun Production Base



## **Reduction of Steam Usage**

Through the launch of new facilities, improvement in production processes and enhancing the utilisation of multiple heat recovery categories, each subsidiary has achieved the target of vigorous steam conservation. Taking the two new projects of Weisheng Pharmaceutical as examples:

1. Through increasing continuous esterification facilities, esterification reaction under high temperature and pressure can be achieved, thereby lowering the consumption of materials and steam.



2. Utilising the difference in osmosis of different molecules when passing through VC high pressure nanofiltration membrane, and by separating water molecule from materials, material content is increased while steam consumption is lowered.



# **Treatment and Recycling of Water**

To thoroughly implement the water conservation initiatives rolled out by the Central Government, the Group has adopted various measures to reduce the consumption of underground water and municipal water. Subsidiaries of the Group have increased investments on various reclaimed water projects to increase the utilisation rate of recycled water resources. Through various measures such as utilisation of recycled water, adjustment of water consumption in processes, and increasing the concentration times of circulating water, the Group was successful in achieving water conservation as the utilisation rate of recycled water resources was recorded at over 40%.

## Recycling of Concentration Water and Cooling Recovery Tower of Shengxue





### **Electricity Conservation**

Through flexible adjustment and comprehensive linkage of subsidiaries, the Group was able to achieve an instant balance and optimisation in energy provision and consumption, increasing the energy efficiency as well as realising comprehensive energy conservation of each unit in 2019.

# **Multi-level Energy Conservation Pump**



# **Recycling of Packaging Materials**

Through the comprehensive control of supply chain, each subsidiary reduces the use of disposable packaging materials and recycles reusable packaging materials such as bulk bag, plastic barrel, pallet and paper box to increase the reutilisation rate of packaging materials and lower logistic costs, reducing waste of resources and protecting the environment, thereby effectively achieving green logistic.

### **CLEAN PRODUCTION**

The Group has always been actively committed to improvement projects targeted at reducing emission from the source. The following are the major projects we were engaged in and the highlights of efforts we made in clean production:

# Improvement project for environmental protection facility

- Zhongnuo Pharmaceutical revamped the whole exhaust pipe network which met the design requirements after testing and solved the workshop drainage issues caused by the old drainage pipe networks;
- Through the launching of high concentration waste water evaporation project, Baike Shandong achieved comprehensive treatment and utilisation of concentrated ammonia waste water, achieving detoxification treatment as the waste residue left can be used as the raw material of fertiliser compound;
- Weisheng Pharmaceutical invested in waste water treatment station and exhaust gas treatment projects, increasing waste treatment facilities such as cold mistifier and alkali washing tower. The construction works completed on 6 September 2019 increase the effects of odor treatment. The Company also completed its upgrade of methanol absorption tower for exhaust gas treatment facility on 6 November 2019, by transforming the UV photocatalyst of the existing technology to biological filtration technology, which greatly reduced the emission of pollutants;

Improvement project for emission reduction at source

- During the year, Shengxue and Zhongrun Production Base both invested in the emission reduction project of recycling and utilisation of condensate, reducing the emission in waste water;
- Two workshops of Ouyi Pharmaceutical achieved separate discharge of clean and waste water and discharged waste water from the workshops in accordance with three different types of water quality to the environmental protection station of Zhongrun Company. At the end of September, the project for increasing Azithromycin intermediate oxime single batch yield was completed, further reducing COD emission.

# Highlights in environmental protection management

- The ecological environmental company improved its original system of Volatile Organic Compound by increasing the absorption efficiency of the alkaline spray tower, as well as increasing absorption capacity through optimising active carbon box;
- Modifications on 13 sets of VOC exhaust gas treatment facilities of Ouyi and NBP and acceptance monitorings were completed, and acceptance opinions were received.

# Full participation of staff in environmental protection event

- In June 2019, XNW organised a clean production promotion event to enhance management and increase efficiency;
- In July 2019, Zhongnuo organised the "Clean Production Month Activities" knowledge contest;
- All staff at Zhongrun Production Base attended a training on environmental knowledge which promoted environmental idea and achievements to factory staff through trainings on environmental laws and regulations, clean production knowledge and hazardous waste knowledge, so that staff would have a deeper knowledge and understanding on environmental regulations.

# GOOD PROCUREMENT TENDER MANAGEMENT PRACTICE AS CORPORATE RESPONSIBILITY TO PRODUCT QUALITY

Sound procurement management is crucial for maintaining the quality of the Group's products, given the Group's increasing scale and diversity of procurement in recent years.

The Group has established a sound supplier management system to clearly determine the responsibilities of relevant management departments, including procurement department and quality department, and promote coordination among departments, and has achieved effective supplier management by strengthening information sharing and feedback. The following is an overview of the Group's suppliers:

	2019	2018
By geographical region		
China	1241	1185
Overseas and Hong Kong, Macao and Taiwan	102	100

# PROCUREMENT MANAGEMENT

The Centralised Procurement Centre of the Group is responsible for coordinating the procurement needs of its subsidiaries in order to reduce the procurement cost through group tender, centralised price negotiation and the development of new suppliers and continuously optimises the supply risk management procedures.

With the rapid development of the procurement business, the Centralised Procurement Center reviewed the supplier management system and related processes in 2019, aiming at continuously revising and improving the existing system to increase the enforceability of the system. The revised system during the year included and not limited to the systems of research and development of material procurement, production procurement plan and pricing management, procurement contract formulation, contingency plan for procurement, staff recruitment and report management.

In order to standardize and refine the business operation details and management, a full effort was put into launching an electronic procurement platform (the SRM system) and the standard operation procedures (SOP) for all critical processes (including pricing, payment approval and the supplier account opening process, etc.) by the Centralised Procurement Centre. Upon the completion of the whole approval and processing, the Centralised Procurement Centre uploaded the monthly consolidated budget plan to the platform for sharing. Following the launch of SRM, we have achieved real-time inquiry and risk monitoring capabilities for the complete process of procurement, including the submission of procurement plans, pricing and approval, signing of contracts and issuing of purchase orders, all being managed through SRM.

At present, all critical processes in procurement which had been carried out physically were put online. By simplifying the payment management process and comprehensively promoting online approval in 2019, the Centralised Procurement Center has greatly improved work efficiency and reduced the use of resources in procurement management.

### SUPPLY RISK MANAGEMENT

The Centralised Procurement Center is responsible for reviewing the supplier account opening and closing process and establishing a supplier register. In the procurement process, the procurement staff should actively promote the sourcing of suppliers, and look for potential suppliers (especially suppliers of strategic materials) with quality and price advantages at home and abroad through professional or industry meetings, customer and peer recommendations, etc. in order to eliminate the risks caused by exclusive supply.

The Centralised Procurement Center has formulated a contingency plan for procurement and supervises the implementation of the procurement business department. The procurement department provides special training for managers closely related to the contingency plan every year, and the orientation for new procurement staff also includes the contents of the contingency plan to ensure the consistent implementation of the plan. Emergency events for material procurement include but not limited to the following:

- The adjustment of national and local policies has a significant impact on the supply of materials;
- Major suppliers stop or reduce production due to accidents or other negative impacts;
- Severe weather has a significant impact on the production or transportation of materials;
- Materials are underwritten or monopolised by a few manufacturers, and the price rises sharply or the supply is affected;
- The quality of purchased materials is not up to standard or there are problems in the production process, which affect the production and use;
- Serious or mass adverse drug reactions events occur in the preparation products at home and abroad, which
  are suspected to be related to the quality of the materials.

The Centralised Procurement Centre has always put supply guarantee as the top priority. The contingency plan specifies a number of countermeasures (including speeding up the development of potential suppliers, increasing the reserve of key stocks and establishing a communication mechanism with suppliers and quality departments, etc.), so as to ensure that the procurement staff can respond quickly when an emergency occurs and safeguard the stability and quality of material supply.

Departments that provide relevant information in a timely manner and take effective measures to solve emergency events will receive bonus points or awards in the monthly assessment. On the contrary, those responsible for not starting the emergency response in time or for ineffective measures during the response period will be investigated according to the regulations on production incident management.

### SUPPLIER EVALUATION MECHANISM

The Group has established a supplier evaluation mechanism to conduct annual evaluations of suppliers of production materials and non-production materials respectively. Based on the principle of fairness and justice, the Group issues evaluation opinions on the service, price and delivery time of suppliers, and implements corresponding rewards and punishments for suppliers according to the evaluation results. In 2019, 98 suppliers accepted and passed the Group's evaluation of environmental, labor and ethical performance.

In March 2019, the procurement center released a "Notice on Further Regulations for Quality Management" and specifies clearly our quality requirements every time in the bidding documents. In addition, the Group organizes communication activities with key suppliers as necessary and provides them with trainings on the knowledge of quality.

### **Material Quality Feedback**

The Group has strict inspection standards for all procured materials. Only materials which have passed the inspections are allowed for production use. The Group's quality management department coordinates communication with the Centralised Procurement Center in supplier quality management and urges both parties to cooperate. The quality management department of each subsidiary is responsible for timely submitting the inspection result deviation (OOS) or material quality feedback in the production or sales process to the procurement manager of the corresponding factory area and sending a copy to the Centralised Procurement Center. The procurement staff shall notify the supplier on the day when the factory area puts forward the quality feedback and request the relevant supplier to give feedback within the specified time.

The supplier administrators of the Centralised Procurement Center upload the "Material Quality Feedback Ledger" to the information platform every month for relevant business management personnel to inquire, so that the business negotiation team can fully understand the quality situation of each supplier during bidding and pricing. The content of quality feedback becomes an important basis for procurement staff to evaluate suppliers at the end of each year. The quality management department also eliminates the suppliers who fail to meet the requirements of the quality assessment or annual evaluation on suppliers each year.

## **Supplier Audit**

The audit work for suppliers of production materials is mainly guided by the field audit plan for major materials drawn up by the quality management department of each subsidiary, and the business department of the Centralised Procurement Center cooperates in the implementation. As a member of the supplier audit team, the business personnel of the Centralised Procurement Center participate in the audit of the supplier's quality management system. After the audit is completed, the "Supplier Inspection Information Form" is compiled within one week and uploaded to the information platform of the Centralised Procurement Center after approval. In addition to participating in relevant supplier audits organized by quality management, the Centralised Procurement Center can also conduct field inspections or visits to suppliers according to actual business needs, such as pre-examination for material suppliers interested in opening an account and annual exchange visits in strategic suppliers.

Field investigation plays a key role in the course of supplier quality audit and supply risk management. The investigation covers:

- Legitimacy of production address, scale and qualification;
- Supply and storage capacity of raw materials;
- Plant facilities and equipment;
- Material and production process management;
- Quality management and environmental protection and safety status; and
- Financial situation, etc.

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 to ensure the impartiality, authenticity and effectiveness of the audit results in order to avoid any audit staff from corruption.

# **PROCUREMENT INTEGRITY**

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. The Group regularly organises trainings on integrity and self-discipline with detailed explanation on the definition, importance, public relations with suppliers and responsive actions 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 taking the job in order to clearly understand the Group's requirements on the conduct of procurement staff.

The Group strictly implements the "Administration Measures on Code of Conduct for Procurement Staff and Accountability" and forbids 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 through letters, clearly expressing that non-compliance with rules and regulations and unfair competition are prohibited. The Group issued the "Notice on the Prohibition of New Businesses with Dishonest Cooperation Parties", requesting all subsidiaries to immediately report any situations in which suppliers do not comply with the requirements of integrity or laws and regulations, upon which the supervision and security department will update the supplier black list so as to terminate the business relationship with such suppliers immediately.

# ANTI-CORRUPTION

# GOOD INTEGRITY BUILDING AS CORPORATE RESPONSIBILITIES TO ANTI-CORRUPTION

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

The Group's independent supervision and security department established in 2017 is dedicated to procuring our staff to perform their duties 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 addition, the special regulatory department closely monitors the development of the Law of the PRC Against Unfair Competition and other relevant laws and regulations to ensure that the businesses of all subsidiaries are conducted in compliance with laws and regulations.

In 2019, the Group continued to strictly implement a series of internal policies and regulations in relation to anticorruption (e.g. the "CSPC Accountability and Responsibility Management System for Dereliction of Duty"), and vigorously promoted the following key tasks in anti-corruption and internal discipline inspection:

## 1. LEARNING FROM EXTERNAL ADVANCED MONITORING EXPERIENCE

CSPC successfully joined the two anti-fraud organizations of the Trust and Integrity Enterprise Alliance and the Enterprise Anti-fraud Alliance in May 2019, and participated in the training and learning activities carried out by the two alliances. The two anti-fraud alliances have been committed to promoting the business philosophy of integrity, self-discipline and obedience to the law and to enhancing the ability of members' internal control departments to perform their duties and the construction of employees' professional ethics. We believe that we will be able to compete with advanced enterprises at home and abroad in the future by strengthening the external communication of supervisors and realizing information sharing.

### 2. CONDUCTING EFFICIENCY SUPERVISION

To enhance the supervision of the subsidiaries, the Group has established a comprehensive and complete 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 2019, the Group conducted a specific round of supervision and audit tasks on efficiencies, and carried out rectifying actions in a timely manner for issues identified, as well as further regulated the related procedures. In addition, the supervision and security department strengthened the problem-identifying and problem-solving capabilities of inspection personnel during supervision and inspection by imposing more specific requirements on their operating skills so as to lay a crucial foundation for further improvement of supervision and inspection.

## 3. 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 security department carried out a group-wide employment integrity educational activity for all employees and was committed to establishing or optimising the requirements for integrity and self-discipline at key positions.

# ANTI-CORRUPTION

In 2019, the supervision and security department issued the notice of strict compliance with integrity and self-discipline requirements during important festivals (the Spring Festival, the Mid-Autumn Festival and the National Day, etc.), requesting managers at all levels and personnel at key positions to be vigilant in maintaining their ethical defense against corruption, and to sign the "Undertaking of Integrity and Risk Prevention".

During the year, the supervision and security department carried out anti-corruption and integrity education to management staff at all levels as well as employees in key or sensitive positions, and raised their awareness of anti-corruption through analysis of typical case studies. In addition, the Group requires all employees to subscribe to the Wechat public account "CSPC Integrity", through which articles on the Company's regulations, legal knowledge and typical case studies are delivered regularly, so as to educate the employees about integrity.

# 4. STRENGTHENING SUPPLIER MANAGEMENT AND OPTIMIZING SUPERVISION FUNCTIONS FOR PROCUREMENT TENDER

For the effective regulation of the procurement tender within the Group, the supervision and security department has appointed special personnel to supervise the whole process of bidding and procurement and review relevant contracts and payments in order to ensure that tendering works are properly executed. In 2019, the Group fully implemented the signing of the "Sunshine Cooperation Agreement". Through timely understanding of abnormal cooperation between subsidiaries and suppliers, the Group issued a ban on cooperation with dishonest entities and reported the blacklist of suppliers.

### **COMPLAINT AND REPORTING MECHANISM**

In an effort to improve the whistleblowing channels and enhance the internal capability for processing whistleblowing, the Group has set up a dedicated hotline and email address and established a Wechat reporting platform with designated personnel responsible for the follow-up of reported matters.

A complainant protection mechanism is established in the Group's "Supervision, Complaint, Reward and Penalty Management System". Supervisory departments at all levels of the Group are dedicated units authorized to conduct investigations on corruptions with duties to protect the complainants and maintain independence as well as objectivity in the course of investigations. Our firm commitment to protecting the complainants' legitimate rights and interests as well as their personal information is a fundamental assurance of the effective functioning of the complaint system.

The supervisory department puts confidentiality of such reporting as priority. The personal information of the complainants and all the information provided by the complainants are kept strictly confidential. In accordance with national laws and regulations and the confidentiality requirements within the group, the staff of the supervisory department keeps the complainant and reported information in strict confidence in all aspects including acceptance, registration, custody, and investigation to prevent leakage or loss.

In addition, the Group strictly forbids any retaliation against a complainant. Any form of retaliation will be dealt with severely in accordance with national laws and regulations as well as the Group's internal system, and the legal liabilities of the responsible parties' will be sought. If a complainant is subject to retaliation of any form or to any extent, the supervisory department should be informed immediately. The supervisory department may introduce a number of strict protection measures to protect the complainant, including the incorporation of the person in the "List of Special Protection" managed by designated personnel in the supervisory department.

### GOOD CHARITY WORKS AS CORPORATE RESPONSIBILITIES TO THE SOCIETY

CSPC adheres to the mission of "All for good medicine, all for mankind's health" and continuously gives back to the society.

CSPC has always been committed to providing patients with safe and quality products while actively serving and giving back to the society and contributing to the health of all mankind. During the year, the donation made by the Group was approximately HK\$34,194,000 (2018: approximately HK\$25,231,000).

With the help of the Hebei CSPC Pu'en Charity Foundation established by Mr. Cai Dongchen, the Chairman of the Group, and CSPC Holdings Company Limited (an affiliated company of the Group) as its main platform for public welfare undertakings, the Group has actively carried out charitable public welfare activities in the fields of "elderly assistance, poverty alleviation, sickness support, predicament relief and education assistance". The Foundation's main source of income is donations from the Chairman, middle and senior management and other employees of the Group. The scope of its activities during the year included:

- 1) giving assistance to the sick, poor, depressed and senior citizens in the underprivileged groups, including those in serious diseases, poor families and the education aid to their children, severely injured people due to accidents, the disabled, orphans and elderlies; and
- 2) organizing charity events for natural disasters relief.

The following are the major charity activities carried out by the Foundation in 2019:

### 1. EDUCATION AID AND POVERTY ALLEVIATION

# The "Twilight Action" education aid programme

The "Twilight Action" which was launched in August 2016 focuses on students from poor families in their primary, secondary and higher education as well as the growth and education of fresh university students. In forms of education aid funds and spiritual care, the programme strives to improve the environment in which the poor students learn and grow up, so that outstanding kids will not fall behind because of poverty.

Date	Major activity highlights
15 January	Six subsidiaries under the Group jointly participated in the "One good deed every day, love will find its way" activity and sent specially made warm packs to students in mountainous areas, hoping to bring warmth to children with love in cold winter.
18 February	45 university students who benefited from the "Twilight Action" programme participated in the forum held at the headquarters of CSPC Group.
7 March	Distributed grants 45 poor students in Xinle.
16 March	Distributed grants, thermoses and notebooks to 138 poor students in Xingtang County.
25 March	Distributed grants and classical Chinese literature books to 137 poor students in Wuji County.

Date	Major activity highlights
9 April	Distributed grants to more than 200 poor students in Gaoyi County, Lingshou County and Yuanshi County, and conducted "Erudite Lecture Hall" courses.
17 May	The successful public welfare campaign of "Crowding Ten Thousand Books" received positive responses from all companies of the Group and the active participation of employees. A total of 34,906 books were collected and book corners were set up for 20 primary schools in seven counties and areas nearby.
31 May	Before Children's Day on June 1, the Foundation joined hands with many caring people to visit Yuting Town in Xingtang County and Nanqinghe Town in Zanhuang County successively to send holiday greetings to more than 300 children from 4 schools.
28 June	Visited Xingtang County, Pingshan County and Xinle successively, and conducted eyesight screening, myopia prevention and control, and education on eye health knowledge for nearly 400 children, and provided myopia glasses for poor myopia students free of charge.
2 August	A special meeting was held, in which the General Manager of the Human Resources Center of CSPC shared experience in career planning and frequently asked questions in recruitment interviews for 45 "Twilight Action" students.
17 August	One good deed every day, love will find its way  The caring team visited five families, delivered food, study desks, books, stationery and other items, and spent a warm weekend with the children.
27 September	Erudite Lecture Hall Visited Beichengzi Primary School in Xingtang County, Xijinshan Primary School in Pingshan County and Xihushe Primary School in Lingshou County to teach children knowledge beyond books and broaden their horizons.
15 October	Conducted eyesight screening for 150 children in Zanhuang County and provided myopia glasses for 25 children free of charge.
26 November	Distributed grants to 67 poor students in Chengde.
3 December	Distributed grants to 44 poor students in Wuyi County, Hengshui.
26 December	Conducted the "Warm Packs Distribution Campaign" and delivered warm packs to 200 poor students from 50 schools in five counties and areas of Xingtang, Zanhuang, Lingshou, Pingshan and Cangzhou.

### 2. SICKNESS SUPPORT

## "Red Sun Action" Hematological Tumor Rescue Project

The Foundation joined hands with the Hebei Children's Hospital of Integrated Traditional Chinese and Western Medicine, a member enterprise of the Group, to carry out "Red Sun Action" to provide advanced diagnosis and treatment and financial assistance to patients aged 0-18 with hematological tumors. In 2019, "Red Sun Action" funded 17 poor children with hematological diseases to undergo hematopoietic stem cell transplantation, which continued the life of the sick children.

## 3. PUBLIC WELFARE ASSISTANCE

## "Spring Drizzles" Public Welfare Programme

The "Spring Drizzles" programme regularly organised various types of charitable events. With a variety of day-to-day main theme activities, charitable contents were enriched and scope of relief assistance was expanded.

Date	Activity highlights
14 January	Carried out the poverty alleviation project of "Special Grain and Oil Processing Plant for Poverty Alleviation in Lijiadi Village of Kangbao county", and funded the construction of plant and ancillary facilities of the Special Grain and Oil Processing Plant in the village and the purchase of production equipment in order to promote the development of special agriculture in Lijiadi Village.
18 January	Donated commonly used drugs, medical equipment, living materials and school supplies to Niujiagou Village clinics and villagers to help poor households in the village.
22 August	Distributed daily necessities including vitamin C chewable tablets and other commonly used drugs and thermos to the villagers in Beiying Village of Lingshou County.
10 September	The foundation donated funds to build a bridge to completely solve the travel problems of residents in Wang Baoshan of Kangbao county.

### 4. ELDERLY ASSISTANCE

### "Sunset Glow Action" elderly assistance programme

In 2019, in addition to sending regards and happiness during visits, the "Sunset Glow Action" project also launched a series of "Red for the Elderly" activities that suit the elderly to enable them to enjoy respect and care in their later years.

Date	Activity highlights
7 May	Carried out "Free Medical Consultations for Health" and distributed common medicines free of charge to send warmth and health to the elderly left behind.
11 September	Held the "Sunset Glow Helping the Elderly during the Mid-Autumn Festival" activity to celebrate the festival with the elderly, and distributed moon cakes, rice, noodles, oil and other items.

In 2020, the Group will continue to actively explore various kinds of aid activities. We hope that the social value of the Group will be reflected in our commitments to public welfare and continuous shouldering of social responsibilities, through our delivery of love and care to the needy.









# 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 Resou	rces	
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 Environm	ent 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	t	
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	Employment and Labour Practices
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: Developmen	nt 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	Employment and Labour Practices (Development and Training)
KPI B3.2	The average training hours completed per employee by gender and employee category	Employment and Labour Practices (Development and Training)
Aspect B4: Labour Stan	dards	
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

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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	Supplier Management
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
Aspect B6: Product Resp	onsibility	
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 occurrence
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: Anticorruptio	n	
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 I	nvestment	
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	Charitable Aids
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport)	Charitable Aids
KPI B8.2	Resources contributed (e.g. money or time) to the focus area	Charitable Aids