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CHAIRMAN'S MESSAGE

"REMEMBERING OUR ORIGINAL ASPIRATION AND GIVING BACK TO THE SOCIETY THROUGH INNOVATIONS"

"All for good medicine, all for mankind's health" has always been the core value of the CSPC Group. The Group upholds this value and strives to promote its business and the sustainable development of the society through innovations.

We deeply understand that innovation is an indispensable element of a corporation's sustainable development. In recent years, the Group has been relying on the two-pronged strategy of inhouse research and mergers and acquisitions, and has achieved rapid growth in the innovative drug business. At present, we have established an integrated research and development system at home and abroad to jointly expedite the progress of innovative drugs' launch to the market, with an aim to attain the greatest well-being for the health of the Chinese people.

In 2018, a number of policies related to the pharmaceutical industry were promulgated in China. Also, the work on consistency evaluation has been expedited, and the implementation of central procurement scheme in the "4+7" pilot cities will redefine the industry landscape. Following the acceleration of drug evaluation and approval and the release of a series of policies such as the "Technical Guiding Principles for the Acceptance of Overseas Clinical Trial Data", the Chinese pharmaceutical industry ushers in profound changes. The Group will continue to regard innovation as a breakthrough, and increase its investment in research and development in order to grasp the development opportunities.

Over the years, product quality and safety management has been regarded as the top priority of the Group. In 2018, we have actively established the cGMP Quality Standard Management System, and strictly implemented full process quality supervision on the products based on the four-level quality management system, comprehensive quality risk prevention and control system, as well as the drug quality, safety tracking and recall mechanism.

With the rapid development of our business, the Group has strenuously maintained the balance between corporate development and environmental protection by continuously optimising our work in environmental protection and absolutely refraining from taking economic benefits at the expense of the environment. Meanwhile, we have always borne in mind the importance of our employees to the development of the corporation. We nurture and motivate talents with a heart of gratitude. In October 2018, CSPC was honoured to be one of the Chinese pharmaceutical companies on the list of the World's Best Employers 2018 released by Forbes.

During the year, the Group launched and participated in public welfare activities in various areas, including education assistance, cancer screening, sickness support, predicament relief and precision poverty alleviation, through the platform of Hebei CSPC Pu'en Charity Foundation. Looking forward, the Group will closely communicate with all stakeholders in making concerted efforts to build a better future.

CAI Dongchen

Chairman





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 2018. For details of corporate governance, please refer to the corporate governance report set out in the 2018 Annual Report of CSPC.

REPORT PERIOD AND RELEASE CYCLE

This report is the yearly report for 2018, and the report period is from 1 January 2018 to 31 December 2018.

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 and misleading statements. This report is published in both Chinese and English. The Chinese version shall prevail in case of any discrepancies between the two versions.





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 one of the renowned listed pharmaceutical companies 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.

In 2018, the Group continued with the development strategies that we have been following in recent years in respect of our different business segments. In response to the opportunities brought by various external changes, we have made proactive efforts in innovation and internationalization:

FINISHED DRUGS

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

BULK DRUGS

- Continue the development of our industry-leading bulk drug business and endeavour to maintain market share, achieve cost effectiveness and explore high-quality customer resources in order to maintain its industry-leading position

INTERNATIONAL EXPANSION

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

INDUSTRY MERGERS AND ACQUISITIONS

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

Regarding the business development and review for 2018, please refer to the 2018 Annual Report of the Group. With the sustained fast development of our businesses during recent years, we deeply understand the greater social responsibilities borne by the Group's subsidiaries. In 2018, the Group has made payments for various taxes amounting to approximately HK\$2,673 million in total (2017: HK\$1,927 million), whereas its total staff costs amounted to approximately HK\$1,601 million (2017: HK\$1,125 million), epitomizing the value the Group has brought to public finances and its staff during its course of active business development.



SOCIAL RESPONSIBILITY MANAGEMENT

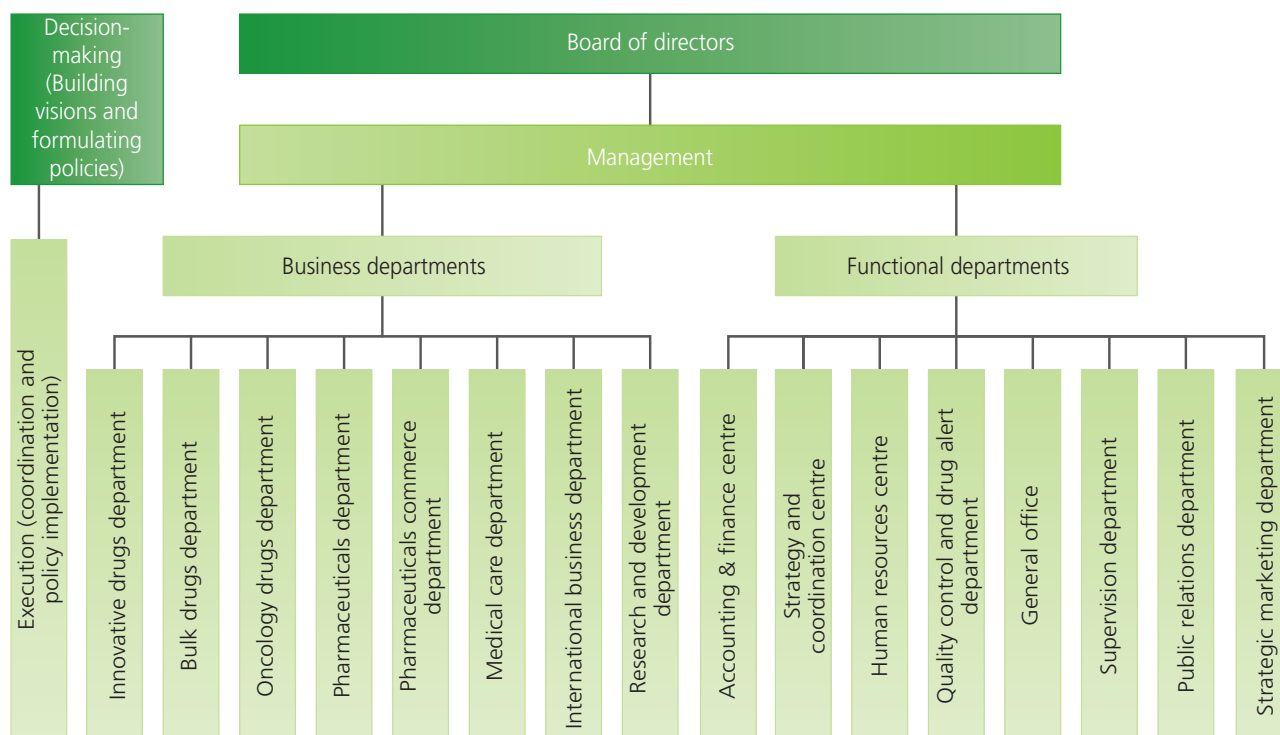
CORPORATE MISSIONS AND VISION

Continuously upholding the corporate value of “All for good medicine, all for mankind’s health” and the corporate ethics of “People-oriented & harmonious development”, we strive to create the best environment for the personal growth of its staff, inherit and develop the internal cultural connotation of “pursuing excellence with honesty, integrity, wisdom and faith” and “objectivity, fairness, diligence and altruism”. 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 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 2018, 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 to us, the Group will continue to review the current working structure and the scopes of responsibilities of relevant functional departments in the future.





SOCIAL RESPONSIBILITY MANAGEMENT

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.

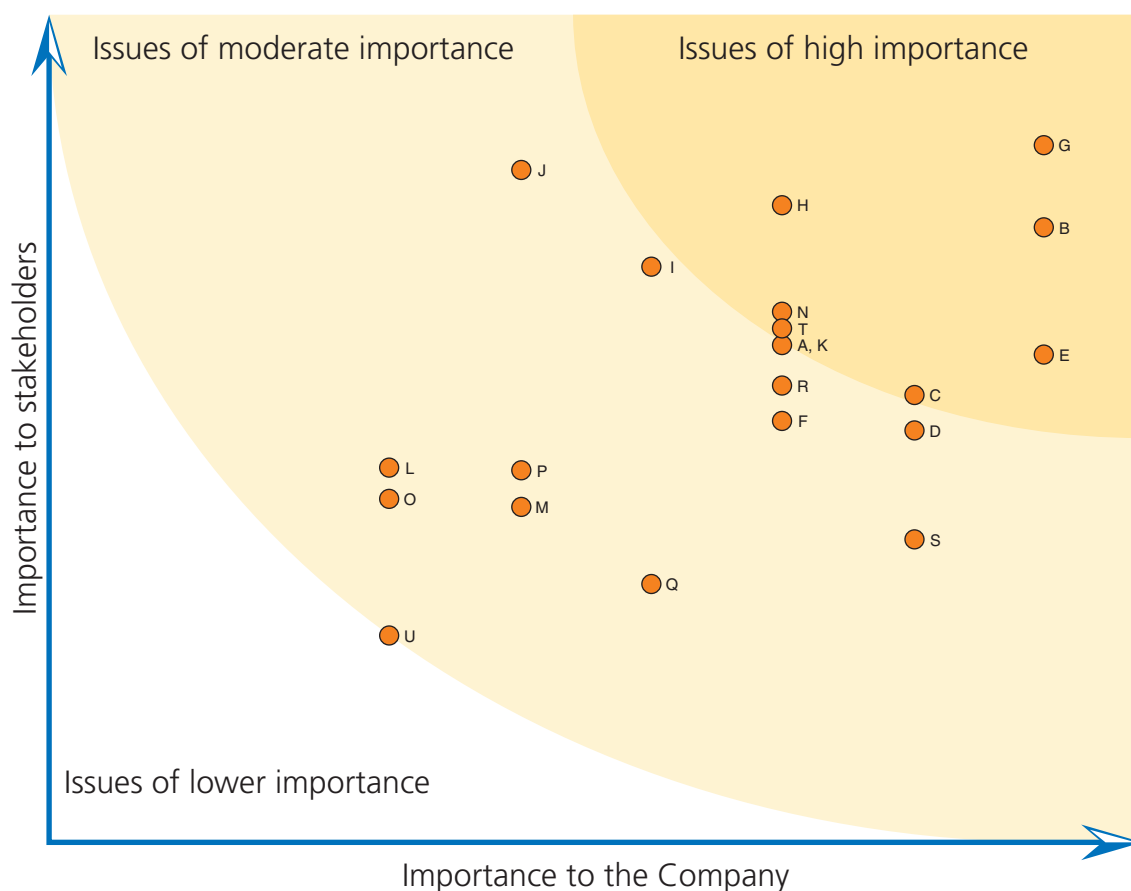
Stakeholders	Main issues of concern	Means of engagement
Shareholders and investors	<ul style="list-style-type: none"> Compliant operation Risk management Anti-corruption Innovative operation Economic performance 	<ul style="list-style-type: none"> General meetings Investor information sessions Site visits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



SOCIAL RESPONSIBILITY MANAGEMENT

IDENTIFICATION OF MATERIAL ISSUES

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



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



PRODUCTS AND CUSTOMERS

MAKING GOOD MEDICINES IS OUR RESPONSIBILITY TO THE CUSTOMERS

Continual innovations as well as product quality and safety lay the foundation for the Group's sustainable development. From the independent research and development to the whole-process product quality management as well as operation with integrity, the Group is committed to doing its utmost in the details of every task.

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 for the patients. The Group continued to improve the research and development system of the "integration of generic and innovative drugs", and built a research and development platform in the areas of small molecule innovative chemical drugs, high-value generic drugs, new target macromolecule biological drugs, macromolecule biosimilar drugs, high-end special preparation technologies, etc., in order to enhance its research and development capabilities and corporate core competitiveness.

R&D ESTABLISHMENT

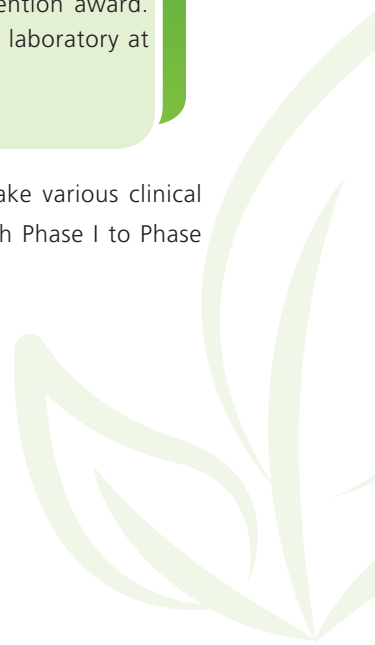
CSPC is a "national innovative enterprise" recognized by three ministries and commissions including the Ministry of Science and Technology of the People's Republic of China ("Ministry of Science and Technology"). In addition to a well-established research facility and an advanced clinical pharmacology research centre built to GLP ("Good Laboratory Practice") standards, the Group also has a Level II Biosafety Laboratory which can be used in viral drugs research.

State key laboratory for novel pharmaceutical preparations and excipients

In 2018, the Group's state key laboratory for novel pharmaceutical preparations and excipients was awarded an excellent rating by the Ministry of Science and Technology in a five-year construction and operation performance assessment of 99 key laboratories (which have passed acceptance tests) across the country. The laboratory is the only state key laboratory in Hebei Province that received this award.

The laboratory focuses on the research and development of extended release technology for targeted drugs, oral controlled drug release technology, bio-macro molecule drug release technology and new pharmaceutical excipients. Since its establishment, the laboratory has completed various domestic invention patent licensings and international patent cooperation treaty (PCT) applications, and won two national patent gold awards and the second prize of one national technology invention award. In the future, the Group will continue to develop the laboratory into a leading state key laboratory at the domestic as well as international level.

The Group has also set up a high-quality clinical research team that has the capability to undertake various clinical studies independently and the ability to complete clinical trials of Class 1 innovative drugs through Phase I to Phase IV.





PRODUCTS AND CUSTOMERS

Research platform for antibody drugs

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

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

In 2018, the Group also laid out its deployment of production related to antibodies, and launched a biological R&D and manufacturing base for the research and development and industrialisation of stem cells and immune cell therapy technology.

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 (GB14925-2010) (《中華人民共和國實驗動物環境及設施國家標準(GB14925-2010)》), 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 install various instruments in 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. We advocate and uphold 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 minimize as far as possible the pain of the animals.





PRODUCTS AND CUSTOMERS

We 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 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 communication

The Group always values the cooperation and communication with domestic and international research institutions, and closely follows the development trends of advanced technologies at home and abroad. We have established good cooperative relations with many domestic and foreign scientific research institutions. At present, we have worked closely with a number of research institutions and established six industry-university-research alliances to enhance our innovation capabilities.

In addition to increasing internal R&D investment, the Group actively sought various cooperation opportunities in 2018. 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 an anti-CD20 monoclonal antibody drug candidate with SinoCellTech Limited.

In January 2018, the Group acquired part of equity interests in Wuhan YZY Biopharma Co., Ltd. ("YZYBio"). This company specialises in the development and industrialisation of bispecific antibody drugs with tumor immunotherapy as its core, and is a technologically advanced enterprise in the field of bispecific antibody research in China. Based on its own innovative platform technology, YZYBio has successfully developed a number of products that were specially supported by the Ministry of Science and Technology's "Twelfth Five-Year Plan" and "Thirteenth Five-Year Plan" in the development of major new drugs. Two of these products used for the treatment of gastric cancer, breast cancer and advanced cancerous ascites have been approved in China for clinical research. There are 10 other candidates in different stages of pre-clinical development.

Looking ahead, the Group will continue to look for acquisition targets with strong R&D capabilities in the biopharmaceutical 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 designated business development staff in the United States.





PRODUCTS AND CUSTOMERS

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 independent innovation capability of pharmaceutical enterprises to continuously refine the pharmaceutical R&D system that integrates generics and innovative drugs by capitalizing on our 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.

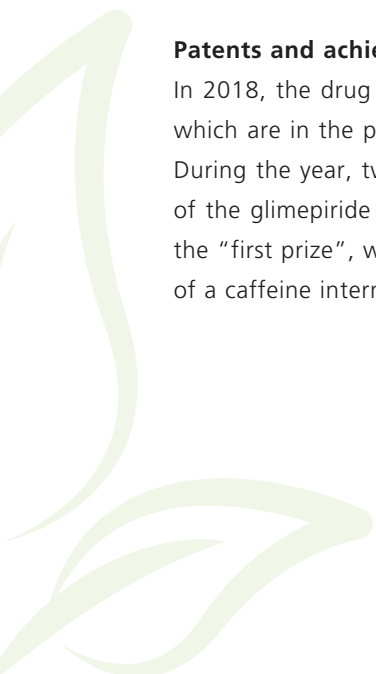
The Group has set up a dedicated department of intellectual property management, which conducts comprehensive diagnostic analyses on intellectual property from time to time, formulates patent application and protection strategies for core products in accordance with the requirements of the "Patent Law 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 make 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 ensure 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 29 June, 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

In 2018, the drug research and development segment of the Group has 30 domestic patents and 8 foreign patents which are in the process of application, and has successfully obtained 28 domestic and 14 foreign patent licensings. During the year, two of the Group's patents won the Hebei Provincial Patent Awards, of which the invention patent of the glimepiride dispersible tablet preparation, "a glimepiride dispersible tablet and its preparation method", won the "first prize", while the invention patent of the caffeine intermediate preparation method, "a preparation method of a caffeine intermediate N,N-1,3-dimethyl-4,5-diaminourea", was awarded an "Excellence Award".





PRODUCTS AND CUSTOMERS

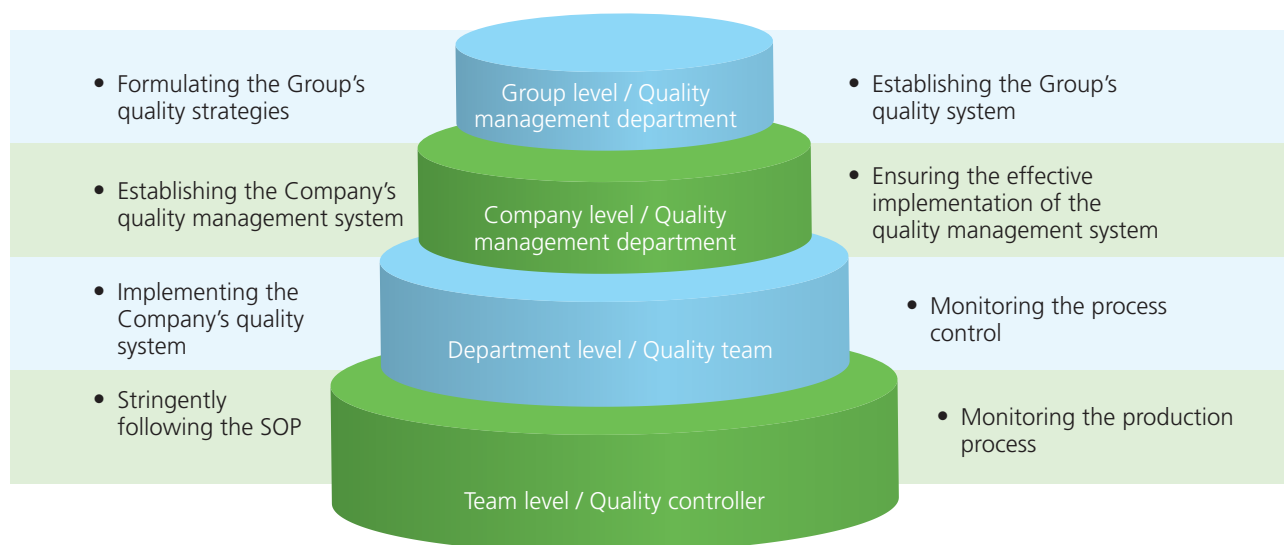
PRODUCT RESPONSIBILITY

Quality system

Since its establishment, the Group has clearly defined 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

On the foundation of the four-level (group level, company level, department level, team level) quality assurance system, the Group’s headquarter established the Quality Control and Drug Alert Department in 2018, which is specifically responsible for the management of quality control and quality assurance of all subsidiaries.



The Quality Control and Drug Alert Department periodically reviews and updates the current quality control system, and coordinates with other departments in improving the quality of pharmaceutical products and accomplishing the analyses on the risks of quality safety, with an objective to meet the latest product quality requirements, both domestically and internationally.

Through a monthly quality analysis and an annual quality review, all subsidiaries summarise 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.



PRODUCTS AND CUSTOMERS

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, 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 2018, the Group obtained 12 domestic GMP certifications, 2 FDA certifications from the U.S. and 1 EU certification. The followings are the Group's major domestic and international certifications achieved by the end of 2018:

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	18 products passed the certification
EU Certification	Drug Administrations of member countries of European Union	4 products passed the on-site inspection of European Union and its member countries
Certification of Suitability to the Monographs of the European Pharmacopoeia ("CEP") Certification	European Directorate for the Quality of Medicines	11 products obtained CEP certification

In 2019, we will vigorously promote comprehensive gap analysis conducted by the subsidiaries in accordance with the compliance guidelines of the Current Good Manufacturing Practice (cGMP), as well as to develop plans in the light of the findings of the gap analysis and clearly define a unified inspection standard during the implementation of cGMP within the Group.





PRODUCTS AND CUSTOMERS

Product Quality Commitment

The Group's quality management and inspection teams possesses 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 2018, 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.





PRODUCTS AND CUSTOMERS

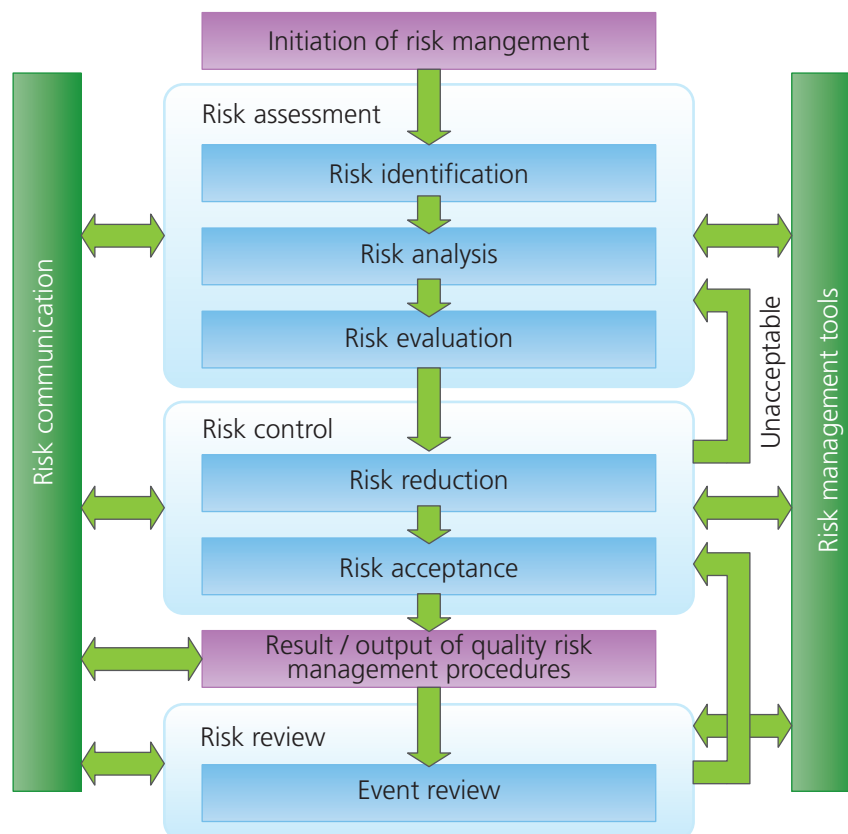
Quality and Safety Risk Management

CSPC highly values the medication safety of patients and is committed to the sound management on quality and safety risk. During the year, the Quality Control and Drug Alert Department vigorously promoted the construction of the pharmacovigilance system, and optimised the management system and procedures of the Drug Safety Committee, contributing to the successful trial run of the new system in the formulation manufacturers on 1 January 2019.

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 Risks 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.

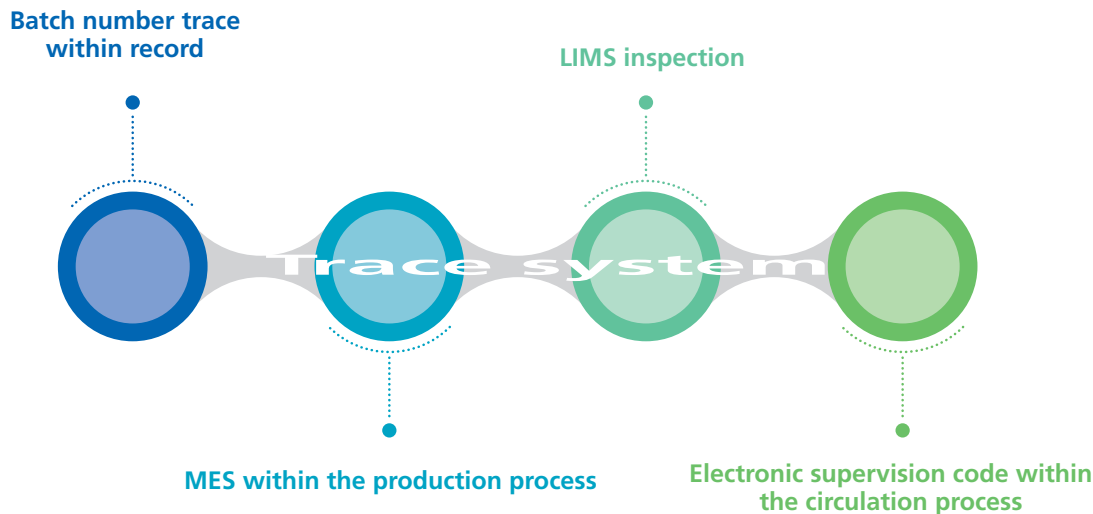
With a comprehensive quality risk prevention and control system, we have clearly established the assessment procedures and the corresponding preventive and control measures for quality and safety risks. During the risk assessment process, the quality supervision department uses risk assessment methods 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.





PRODUCTS AND CUSTOMERS

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.

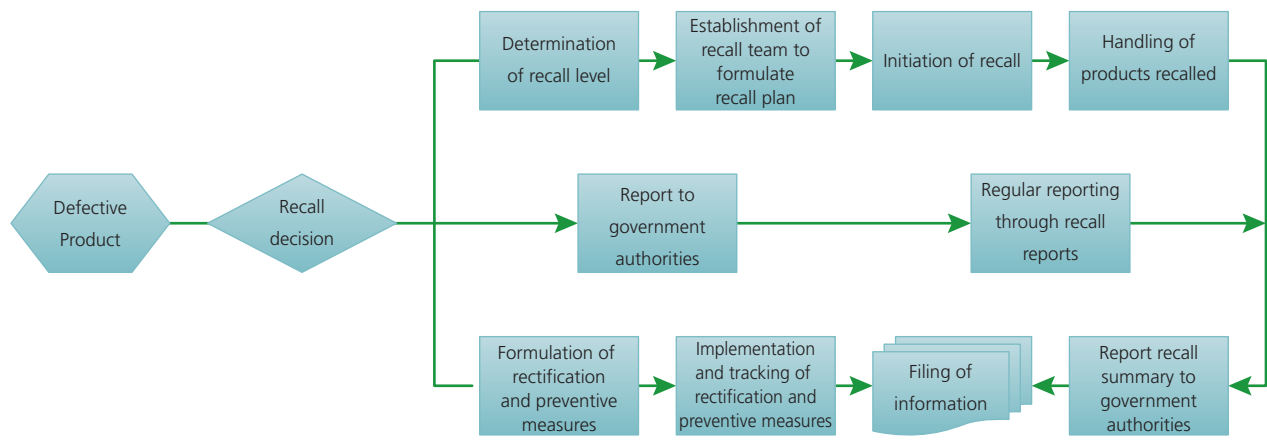
The Group has formulated regulations for the administration on reporting and monitoring of adverse drug reactions and emergency treatment plan for mass adverse reactions to ensure that emergency measures can be promptly initiated in the occurrence of adverse reaction events and a timely reporting to National Medical Products Administration, Hebei Province Adverse Drug Reaction Monitoring Centre and relevant authorities. Meanwhile, the Group also updates and submits a periodic drug safety report annually in accordance with the requirement of the "Report on Adverse Drug Reactions and Methods of Monitoring and Control".

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 2018, there was no case of product recall due to reasons of safety or health for any products sold or shipped by the Group.



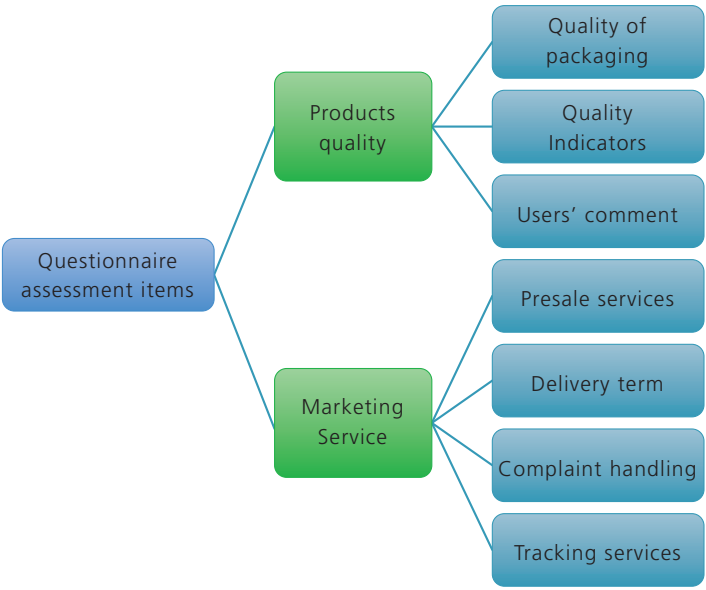


PRODUCTS AND CUSTOMERS



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 the receipt of their complaints and provide a reply and an explanation to the customers subsequent to a detailed investigation and inspection. The Group conducts an annual survey on customer satisfaction through questionnaire, and performs evaluation 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.



PRODUCTS AND CUSTOMERS

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 credit management system in accordance with relevant requirements under the Contract Law. The Group also develops the "CSPC's Integrity Management Standards" with detailed terms of operation with integrity. Harsh and punitive measures will be taken to the units and individuals in breach of the integrity management standards to ensure that integrity management has a "legal basis" by firmly opposing and resisting commercial bribes in all forms. The Group complies with the market rules and sticks to 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.





EMPLOYMENT AND LABOUR PRACTICES

SOUND TALENT MANAGEMENT IS OUR RESPONSIBILITY TO THE EMPLOYEES

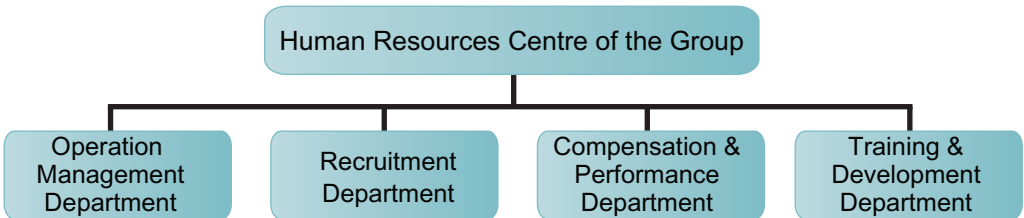
CSPC deeply understands the importance of a sustainable development achieved by the corporation and its talents together. Hence, we are committed to fostering a sound working environment for the growth with our employees.

“Rely on talent, foster talent and thrive on talent” has always been the Group’s talent development philosophy. Every year, we review the remuneration, training and development situation of staff at all levels and strive to foster a working environment which facilitates the growth of the employees with the corporation.

HUMAN RESOURCES MANAGEMENT FRAMEWORK

Further to the optimisation of human resources management structure in 2017, the Group took another step in September 2018 in strengthening the strategic human resources planning as well as in the construction of various professional systems and functional guidelines. While advanced resources are actively introduced from outside, the management of human resources function of Human Resources Centre was delegated to various business segments and subsidiaries, where corresponding departments were established to report to Human Resources Centre of the Group’s headquarters.

During the year, Human Resources Centre divided its management functions into four major areas, namely recruitment, compensation and performance, training and development and operation. Designated departments were established for the management of these functions as detailed below:



Upon the establishment of the new human resources system, Human Resources Centre proposed and implemented a series of improvement measures during the year:

1. Further revised and optimised the Group’s human resources system and processes, and completed the review of seven systems including “Employees Reward and Punishing System”, “Compensation Management System”, “Attendance and Leave Management System”, “Selection, Evaluation and Appointment System for Middle to Senior Management”, “Recruitment Management System” and etc., regulating the formulation of management standards by the subsidiaries;
2. Simplified the approval procedures for the transfer of personnel between business segments or between subsidiaries and shortened the time of approval to less than 7 calendar days through reducing the required approval levels; and





EMPLOYMENT AND LABOUR PRACTICES

- Clearly defined the frameworks for the five major tasks including “Human Resources Planning”, “Position Qualifications and Competencies Model”, “Reserve Echelon Training and Construction”, “Development Path for Professional Technical Personnel and Evaluation of Professional Sequence”, and “Research Analysis on Remuneration and Incentive Policies” with objectives and implementation paths, shifting its focus of work from routine affairs to planning and execution of core functions.

The Group also introduced advanced resources and management experiences from external sources to help put the ideas of the core functions into practice. In 2018, Human Resources Centre organised the Group’s senior management to visit companies such as Huawei and Hitachi for field trips and exchanges and analysed the current situation whilst embracing the future, hoping to implement the top-down design and medium to long term strategies well through promoting the philosophical and cultural transformation of the corporation.

In the second half of 2018, the management transformation, layout of new functions and review of responsibilities of the Group have been completed successively. Currently, we are inviting successful management lecturers once every two months to analyse the development trend of the industry, and hold Tsinghua Action Learning and Study Classes for the top management and Pharmaceutical Classes for the middle management, enabling the top and middle management staff to broaden horizons and make a breakthrough of their original technical mindset.

Looking into the future, Human Resources Centre will continue to play a major role in exploring and helping with the manpower needs of the functional departments, coordinate resources with all parties to provide business departments with professional to solutions, and push forward for the implementation of the relevant programmes (see the specific functions as below).





EMPLOYMENT AND LABOUR PRACTICES

TALENT STRUCTURE

As of the end of December 2018, the Group has 14,471 employees, increased by 3,265 as compared to the level as at the end of 2017, in which male and female employees accounted for 7,385 (51% of the total) and 7,086 (49% of the total) respectively. During the year, the Group continued to optimise its employee structure and adhere to the guidelines mentioned below for improving talent structure to support the business transformation in recent years.

Staff Rejuvenation: The Group attaches importance to the rejuvenation of staff and the formation of a new generation of talent to better align its employee structure with the future business development, through which an increasing number of young people will take up core positions and become backbone force. As of the end of December 2018, the total number of employees aged 30 years or below is 7,077, which accounted for 49% of the Group's total headcount.

	Age	30 and below	30-50	50 and above
Headcounts	14,471	7,077	6,948	446

Upgrade of Education Background: The Group recruits a pool of outstanding talents each year and attracts highly educated staff while cultivating reserved talents of the Company. As of the end of December 2018, the number of employees holding bachelor degree and above accounted for 37% of the Group's total headcount.

	Education background	Doctoral degree	Master degree	Bachelor degree	Academy	Below academy
Headcounts	14,471	67	759	4,543	4,990	4,112

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





EMPLOYMENT AND LABOUR PRACTICES

STAFF EMPLOYMENT AND RIGHTS

Lawful Employment

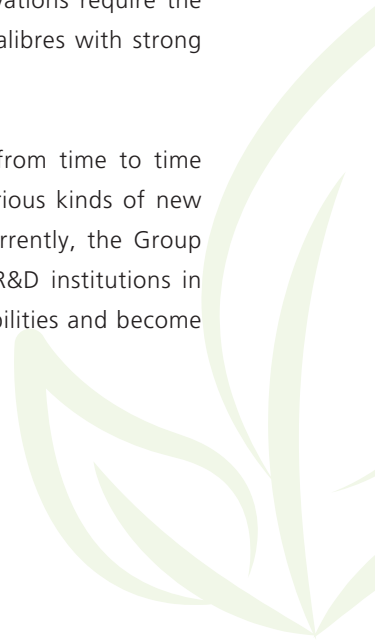
The Group strictly abides by the provisions of relevant regulatory requirements of the “Labour Law of the PRC” (the “Labour Law”) and the “Law on Labour Contract of the RPC” (“Law on Labour Contract”) and safeguarded the legitimate rights and benefits of the employees to exert full efforts to build a harmonious and stable labour relations, and therefore was awarded the “Hebei Province’s AAA Harmonious Labour Relations Enterprise” and the “National Advanced Enterprise for Employment”. The Group’s subsidiaries have always 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 retreat to combine their work and life together and establishing the labour congress as the basic form of a democratic management system;
7. Establishing a sound wage distribution and payment system to make timely and full payment of wages and adhering to sharing the fruits of enterprise success with 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 calibres with strong capability to learn.

The Group carries out analyses on current human resources conditions and relevant positions from time to time and after having clearly defined the objective and requirements of talent recruitment, admits various kinds of new talents without sticking to one pattern and through both full time and flexible introduction. Currently, the Group has established a high-quality research and development team of approximately 1,500 people, R&D institutions in Beijing and Shanghai as well as R&D centres in the U.S. in order to build up our strong R&D capabilities and become a leader in China’s pharmaceutical industry with a strong R&D capability in innovative drugs.





EMPLOYMENT AND LABOUR PRACTICES

Our Human Resources Centre has introduced the Beisen Recruitment Management System and achieved workflow management and digitization of information collection with respect to distribution of recruitment announcements, collection of resumes and accumulation of talent database. In 2018, on the foundation of the existing recruitment system, the Group added an external talent database with automatic updates of the resumes of external talents to ensure the seamless matching up of the Group's talents requirements with the talents database during the course of rapid development of the Group.

During the year, the Group has continued to attract students from different institutes to visit and work at its subsidiaries, and has become an important base of these institutes for internship. The event called "Corporate Visits to Well-known Universities" organised this year has demonstrated the rapid development of CSPC to the staff and students of these universities. The institutions can then better nurture high quality innovative talents according to the corporate requirements and continuously provide the Group with various professional and technical talents to facilitate the development of the Group in the future.

In 2018, a nationwide conference on the joint nurturing base for engineering professional post-graduates in the area of pharmaceutical engineering hosted by the National Education Steering Committee and held by CSPC Group attracted the participation of more than 100 teaching staff and students from over 40 well-known universities. Through this joint nurturing base, we hope to attract more talented engineering post-graduates, and develop professional talents who match closely with the requirements of the Group.

To strengthen the recruitment of high-end talents, the Group implemented the project of Recruitment Process Outsourcing (RPO). In addition, Human Resources Centre also organized a number of internal and external high-end talent recruitment and interviews, and hoped to attract more high-quality talents with doctoral qualifications through the participation of campus matching interviews and post-graduates recruitment event organized by the Ministry of Industry and Information Technology.

DEVELOPMENT AND TRAINING

Professional Training

Following the acceleration of knowledge and technological updates, enterprises need to carry out staff trainings constantly to sustain innovation and the introduction of new ideas. The Group values the professional trainings for talents and provides targeted development plans to the senior management, high-potential employees and new recruits based on the philosophy of emphasizing on covering the key points. The followings are the statistics of the employee training hours provided by Human Resources Centre at the Group's headquarters:

	Total number of training hours ('000 hours)	Average training hours per person (hours)
By employee type		
Top management staff	8	49
Middle management staff	34	41
Junior staff	1,185	88
By gender		
Female	599	84
Male	628	85





EMPLOYMENT AND LABOUR PRACTICES

The Group formulated the technical enhancement training programmes by adopting the approach that employees grow with the enterprises, in order to progressively establish a talent pool for management functions and key technical positions. Each year, all employees of different genders and at different levels are required to attend specialised trainings of their respective departments on relevant technical and regulatory knowledge with respect to safety, quality, environment and labour laws, which effectively promote general legal knowledge and work related to compliance and corporate governance.

Case Study 1: Conducting “Corporate Innovative Management and Capability Building – Advanced Level Seminar”

Based on the evaluation results of the senior management’s competencies, the Group selected 53 outstanding senior managers in May 2018 to join Tsinghua University’s Corporate Innovative Management and Capability Building – Advanced Level Seminar”. The “targeted and customised” training of 4 sessions in 12 days for the senior management team was completed successfully at Tsinghua University on 21 October. An evaluation on the results of the training indicated that all the participants had a certain degree of improvements in their capabilities in terms of strategic thinking, high-quality decision making, talent identification as well as team building.

Case Study 2: Organising the BL2018 Training for Mid-level Management, to Nurture the Capabilities and Responsibilities of the Mid-tier Employees

In May 2018, the Group organized an internal training programme known as “BL2018” for 111 high-performing middle managers. According to the planned training requirements, four major training modules, namely “Development Trend of the Pharmaceutical Industry and Corporate Culture”, “Building Team Spirit and Boosting Team Dynamics”, “Situational Leadership” and “Innovative Thinking in Corporate Management” were delivered. Through this training, the participants were expected to strengthen their overall capabilities, professional qualities and management.

This year, we have also arranged the FC200 Training for 100 employees who hold bachelor’s degree or above and have joined us for 1 to 3 years. This training is to help the participants in the mastery of communication skills, enhancement of goals and planning capabilities, the learning of problem analyses and problem solving, building a solid foundation for their future promotion to a higher position.





EMPLOYMENT AND LABOUR PRACTICES

Development and Incentive

CSPC has been creating a working environment that can attract, cultivate and motivate the growth of talents and is committed to providing a platform for fair competition, ensuring that all employees have equal opportunities for development and growth and talents can be retained by the Group's sincerity and career development opportunities. To effectively select the appropriate members of the management team, the Group has adopted a mode of competence-based human resources development and management, and established the relevant evaluation and selection system for management personnel, resulting that the Group has effectively nurtured and selected a large number of young and outstanding management talents over the years.

The core competitiveness and sustainable development of a corporation depends on the construction of a reserve echelon of talents. The Group has formulated a comprehensive plan in nurturing these talents to ensure a continuous supply of talents of various types. In 2018, we selected over 100 reserve talents for middle and senior management through the internal "Successor" programme. In the construction of professional technical team, the Group has completed the construction of the "Professional Sequence and Qualification Management System", and will carry out professional competence and generic core competence assessments and professional evaluations in July of each year for cross-grade promoted employees, so as to achieve the dual-development of professional and technical skills.

Over the years, the Group has designed an incentive compensation system for employees at all levels and established a dynamic adjustment mechanism for broadband compensation. Human Resources Centre regularly conducts compensation benchmarking analysis, and upgrades the salary of outstanding employees based on the results of the year-end performance evaluation. In 2018, the performance evaluation results were first linked to the proposed year-end restricted share incentives. In addition, the Group also introduced various new policies with respect to compensation and benefits incentives during the year, including the monthly salary incentives for employees who were evaluated as excellent during the year through the "Employees' Annual Evaluation Incentives" implemented in January.

CARE FOR EMPLOYEES

The employees of CSPC have already become our "family members" through years of thick and thin. The "CSPC Family" relief program aims at caring the Group's employees with difficulties and providing assistance to them and their immediate family members in the face of economic difficulties due to major sickness, accidents and education, giving the employees a peaceful and healthy working and living environment. In addition, 15 employees were granted medical assistance for critical illness based on the "Implementation Rules of the Medical Relief for Critical Illness of CSPC Employees" which came into effect in June 2018.





EMPLOYMENT AND LABOUR PRACTICES

HEALTH AND SAFETY

The Group considers production safety as a fundamental element of production management and adheres to the production safety approach of “Safety first, Prevention Foremost and Comprehensive Management” with thorough implementation of the relevant law and regulations of the “Law on Production Safety of the PRC”. 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 are operational in accordance with the relevant laws and regulations. Every 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 safe production management for the entire process by all employees.

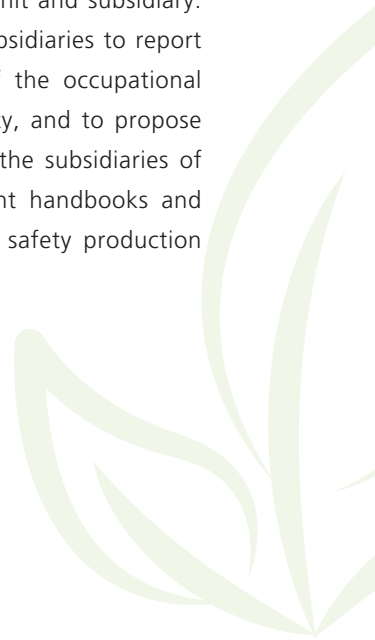
The Group is always committed to enhancing its safety incident response plan and organising different kinds of drills, and has amended the related systems and procedural documents such as the “Safe Production Responsibilities Management System”, “Potential Hazards Identification and Management System”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

In 2018, NBP and Zhongnuo Pharmaceutical Co. Ltd. (Zhongrun Production Base) complied with the “Hebei Provincial Evaluation Standards for Safety Culture Demonstration Enterprises”, passed the audits by the Hebei Administration of Work Safety, and were ranked as 2017 Provincial Safety Culture Demonstration Enterprise.

Production Safety

The Group has established a sound production safety management system dedicated to the promotion of OHSAS18001 Occupational Health and Safety Management System and the implementation of the “Framework for Occupational Health and Safety Management System” and requires the production department of its subsidiaries to take occupational health and safety into account during the establishment and formulation of production procedures. Each of the manufacturing subsidiaries 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.

The Group’s operation management department leads the safety management of each business unit and subsidiary. It organises monthly regular meetings on production safety which allow key managers of each subsidiaries to report the operation of occupational health and safety management system, the current progress of the occupational health and safety projects, the hidden danger investigation and rectification for production safety, and to propose the arrangement and specific views on the next phase of the production safety work. In 2018, the subsidiaries of the Group continued to operate in a steady manner in strict compliance with the management handbooks and procedural documents, and further refined the method of internal assessment through monthly safety production meetings to review the status of target completion by different departments.





EMPLOYMENT AND LABOUR PRACTICES

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

For the avoidance of injuries and fatalities caused by the equipment, the technical transformation and equipment departments of all subsidiaries carry out comprehensive and professional inspections on all equipments of various kinds on a regular basis and prepare and approve the equipment overhaul plan of all subsidiaries to ensure the proper functioning of the dust-proof and gas-proof protective equipment and labour protection facilities. In case of any equipment failure, each department will immediately conduct investigation and evidence collection as well as provide remedies and implement them as required.

Occupational Health

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

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

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).





EMPLOYMENT AND LABOUR PRACTICES

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.

Safety Training and Education

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

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

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

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 hidden danger investigation and handling to encourage all departments to actively enhance the ways of preventing accidents and strengthen the awareness of self-protection during the accidents and their operational capacity for using the firefighting facilities.





EMPLOYMENT AND LABOUR PRACTICES

The followings are the highlights of safety production management performed by the Group's subsidiaries during 2018:

Name of Subsidiary	Work items
Weisheng Pharmaceutical	<ol style="list-style-type: none">1. Strictly implemented the requirements of the "Hebei Provincial Regulations on Safe Production, Risk Management and Potential Hazard Control" and those of the High-tech Zone Safe Production Supervision Administration, and established a "dual control" mechanism for the hierarchical safety risk and potential hazard management, which was implemented as key tasks;2. Carried out a major risk emergency drill;3. Prepared and strictly implemented an annual plan on rectification of potential hazards.
NBP	NBP established a steering group for the cultivation of safety culture. With "zero" incident as the core culture and employees as the centre, all employees were encouraged to participate in safety management, creating a people-oriented and employee caring atmosphere.
Ouyi Pharmaceutical	Carried out a wide range of safety activities, and organized practical fire-drills, a safety talent competition known as "Let Me Speak for Safety" and a comprehensive emergency response drill during events such as Safety Month and Fire-drill Month while vigorously promoting the concept of safety culture.
Zhongnuo Production Base	For timely identification and elimination of potential hazards, this company revised the potential hazard inspection and management system, and clearly defined inspection frequencies and inspection items at all levels. The principal person-in-charge shall organise and participate in at least one potential hazard inspection every quarter, and the Safety Management Department shall conduct comprehensive potential hazard inspection at least once every 10 days. Potential hazards were timely identified and eliminated through different types of safety inspections.
Baike Shandong	According to the requirement of the "Notice on the Guidelines for Further Improving Safe Production by the Construction of a Dual Prevention System Comprising Risk Level Management and Potential Hazard Inspection Released by the Provincial Administration of Work Safety and Forwarded by the General Office of the People's Government of Shandong Province", Baike Shandong established the steering group for the construction of a dual-prevention system and formulated the "Implementation Plan for the Construction of a Dual-prevention System", which established specific arrangements for relevant tasks and promoted the participation in the programmes of hazard source identification and risk level assessment by all staff.





EMPLOYMENT AND LABOUR PRACTICES

Safety Management Training



Promotion Week on Prevention of Occupational Disease



Comprehensive Incident Emergency Response Drill





ENVIRONMENTAL PROTECTION

GOOD ENVIRONMENTAL PROTECTION PRACTICE AS CORPORATE RESPONSIBILITY TO THE ENVIRONMENT

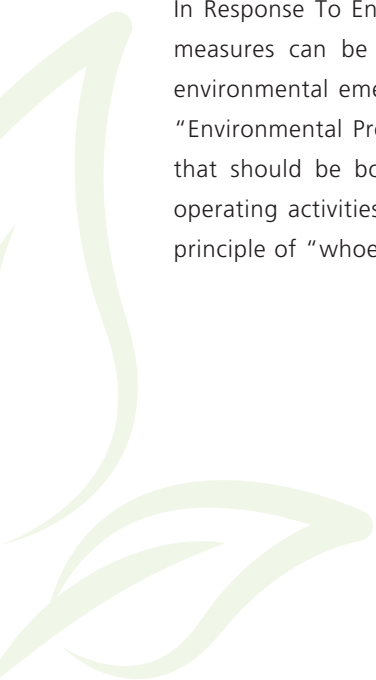
It is vital to strike a balance between corporate development and environmental protection. We fully recognise environmental protection as an essential part of the social responsibility in economic development and therefore have been dedicated to minimising the impact of business development on the environment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

ENVIRONMENTAL MANAGEMENT SYSTEM

CSPC actively builds a sound environmental protection and management system, sets up dedicated departments for the supervision and management of environmental protection and occupational health and safety, and adopts a management approach under which head office and subsidiaries will be responsible for the efficiency supervision and daily operation, respectively. The operation management department at the Group's head office is responsible for monitoring the overall management of environmental protection while subsidiaries also have specific environmental protection departments. In 2018, 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 amendments can be timely made on relevant policies and procedures. Meanwhile, through the intranet, training programs and meetings before and after duty in the production workshop, the subsidiaries of the Company disseminate the knowledge in relation to environmental protection policies and regulations to relevant departments and employees so as to improve their understanding on applicable national laws and regulations and local standards and increase corporate environmental protection awareness.

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. In addition, the Group has also established the "Environmental Protection Responsibility System" which clearly defines the environmental protection responsibilities that should be borne by managing staff as well as employees at all levels during the course of production and operating activities, requiring all employees to take responsibilities within their respective scopes of work under the principle of "whoever is in-charge should be responsible" for the environmental protection matters in their positions.





ENVIRONMENTAL PROTECTION

Pollutant Prevention and Control

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

- Environmental Protection Law of the PRC;
- Law of the PRC on the Prevention and Control of Environment Pollution by Solid Waste;
- Law of the PRC on the Prevention and Control of Water Pollution;
- Law of the PRC on the Prevention and Control of Atmospheric Pollution; and
- Law of the PRC on the Prevention and Control of Pollution from Environmental Noise.

Each subsidiary identifies the applicable law and regulations and other requirements and periodically performs compliance evaluation on their pollutant discharge, prepares operation report for the environmental management system and assessment form for the compliance with environmental laws and regulations. We identify and correct the deficiencies based on the analysis results, and amend the management system for waste water discharge and solid waste treatment.

In addition, all the subsidiaries set up pollution emission automatic monitoring systems in accordance with the requirements of governmental environmental protection departments to ensure that they can pass the conformity assessment on relevant laws and regulations of governmental supervision departments and obtained "Pollutant Discharge Permit of Hebei Province" issued by the Hebei Provincial Environmental Protection Bureau. The Group also conducts internal review on the environmental management system on a regular basis and issues non-compliance reports to formulate corrective measures for the workshops with non-compliance items and to monitor and verify the effectiveness of those measures. In May 2018, a subsidiary of the Group completed the rectification works of the workshop concerned in response to the questions and request raised by Hebei Environmental Protection Bureau.

The Group attaches great importance to the impact of the production process on the surrounding environment. In 2018, 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

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

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



ENVIRONMENTAL PROTECTION

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, containing details of general emission and greenhouse gas emissions of the Company, emission factors and data and sources description, as well as an audit of greenhouse gas emission. The Group will pay close attention to the audit method and reporting requirements for greenhouse gas emissions and strengthen the related data management.

Waste Water

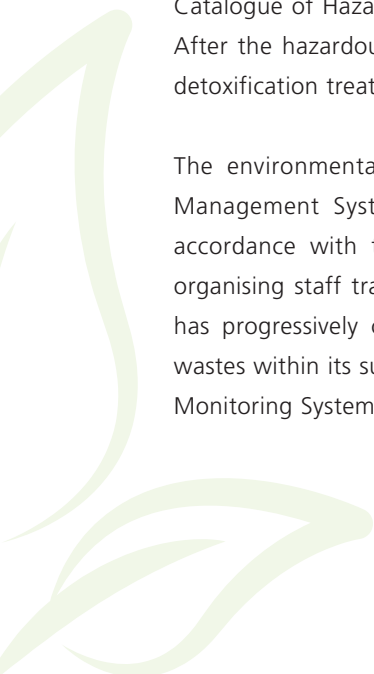
The industrial waste water discharged into the pipes by our subsidiaries containing pollutants (such as chemical oxygen demand ("COD") and ammoniac nitrogen) need to be pre-treated by the internal sewage treatment station of the factories before being discharged into the municipal sewage treatment system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

In order to ensure stable operation of the environmental protection facilities throughout the year, our environmental protection professionals adhere to the "Standard Operating Procedures for the Processing System in Environmental Protection Station", pursuant to which 24-hour shift inspection and test on water discharge will be conducted and regularly spot-checked by the competent departments, and timely take emergency measures upon discovering any deviations in the sewage discharge. Subsidiaries of the Group 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. The Group appointed dedicated personnel to manage the hazardous wastes which are collected and classified according to National Catalogue of Hazardous Wastes. The packaging and storage areas of hazardous wastes are labeled for proper storage. After the hazardous wastes have been centrally collected, qualified company will be engaged to carry out centralised detoxification treatment to ensure that the hazardous waste disposal fulfills the compliance requirement.

The environmental protection department of each subsidiary strictly complies with the "Solid Waste Discharge Management System" 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, as well as organising staff training on the implementation of the relevant environmental protection policies. In 2018, the Group has progressively completed the installation and online connection of intelligent monitoring systems for hazardous wastes within its subsidiaries in accordance with the requirements of the "Notice on the Establishment of the Intelligent Monitoring System for Hazardous Wastes in the Province".





ENVIRONMENTAL PROTECTION

Domestic and non-hazardous solid wastes are collected by the municipal environmental hygiene department. Taking XNW as an example, the company is committed to improving its solid wastes treatment technology. It has adopted the use of high-pressure plate and frame as well as stirring blade dewatering facilities to treat the sludge, significantly reducing the moisture rate in sludge and effectively achieving the reduction of solid waste volume.

ENERGY UTILISATION

The Group 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 workshop to promote energy measurement management. Subject to semi-annual revision and adjustments under special circumstances, the energy consumption quota is determined by the production departments according to production operating conditions. The workshop of each subsidiary then sets the consumption quota for each production process and major energy-consuming equipment in the workshop based on the 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.



ENVIRONMENTAL PROTECTION

The following are the details of the Group's pollutants emission and resources usage during 2018:

Pollutants emission				
Type of pollutants	Emission		Intensity	
	2018	2017	2018	2017
Greenhouse gas	981,708.42	1,108,844.97	4,668.38	7,171.17
Other exhaust gases	(tCO ₂ e)	(tCO ₂ e)	(tCO ₂ e /HK\$100 million income)	(tCO ₂ e /HK\$100 million income)
— Sulfur dioxide	37.50 tonnes	61.96 tonnes		
— Nitrogen oxides	93.92 tonnes	73.90 tonnes		
Solid Waste	54,213.72 tonnes	53,566.61 tonnes	257.81	346.43
— Hazardous waste	9,321.77 tonnes	9,019.27 tonnes	(tonnes/HK\$100 million income)	(tonnes/HK\$100 million income)
— General industrial waste	44,891.95 tonnes	44,547.34 tonnes		
Waste water	7,040,000 tonnes	6,230,000 tonnes		
Including:				
— COD	917 tonnes	679 tonnes		
— Ammonia nitrogen	98 tonnes	86 tonnes		
Resources consumption				
Type of resources	Quantity of Consumption		Intensity	
	2018	2017	2018	2017
Electricity	630,151.3 kWh	630,129.7 kWh	2,996,600 (kWh/ HK\$100 million income)	4,075,200 (kWh/ HK\$100 million income)
Steam	1,314,397.56 tonnes	1,293,803.71 tonnes	6,250.44 (tonnes/HK\$100 million income)	8,367.35 (tonnes/HK\$100 million income)
Coal	8216.44 tonnes	7,082.57 tonnes	39.07 (tonnes/HK\$100 million income)	45.80 (tonnes/HK\$100 million income)
Water				
Freshwater:	8,278,357 m ³	7,305,306 m ³	39,366.63	47,245.22
— underground water	733,391 m ³	1,951,239 m ³	(m ³ /HK\$100 million income)	(m ³ /HK\$100 million income)
— municipal water	7,544,966 m ³	5,354,067 m ³		
Packaging materials	38,278.87 tonnes	24,262.53 tonnes	182.03 (tonnes/HK\$100 million income)	156.91 (tonnes/HK\$100 million income)



ENVIRONMENTAL PROTECTION

CLEAN PRODUCTION

The Group strictly complies with relevant provisions under the “Law of the People’s Republic of China on Promoting Clean Production” and has been dedicated to further reduce pollutant emissions and strengthen its governance on industrial pollution sources. During 2018, the Group continued to actively promote clean production and strengthen industrial pollution control and improve its production process design while using clean energy and materials and employing advanced workmanship, technology and equipment. The Group 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.

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

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

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

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





ENVIRONMENTAL PROTECTION

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

(1) Water conservation

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

The Group has also strived to reduce the consumption of underground water and municipal water. During the year, subsidiaries of the Group have increased investments on various reclaimed water projects, through which reclaimed water from the water systems was collected and used as recycled water, which in turn enhanced the rate of recycled water utilisation. Taking Yinhu Pharmaceutical as an example, in August 2018, the company added a reverse osmosis facility to the workshop to prepare purified water, which greatly improved its water utilisation rate.

In 2018, we continued to promote various water conservation programmes in all subsidiaries. For example, Weisheng Pharmaceutical responded to the World Water Day by holding water-saving trainings and implementing various water-saving programmes.

(2) Energy Conservation

Currently, the energy measurement data of a number of workstations, automatic stereoscopic warehouses and integrated buildings can be uploaded to the software platforms of energy management centre with various types of reports being produced through such platforms, which set out the daily energy consumption indicators for each type of energy of every workshop.

Ouyi Pharmaceutical promotes intelligent energy-saving management projects by taking advantage of the energy management centre's software platform and increasing energy management personnel. It strengthens the intelligent management of energy measurement in integrated zone, and analyzes daily reports to ensure timely detection of daily energy consumption abnormalities.

In addition, Weisheng Pharmaceutical has increased the amount of nanofiltrate through adding high pressure nanofiltration equipment, which reduces steam consumption of concentration system.





ENVIRONMENTAL PROTECTION

(3) Clean production

The Group has always been actively committed to improvement projects targeted at reducing emission from the source. The following are the efforts we made in clean production in 2018:

Improvement programme for environmental protection facility

- NBP pushed for the implementation of the waste water treatment upgrade project, which has greatly strengthened the sewage treatment capacity to ensure the compliance with waste water discharge standard;
- XNW invested in a new phase of ammonia-nitrogen deep treatment project. After implementation, the ammonia-nitrogen treatment capacity has been greatly enhanced;
- Yinhu Pharmaceutical launched the natural gas boiler clean energy alternative project to meet the extra low emission standard.

Improvement programme for emission reduction at source

- In order to reduce the concentration of chlorine ions in waste water and further control production costs, Weisheng Pharmaceutical launched the source reduction of hydrogen chloride programme in the 201 and 206 workshops to reduce the concentration level of chlorine ions during waste water treatment as well as the burden of environmental protection facilities;
- Zhongnuo Pharmaceutical's Zhongrun production base completed a water-saving project to lower primary water flow and reduce waste water discharge;
- Ouyi Pharmaceutical has improved the Indomethacin acylation centrifugal washing pipeline project to make the freshwater pipeline thinner. Under the conditions of basically the same amount of time and washing results using the filter cake, the volume of freshwater used as well as the quantity of waste water emissions have been greatly reduced.

Highlights in environmental protection

- With the collaboration of various departments, the in-depth treatment of volatile organic compound (VOC) used by several major subsidiaries, including Weisheng Pharmaceutical, Ouyi Pharmaceutical and NBP, has been evaluated as grade "A". While achieving no requirement for staggering peak production during winter season, this has provided a strong guarantee for the Company's normal production.

Full participation in environmental protection event

- In June 2018, XNW organised an "Environment Day" event with solid waste management as the theme of promotion.
- In July 2018, Zhongnuo Pharmaceutical organised the "Clean Production Month Activities" which through window displays, electronic screen promotion, as well as speech contests, encouraged the participation by all employees.



ENVIRONMENTAL PROTECTION

Regular Environmental Protection Meeting at Manufacturing Centre



LDAR On-site Inspection (Ouyi Pharmaceutical)





SUPPLIER MANAGEMENT

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 and authorities of relevant management departments, including procurement department, production department and quality department. The principles and basis for the classification of materials have been formulated to implement the categorisation of all materials and set out the details of all material categories, such as raw materials, excipients and packaging materials used in production.

PROCUREMENT MANAGEMENT SYSTEM

The Group has set up the centralised procurement centre to coordinate the procurement needs of its subsidiaries in order to reduce the procurement cost through group tender, centralised price negotiation and the development of new suppliers and continuously optimised the supply risk management procedures.

The Centralised Procurement Centre formulates the material procurement management guidelines, and regularly prepares production material procurement plans together with various business units and subsidiaries according to the production department's production plans. The procurement staff selects the appropriate material procurement pricing method according to the procurement plan. During the procurement process, the procurement staff is required to actively look for potential suppliers to ensure that there are no fewer than two suppliers participating in the bidding and for price comparison, and the members of the bidding team or the heads of the procurement departments of various subsidiaries will negotiate the prices with the qualified suppliers. The procurement department will conduct a comprehensive evaluation of the qualified suppliers in terms of qualification, reputation, quality, price, etc., and adhere to the procurement principle of comparing qualities and prices (i.e. adopt the method of comparing quality for the same material, comparing price for the same quality and comparing reputation for the same price) when carrying out procurement approval according to the requirements of established procurement bidding and price comparison procedures.

In 2018, the centralised procurement centre continued to review the procurement management system. Apart from the newly added system for the management of hazardous chemicals, various existing systems (such as R&D and production materials procurement, procurement for contingency plans and supplier management) have been revised according to the actual situation of procurement works. In addition, standard operating procedures for key phases (including pricing, payment approval, and negotiation processes, etc.) have further been refined during the year.





SUPPLIER MANAGEMENT

SUPPLY RISK MANAGEMENT

After the long-standing business relationship with suppliers, the Group has established a long-term and stable strategic partnerships with the core suppliers to share information, mutual benefit and the risks. In order to meet the customers' demands, the Group helps key suppliers to improve their process and provides them with technical support, enabling them to develop a supply risk management in line with the Group.

The Centralised Procurement Centre also assesses and minimises the impact of a single supplier on the stable material supply from time to time so as to adopt mitigating measures timely when the supplier becomes the primary target for surveillance and supervision of the government or environmental protection departments. In recent years, in light of increasing attention on environmental protection and safety by the PRC government, some of the suppliers' production and material transportation were affected and limited. The Centralised Procurement Centre has always put supply guarantee as the top priority of the year. Through various measures including exerting efforts in developing new qualified suppliers and expanding supply channels, coordinating and enhancing the inventory management at its production bases and increasing the frequency of onsite monitoring of suppliers, stable production was secured at all production bases during the year.

INFORMATION MANAGEMENT SYSTEM ON PROCUREMENT

In respect of the construction of information systems, the Group has put in place a platform on which procurement information can be shared. Through exchanges and resources sharing, real-time references can be provided for procurement bidding and supply risks management.

During the year, a full effort was put into launching an electronic procurement platform (the SRM system) by the Centralised Procurement Centre. Starting from the middle of the year, all subsidiaries are required to submit the approved monthly material requirements plans to the Centralised Procurement Centre through the SRM system. Upon the completion of the whole approval and processing, the Centralised Procurement Centre will upload 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.

For the improvement of work efficiency and the reduction of travelling time of procurement staff between various factory areas, the Centralised Procurement Centre has migrated the approval process for payment budgets and material payment vouchers to the Office Automation (OA) System for online approvals. As of the end of 2018, all critical processes in procurement which had been carried out physically were put online. In addition to the substantial improvement of work efficiency, the procurement management has become more transparent and standardised.





SUPPLIER MANAGEMENT

SUPPLIER EVALUATION MECHANISM

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

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

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

QUALITY AUDIT

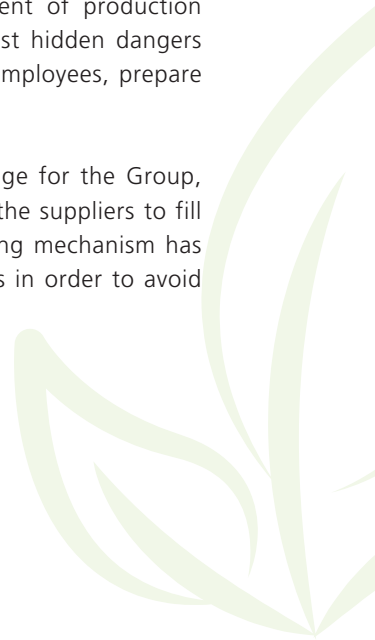
The Group has set up a supplier audit team with quality management department as the core member to perform audit on the overall quality management system of material suppliers and formulate audit plan for the quality audit on suppliers in which the detailed requirements for duties, contents, procedures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

Field Audit

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

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

To further regulate the supplier audit procedures and build an impartial and strict corporate image for the Group, the supplier audit team strictly abides by the "Supplier Audit Discipline of CSPC" while requiring the suppliers to fill in the "Letter of Undertaking for the Acceptance of Field Audit by CSPC". A sound whistleblowing mechanism has also been established to ensure the impartiality, authenticity and effectiveness of the audit results in order to avoid any audit staff from corruption.





SUPPLIER MANAGEMENT

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 first entering into the position 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. In March 2018, the Group's supervision and security department 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

We place great emphasis on anti-corruption and take anti-corruption management, integrity building and supervision as our strategic tasks.

The Group's independent supervision and security department 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 order to safeguard the order of the Group's business operations and stimulate all employees of the Group to conscientiously comply with the PRC laws and regulations as well as the Group's various procedures and systems, the Group formulated a series of internal policies and regulations in relation to anti-corruption, including the "CSPC's Employee Integrity Management System (cum Integrity, Self-discipline and Accountability System for Middle and Senior Management)", the "Reporting and Handling of Gifts Administration System for CSPC Employees", the "Integrity and Self-discipline Management System for Business Entertainments", the "CSPC Misconduct Blacklist Management System" and the "CSPC Monitoring, Reporting, Reward and Punishment Management System". The Group's major efforts in relation to anti-corruption and internal discipline inspection in 2018 are described as follows:

1. CONDUCTING EFFICIENCY SUPERVISION

To enhance the supervision and audit in respect of discipline inspection of the Group and its members, the Group has established a comprehensive and 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 2018, the Group conducted a special 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, audit on efficiency supervision enabled us to impose more specific requirements on operating skills of discipline inspection personnel which help strengthen the problem-identifying and problem-solving capabilities of discipline inspection personnel during supervision and inspection, laying a crucial foundation for further improvement of supervision and inspection.

2. PROMOTING INTEGRITY AND SELF-DISCIPLINE

With the aim of strengthening integrity education and developing a sound atmosphere of lawful operation and integrity, the supervision and security department carried out a group-wide employment integrity educational activity for all employees, and in March 2018, requested the Group headquarters and various subsidiaries to establish or optimise their requirements for integrity and self-discipline at key positions".

In September 2018, the supervision and security department issued the "Notice of Strict Compliance with Integrity and Self-discipline Requirements During the Mid-Autumn Festival and National Day holidays", requesting managers at all levels and personnel at key positions to be vigilant in maintaining their ethical defense against corruption, and to ensure that the "Undertaking of Integrity and Risk Prevention" is signed 100%.



ANTI-CORRUPTION

3. 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 in order to ensure that tendering works are properly executed. In 2018, the Group strengthened the regulations on the bidding and pricing process. The discipline inspection personnel of the Group's supervision and security department reviewed the relevant records of communication during the pricing process to ensure that prices were determined strictly in accordance with internal management systems and requirements of operation procedures.

In addition, in an effort to optimise the whistleblowing channels and enhance the internal capability for processing whistleblowing, the Group has set up a dedicated hotline and email address, and in 2018 established a Wechat reporting platform, with designated personnels responsible for the follow-up of reported matters.





Community Investment

GOOD CHARITIES WORKS AS CORPORATE RESPONSIBILITIES TO THE SOCIETY

Since its establishment, CSPC has always regarded its social responsibilities as the direction of all business practices and contributed to the society with gratitude.

With an aim to make contribution to our home country and society, the Group has been adhering to the corporate philosophy of “All for good medicine, all for mankind’s health” for a long period of time and bearing in mind our corporate social responsibility to actively participate in social charitable activities. The Group has organized a series of social charitable services and taken actual action to help the society with full efforts. During the year, the donation made by the Group was approximately HK\$25,231,000 (2017: approximately HK\$5,089,000), and the Hebei Children’s Hospital of Integrated Traditional Chinese and Western Medicine under the Group was put into service this year.

To better achieve our works in charitable services, Mr. Cai Dongchen, the Chairman of the Group, together with CSPC Holdings Company Limited (an affiliated company of the Group) established the Hebei CSPC Pu’en Charity Foundation (the “Foundation”) in late 2015. The service scope of the Foundation includes:

- 1) giving assistance to the sick, poor, depressed and senior citizens in the underprivileged groups, including those in serious diseases, poor families and 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.

Since its establishment, the Foundation has always adhered to its original aspiration in passing on and extending love and care through contribution to public welfare. On this Foundation platform, the Group has carried out a number of public welfare activities in the areas of “elderly assistance, poverty alleviation, sickness support, predicament relief and education assistance”, including donation to poor employees within the Group, donation for education assistance, visits to poor children, and precised poverty alleviation programme in mountainous areas as well as elderly care and other activities. The following are the charity activities carried out by the Foundation in different areas during the year:





Community Investment

1. EDUCATION AID AND POVERTY ALLEVIATION

The “Twilight Action” education aid programme

The “Twilight Action” programme 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	Activity highlights
12 January	Launched the ceremony of the programme at the country’s poverty-stricken Xingtang County and visited the Xingtang No. 1 Middle School and experimental middle school. 236 poor students received financial aids and inspiring books.
1 March	30 university student representatives who benefited from the Foundation’s aids in 2016 and 2017 and the recent graduate representatives of CSPC jointly participated in the university student forum held at the headquarters of CSPC Group.
16 March	Conducted visit to local schools in Pingshan and identified 107 students as the first batch of targets to receive aids. During the ceremony, the Foundation distributed financial aid and inspiring books, with an aim to help these poor students to complete their studies successfully and realise their dreams.
1 June	The public welfare event called “Give Your Heart and Fulfill Your Wishes” for the Children Day on 1 June was successfully hosted in the Yuanfang Primary School in Pingshan County. More than 200 wishing cards were hung on the wishing tree, with a sad story behind each of these wishes. The caring persons on-site fulfilled each children’s wish.
18 August	The education aids on fulfilling dreams activity “Give Your Heart and Fulfill a Dream” was held at the CSPC headquarters. In this event, each of the 200 outstanding students from poor families in 18 counties including: Pingshan, Lingshou, Zanhuang, Gaocheng, Shenze, Gaoyi and Xinle received education aid of RMB5,000, which could help them in successfully entering into universities. All of these outstanding students had faced difficulties in life with courage, and were admitted to undergraduate programmes by universities through the college entrance examination.
30 September	Distributed education aid fund and classical Chinese literature books to 84 poor students from 54 primary, middle and high schools in the Gaocheng area.
16 November	Erudite Lecture Hall A series of activities were launched to enlighten the hearts of the poverty-stricken children and help them establish warm and healthy personalities.
26 December	One good deed every day, love will find its way In response to the needs of students in remote mountainous areas, the Foundation has specially made warm packs and brought internal staff to bring the saying “One good deed every day” into practice. By guiding the employees to experience the happiness of doing good and encouraging them to be charitable, it is hoped that a trend of holding high value of morality will be formed within the Group.





Community Investment

2. SICKNESS SUPPORT

The “Shining Star” Programme

The “Shining Star” handicapped support programme was established in November 2017. It focuses on the handicapped children of families with economic difficulties. It was hoped that the body functions of the handicapped children could be recovered to a maximum extent through medical and educational rehabilitation, so as to change the destinies of the children and their families.

Date	Activity highlights
25 July	A hearing-impaired child, who could not afford the costs of cochlear implant and surgery costs due to financial difficulties, received the cochlear implant operation with the help from the Foundation.

“Spring Drizzles” Public Welfare Programme

Through the “Spring Drizzles” programme, the Foundation 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. Events in 2018 included: “Hebei Breast Cancer Early Screening Project”, “Jilin Provincial Cancer Hospital – Poverty-stricken Tumor Patients Charity Relief Project”, “Donation of Clinically-used Medicines to Red Cross of Pingwu County, Mianyang City, Sichuan”, and the “Precised Poverty Alleviation Project of South Qiaojiaying Village, Kangbao County, Zhangjiakou”, and etc..

Date	Activity highlights
3 May	On the special day of the 10-year anniversary of the Wenchuan Earthquake in Sichuan, the Foundation, together with other caring enterprises, donated medicines to the poor and grassroots level patients in Pingwu County, Sichuan.
13 September	“Precised Poverty Alleviation by Promoting Industries, Filled the Village with Heartful Donations” The Foundation donated funds to help South Qiaojiaying Village develop beef cattle breeding industry, in such a way to promote local industries, achieve self-sufficiency through recycling production and finally achieve ultimate poverty alleviation.
30 October	The Foundation donated winter food supplies to Daijia Village of Zhangbei County, Zhangjiakou, with an aim to help the poor families stock up winter food supplies for the winter.



Community Investment

3. ELDERLY ASSISTANCE

“Sunset Glow Action” elderly assistance programme

Respecting the elderly is a fine tradition of the Chinese culture. The Foundation launched the “Sunset Glow Action” elderly assistance programme to send regards and happiness to the elderly through visits. In 2018, the “Sunset Glow Action” elderly assistance program focused on the elderly who were poor and lonely. At different times, elderly respect activities were carried out in the Community Care Canteens in Jingjing and Xingtang as well as in the Yuan’s Caring Commune. Activities included donation of required supplies, free medical consultations and compassionate companionship.

Date	Activity highlights
14 March	In the Community Care Canteen of Dishui Village, Jingjing County, the staff of the Foundation and volunteers of more than 10 people brought specially made nutritious biscuits, steamed buns and steamed rolls to the elderly people who were dining in the canteen.
14 June	In the Community Care Canteen of Xingtang County, the public welfare event with the theme “CSPC Pu’en Delivers Love with Dragon Festival Rice Dumplings” was held, sending blessings, caring words, warmth and love to over 30 lonely elderly people.
24 August	The Foundation brought supplies including pillows, blankets, food and common medicines to the hands of the lonely elderly people at the Community Care Canteen in Xingtang County, Shijiazhuang City.
12 October	“Health Caring Visit at Chung Yeung Festival – Autumn Caring Event” Before Chung Yeung Festival, the Foundation together with NBP visited the lonely elderly people of apartment for the aged in Daguo County, Shijiazhuang City, bringing them warm regards, interactive games and common medicines and daily consumables. Meanwhile, the accompanying expert held a health talk on the physiological and psychological characteristics of the elderly, as well as characteristics of common diseases, cardiovascular and cerebrovascular diseases.
17 October	“Health Caring Visit at Chung Yeung Festival – Beautiful Sunset Event” The Foundation, together with the Group’s subsidiaries, visited the Lingshou Honorable Institute and shared a good time with the handicapped veterans and lonely elderly people, offering common medicines and daily consumables.





Community Investment



**Twilight Action —
“Give Your Hearts and
Fulfill Your Wishes**



Erudite Lecture Hall



Sunset Glow Action



Spring Drizzles

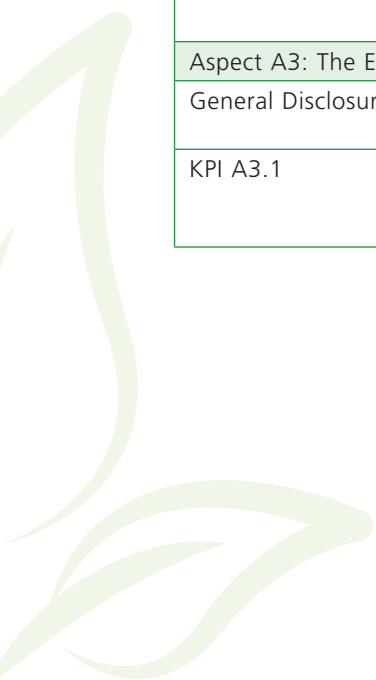
In 2019, the Group will continue to actively explore new ideas in launching various kinds of aid activities through the social welfare platform of the Foundation. We sincerely hope that the social value of the Group will be reflected in our commitments to public welfare and continuous shouldering of social responsibilities, through our delivery of love and care to the needy.





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





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B. Social		
Aspect B1: Employment		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare	Employment and Labour Practices
KPI B1.1	Total workforce by gender, employment type, age group and geographical region	Employment and Labour Practices
KPI B1.2	Employee turnover rate by gender, age group and geographical region	No disclosure
Aspect B2: Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards	Employment and Labour Practices (Health and Safety)
KPI B2.1	Number and rate of work-related fatalities	Employment and Labour Practices (Health and Safety)
KPI B2.2	Lost days due to work injury	Employment and Labour Practices (Health and Safety)
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored	Employment and Labour Practices (Health and Safety)
Aspect B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Employment and Labour Practices (Development and Training)
KPI B3.1	The percentage of employees trained by gender and employee category	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 Standards		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	Employment and Labour Practices (Lawful Employment)
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	Employment and Labour Practices (Lawful Employment)
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	No occurrence





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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	No disclosure
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 Responsibility		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress	Product and Customer (Product Responsibility)
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	No 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: Anticorruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Anti-corruption
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the organisation or its employees during the reporting period and the outcomes of the cases	No occurrence
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored	Anti-corruption
Community		
Aspect B8: Community Investment		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests	Community Investment
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport)	Community Investment
KPI B8.2	Resources contributed (e.g. money or time) to the focus area	Community Investment

