



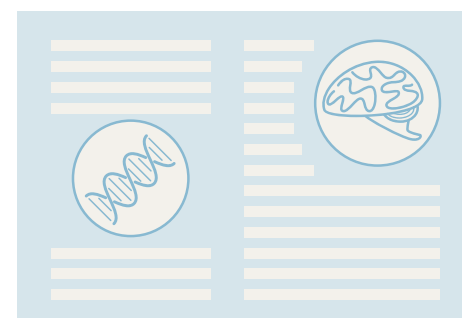
上海醫藥集團股份有限公司
Shanghai Pharmaceuticals Holding Co., Ltd.*
(A joint stock company incorporated in the People's
Republic of China with limited liability)
(Stock Code: 02607)

2021 Sustainable Development Report

& Environmental, Social and Governance Report



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About this Report

This report is the 12th Corporate Social Responsibility (CSR) Report issued by Shanghai Pharmaceuticals Holding Co., Ltd. (hereinafter referred to as "SPH", "the Company", "the Group", or "We"), disclosing information regarding Environmental, Social and Governance (ESG) of the Company and our subsidiaries in 2021. This is an annual report. The previous one was published in May 2021.

Important Notice

The Company's Board of Directors (the "Board") and directors (the "Directors") certify that there are no false representations and misleading statements contained in, or material omissions from, this report, and jointly accept the responsibility for the truthfulness, accuracy and completeness of the contents of this report.

Reporting Scope

This report covers January 1, 2021 to December 31, 2021 ("Reporting Period"). Some contents and data may touch on a period beyond this timeline. The report touches on the main businesses of SPH's pharmaceuticals and pharmaceutical services. There is no major change in the scope of this report compared with the 2020 Shanghai Pharma Corporate Social Responsibility Report.

Reporting Standard

This report was prepared in accordance with the requirements of the Environmental, Social and Governance Reporting Guide (ESG Guide), as set out in Appendix 27 of the Rules Governing the Listing of Securities of the Stock Exchange of Hong Kong Limited (SEHK), as well as "Notice on Strengthening the Social Responsibility Commitment of Listed Companies and Promulgating the Guidelines on Environmental Information Disclosure of Companies Listed on Shanghai Stock Exchange", and the Guidelines on Preparation of Corporate Social Responsibility Reporting promulgated by the Shanghai Stock Exchange (SSE). This report also makes reference to partial indicators in the Sustainability Reporting Guidelines (GRI Standards) of the Global Reporting Initiative (GRI), and the Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR4.0) of the Chinese Academy of Social Sciences (CASS).

Reporting Principles

This report follows the Reporting Principles of materiality, quantitative, balance and consistency in the ESG Guide:

Materiality: This report has identified important stakeholders and included stakeholder communication and materiality assessment as a basis for determining the importance of ESG issues.

Quantitative: This report presents environmental and social KPIs using quantitative data, accompanied by a narrative, explaining its purpose and impacts.

Balance: This report follows the principle of balance and objectively displays the current status of ESG management of the Company.

Consistency: Unless otherwise stated, this report uses the same statistical methods as the 2020 Shanghai Pharma Corporate Social Responsibility Report.

Report Availability

This report is published online. The online version can be downloaded from the Company website (www.sphchina.com) and the website of Hong Kong Exchanges and Clearing Market (www.hkexnews.hk).

Definition

In this report, unless the context otherwise requires, the following terms shall have the following meanings:

"SPH", "the Group", "the Company" or "We"	Shanghai Pharmaceuticals Holding Co., Ltd.
SHAPHAR	Shanghai Pharmaceutical Co., Ltd.
SPH Kyuan	SPH Keyuan Xinhai Pharmaceutical Co., Ltd.
SPH Sales	SPH Drug Sales Co., Ltd.
Sine United	Shanghai Sine United Western and Chinese Traditional Medicine Co., Ltd.
SPH Shangke	Shanghai Shangke Pharmaceutical Co., Ltd.
New Asia Pharmaceuticals	Shanghai SPH New Asia Pharmaceuticals Co., Ltd.
SPH Dragon&Tiger	Shanghai SPH Dragon&Tiger Pharmaceutical Sales Co., Ltd.
SPH-IPT	Shanghai SPH Innovative Pharmaceutical Technology Co., Ltd.
SPH Sine	Shanghai SPH Sine Pharmaceutical Laboratories Co., Ltd.
SPH SBPC	SPH No. 1 Biochemical & Pharmaceutical Co., Ltd.
SPH TCM	Shanghai Traditional Chinese Medicine Co., Ltd.
SPH Changzhou Pharma	SPH Changzhou Pharmaceutical Co., Ltd.
SPH New Asia	Shanghai SPH New Asia Pharmaceutical Co., Ltd.
SPH Zhongxi Sunve	Shanghai Zhongxi Sunve Pharmaceutical Co., Ltd.
SPH Techpool	Techpool Bio-Pharma Co., Ltd.
SPH Qingchunbao	Chiatai Qingchunbao Pharmaceutical Co., Ltd.
SPH Growful	SPH Qingdao Growful Pharmaceutical Co., Ltd.
SPH Research Institute	Central Research Institute of Shanghai Pharmaceuticals Holding Co., Ltd.
SPH Herbapex	Liaoning SPH Herbapex Pharmaceutical (Group) Co., Ltd.
Huqingyutang Pharma	Hangzhou Huqingyutang Pharmaceutical Co., Ltd.
SPH Zhonghua Pharma	Shanghai Zhonghua Pharmaceutical Co., Ltd.
SPH XTCM	Xiamen Traditional Chinese Medicine Factory Co., Ltd.
SPH Sinobp	SPH Dongying (Jiangsu) Pharmaceutical Co., Ltd.
SPH SunwayBio	Shanghai Sunway Biotech Co., Ltd.
SPH RD	Shanghai SPH Rare Disease Co., Ltd.
CanSino SPH	CanSino SPH Biologics Inc.
SPH Leiyunshang	Shanghai Leiyunshang Pharmaceutical Co., Ltd.
SPH Import & Export	Shanghai Pharmaceutical Import & Export Co., Ltd.
SPH-BIOCAD	SPH-BIOCAD (HK) Limited
SPH SMICC	Shanghai Medical Instruments Co., Ltd.
SPH Materials	Shanghai Pharmaceutical Material Supplying&Selling Co., Ltd.
A shares	domestic shares of the Company, which are listed on the Shanghai Stock Exchange and traded in RMB
H shares	overseas shares of the Company, which are listed on the Hong Kong Stock Exchange and traded in Hong Kong dollars

Message from the Chairman



Time is running out. The year 2021 marks the centenary of the CPC and the start of the 14th Five-Year Plan. At the historic crossroad of the "Two Centenary Goals", SPH is committed to the mission of improving health and quality of life, keeps up with current trends responds to the call of our country, addresses social needs, and integrates social responsibilities and sustainable development into the business management to promote the high-quality development of the industry and society.

Accelerating innovation and upgrading. China's pharmaceutical industry is facing unprecedented changes in a new wave of global technology. SPH actively responded to the national biomedical development strategy and established the goal of "pursuing innovation-driven development and building a globally competitive pharmaceutical conglomerate in China". The Company promoted an open and diversified innovation model of "Independent R&D + BD", and continued to develop product portfolio with clinical value. As of the end of 2021, there were 47 new drugs in the R&D pipeline, and

the Company's first license-out project was successfully launched. SPH has built an "industry-university-research" platform with a number of universities, medical institutions, and research institutes, and has translated many cutting-edge projects including CAR-T cell therapy. The construction of SPH's Biopharmaceutical Industrial Base Project, a major project in Shanghai, reached a milestone in 2021, moving towards a biopharma innovation hub with international influence.

Advancing green transformation. Since the 18th National Congress of the Communist Party of China, green development has become a dominant development concept, and "carbon peaking and carbon neutrality" have been incorporated into the framework to build an ecological civilization. With the goal of "becoming a resource-saving and environmentally-friendly Company", SPH continued to promote green operations. In 2021, SPH launched more than 70 energy conservation and emission reduction projects to improve energy efficiency through process renovation and equipment renewal; strictly controlled waste discharge and received no penalties for illegal discharge of pollutants throughout the year; carried out publicity and training for environmental protection to strengthen employees' environmental awareness; conducted dual-carbon training and promoted photovoltaic projects to reach its dual-carbon goals.

Improving drug accessibility. As the largest service provider of imported drugs and vaccines in China, SPH assumed the responsibilities of meeting the needs of Chinese patients, actively sought cooperation with multinational pharmaceutical companies, and accelerated the introduction of global innovative drugs, so that Chinese patients can have access to high-quality medicines at home. At the same time, SPH strove to build a medical and pharmaceutical innovation service platform, continuously expanding extension services of hospital supply chain, becoming an important force in modern hospital management. It explored new forms of cooperation in various fields to improve the accessibility and convenience of patients' medication relying on "Internet + Medicine". It facilitated the reform in medical security system and jointly built a new model of seeking medical treatment and using drugs to reduce the burden of patients for medication, and meet the public's medication needs. By establishing a rare disease business platform company, the Company ensured the supply of existing orphan drugs,

accelerated the implementation of rare disease projects under research, introduced domestic and foreign rare disease innovation cooperation projects, and created a rare disease business platform integrating R&D, manufacturing and sales.

Fighting the COVID-19 pandemic. In 2021, the novel coronavirus continued to ravage the globe. SPH shouldered its responsibilities and devoted itself to the battle against the epidemic in Shanghai and across the country, and strove to promote the R&D cooperation and commercialization of coronavirus vaccines. CanSino SPH leveraged SPH's strengths in the full industrial and commercial value chains, built a vaccine gigafactory with a total area of 50 acres and construction area of about 50,000 square meters in 99 days. The factory can produce 200 million shots of the COVID-19 vaccines annually, providing safe and reliable technical support to protect people's lives and health.

Forging ahead together. SPH regards talents as the core engine for strategic development. In 2021, the Group defined the four overall goals of its three-year human resources plan, perfected the construction of its rank system, and provided employees with an open, inclusive and fair working environment and diversified incentive mechanisms and development channels. It stimulated the potential of employees and empowered long-term growth through a sophisticated training system with Shanghai Pharma University (SPU) as the core platform. The Company once again received the "Top Graduate Employers of China" and "Employer Excellence of China" awards.

Promoting industrial development. As a leading enterprise in Shanghai's biopharmaceutical industry, SPH actively promotes industry exchanges and development with a high sense of responsibility and a global vision. In 2021, the first International Biopharma Industry Week Shanghai (IBIWS) co-hosted by SPH and other institutions strengthened exchanges and cooperation at home and abroad, and attracted superior resources worldwide. The Shanghai Biopharma Cutting Edge Industry Innovation Center was unveiled at the opening ceremony of the IBIWS. The center will aggregate resources of top enterprises, universities and hospitals in Shanghai's biomedical sector, set up an efficient platform for basic and applied research as well as the commercialization of key research results, and promote innovation in China's biopharma industry.

Upholding original aspiration. Going forward, SPH will forge ahead towards its vision as "An Internationally Trusted and Competitive Biopharmaceutical and Healthcare Provider", continue to pursue sustainable development, and fulfill its social responsibilities with practical actions.

Chairman of Shanghai Pharmaceuticals Holding Co., Ltd.

A stylized, handwritten signature in black ink, consisting of several fluid, interconnected strokes.

About SPH

SPH is a vertically-integrated and diversified pharmaceutical group. The company has dual listings on the stock exchanges in Shanghai (601607) and Hong Kong (02607) respectively. The company provides leading healthcare services in: Research & Development, Manufacturing, Distribution and Retail.

Note: * Exchange Rate is standardized at 1USD=6.4515CNY (the average closing exchange rate in 2021).



Operating Revenue

USD33.45bn* (CNY215.82bn)

Increased Y.o.Y.

12.46%



Net Profit Attributable to Shareholders

USD789mm* (CNY5.09bn)

Increased Y.o.Y.

13.28%



Total R&D Investment

USD388mm* (CNY2.50bn)

Increased Y.o.Y.

26.94%



Total Assets

USD25.33bn* (CNY163.44bn)



Total Tax

USD985* (CNY6.35bn)

Second Largest Pharmaceutical Distributor & **Largest** Drug and Vaccine Importer in China



Nationwide distribution network covering

31 provinces, municipalities and autonomous regions

Wholly-owned subsidiaries covering

24 provinces, municipalities and autonomous regions

Healthcare institutions served

32,000+

Nationwide retail network covering

16 provinces, municipalities and autonomous regions

Nationwide retail pharmacies

2,000+



About SPH

A Hundred Years of Extraordinary Achievements

Over the past hundred years, SPH has always stayed true to its original aspiration and founding mission. Many of its century-old brands have demonstrated the social responsibilities of pharmaceutical companies in different eras, and achieved many **firsts** in the history of Chinese medicine:

China's first "Penicillin" born in Shanghai No. 3 Pharmaceutical Factory (the predecessor of SPH New Asia, known as "the cradle of Chinese antibiotics"), which ended the inability to produce penicillin in China and the history of China's dependence on penicillin imports;

China's first Sino-US pharmaceutical joint venture "Sino-American Shanghai Squibb Pharmaceuticals Ltd.", which was co-established by Bristol-Myers Squibb and SPH, and it is also the first Chinese pharmaceutical company producing Western medicine to break into the North American market;

China's first company inspected by the U.S. FDA, whose product quality has been recognized by the U.S. FDA, and has greatly affected the FDA's quality inspection standards for Chinese pharmaceutical companies;

.....

Over the past century, SPH has been committed to improving health and quality of life and devoted to leading the development and improvement of the industry.

In 1996, under the reform of the separation of government functions from enterprise management, the former National Medical Administration, Shanghai Branch was restructured to Shanghai Pharmaceutical (Group) Company, moving towards becoming a conglomerate.

In 2008, supported by the CPC Shanghai Municipal Committee and the Shanghai Municipal People's Government, SIIC seized the industry opportunity and included its high-quality pharmaceutical assets into Shanghai Pharmaceuticals Holding Co., Ltd. to advance the SOE reform and build a leading biopharmaceutical enterprise. The new SPH entered a new era of development following this reorganization.

SPH was relisted on SSE in 2010 and launched an IPO at HKEX in 2011, becoming the first dually-listed pharmaceutical conglomerate in China. Since its listing, SPH has upheld its pillar strategies of innovation, intensive development, globalization and integration of industry; established a corporate governance structure in line with international standards; introduced excellent management team and market-oriented governance mechanism, and maintained a rapid double-digit growth for ten consecutive years.

After ten years of development, the restructured Company's main businesses cover pharmaceuticals and pharmaceutical services, including chemicals, bio-chemicals, Traditional Chinese Medicine (TCM), healthcare products, orphan drugs and pediatric drugs. SPH's core therapeutic areas are Oncology, Cerebro-cardiovascular, CNS, General Infection, Immunology, Digestive and Metabolism, and Respiratory. The Company has about 700 drug varieties manufactured in over 20 dosage forms. A number of its drugs have passed quality authentications from the WHO, FDA, EU and have been sold in overseas markets. SPH has 21 orphan drugs targeting 34 rare diseases. The Company owns over 2,000 pharmacies and its pharmaceutical distribution network covers 32,000 hospitals in 31 provinces, municipalities and autonomous regions across the country. Its wholly-owned subsidiaries covers 24 provinces, municipalities and autonomous regions. SPH is committed to pharmaceutical R&D, manufacturing, distribution and retail to achieve integrated, efficient and coordinated development, provide safe and effective drugs for patients, and meet public health needs.

Since the outbreak of the novel coronavirus, SPH has made great efforts in COVID-19 vaccine R&D and commercialization. At the beginning of 2021, the Company and CanSino Biologics Inc. (CanSinoBIO) established a joint venture, CanSino SPH, to produce recombinant novel coronavirus vaccine (adenovirus vector vaccine named Convidecia®). Since the start of the project in March, CanSino SPH took 3 months to build a GMP-compliant COVID-19 vaccine filling workshop with an annual output of 100 million doses, and spent 6 months building a vaccine factory with an annual production capacity of 200 million doses and entered trial production. As of the end of 2021, the joint venture has obtained Shanghai's first COVID-19 vaccine production license and a preparation production approval, becoming the first company in Shanghai to be approved for the production of COVID-19 vaccines.

For years, SPH has adhered to the mission of "Committed to Improving Health and Quality of Life" and the vision of "An Internationally Trusted and Competitive Biopharmaceutical and Healthcare Provider", advocated the core values of "Innovation, Integrity, Cooperation, Inclusiveness and Responsibility". Faced with the new changes in policy and the market, SPH has embraced and adapted, won recognition, and strengthened its industry position. The company ascended to the second place in China's pharmaceutical industry and entered the Fortune Global 500 and Pharm Exec 50 lists. It is included in the constituent stocks of the SSE 180, CSI 300 indices and MSCI.

About SPH

Pharmaceuticals

SPH started in product planning, and through technological innovation and internationalization, is transforming from a generic pharmaceutical company to an R&D pharmaceutical enterprise driven by scientific and technological innovation. The Company formulates new drug development strategies, focuses on core therapeutic areas, and continues to make products that meet new clinical needs and leverages technological advantages through various methods such as "independent R&D + external cooperation". The Company further expanded its innovative drug pipeline, and several varieties are now in advanced stages of development. As of the end of 2021, the Company has 3 Class I novel drugs on the market and 47 new drugs that have received clinical applications or have entered the clinical research stage, including 39 innovative drugs and 8 improved drugs. In the innovative drug pipeline, 6 drugs are in the pivotal research or clinical phase III stages. At the same time, by cooperating with innovative pharmaceutical companies, the Company has introduced a number of new drugs, and gained overseas authorization for the self-developed anti-tumor small molecule inhibitor SPH6162, exploring the international development of innovative drugs, and further confirming the Company's strength in innovation. In the future, the Company will expand its research in the fields of biological drugs, chemical drugs, traditional Chinese medicine, rare disease drugs, and pediatric drugs.



Biological drugs and chemicals: The Company's core platform is the Shanghai Pharmaceutical R&D Management Center as the core platform. It develops domestic Class I novel drugs and drugs via the 505b (1) US New Drug Application Regulatory pathway. Focusing on oncology, CNS, Cerebro-cardiovascular, immunology and other fields, the Company emphasizes the development of therapeutic antibodies, nucleic acid drugs, immune cells treatment, vaccines, micro-ecology, and other new biological drugs. Meanwhile, with the SPH Technology Innovation Center as the core, the Company will focus on the research and development of high-end generic and improved drugs, and build innovative technology platforms for inhalation formulation, sustained and controlled release preparations, oral fast dissolving films, complex injectables and APIs.



TCM: With the Shanghai Institute of Traditional Chinese Medicine as the core, the Company adheres to ethical innovation; establishes value-oriented clinical evaluation around safety, efficacy, quality, and accessibility; accelerates the secondary development of existing Chinese medicine varieties, such as Babaodan, Guanxinling, Weifuchun and Yuxuebi with modern drug research methods; cultivates varieties of traditional Chinese medicine, and continuously improves its technological competitiveness.



Orphan drugs and pediatric drugs: The Company will build a complete rare disease drugs structure based on its current portfolio and the newly established specialized platform, Shanghai SPH Rare Disease Pharmaceutical Co., Ltd. (SPH RD). It will continue to enrich the rare disease and pediatric drugs through the pattern of "independence + cooperation + introduction" to fill the gap in the rare disease drugs market in China and meet the clinical needs in rare disease treatment.

Pharmaceutical Services

Focusing on model innovation, Shanghai Pharmaceuticals has transformed from a traditional pharmaceutical distribution company to a service-driven and technology-driven leading modern health service provider in China. The Company has developed comprehensive and in-depth cooperation with renowned pharmaceutical companies such as Bristol-Myers Squibb and Antengene. The Company will continuously promote innovation in supply chain services, improve the efficiency of the international supply chain, and consolidate the advantages of the domestic and international trade industry. In the future, the Company will further cement its position as the leading drug importer in China and actively expand its innovation business.

The Company will continue to build a leading innovative drug import service platform and provide one-stop services for partners' innovative products throughout the supply chain by extending the industrial chain and establishing the whole process services. At the same time, following the national promotion of the Shanghai Lin-gang Special Area, the Company stepped up the construction of Lin-gang International Pharmaceutical Supply Chain Industrial Park. The Company will strengthen its industrial innovation capacity and consolidate its leading role in pharmaceutical import and export.

With respect to "Internet+" innovation services, the Company actively establishes the "Internet+" pharmaceutical business technology platform. SPH Health Commerce Co., Ltd. establishes an "online + offline" pattern and provides a valuable and accessible sales and service network for the flourishing of innovative drugs. Shanghai MediTrust Health Technology Co., Ltd. is committed to integrating insurance and medical treatment, connecting "Internet + Treatment + Medicine + Insurance", in order to provide professional support for China's insurance program and multi-level medical security system.



Digitalization at SPH

The "14th Five-Year Plan" and the "Vision 2035" clearly propose to strengthen digital economy, promote the integration of digital technology and the real economy, and step up the transformation and upgrading of traditional industries. In the digital era, it is important for companies to leverage the potential of data and drive production, lifestyle, and governance with digital transformation.

Based on a digital information foundation, the Company launched the "1+4+1" digital transformation in 2021, adopting the digital transformation trend. The overall plan aims to lay a solid foundation for the four major transformation strategies during the 14th Five-Year Plan period, and to stimulate the plan to "improving system capability and building an efficient organization". This plan is based on the combination of "strategy and guarantee", in four major sectors (industrial manufacturing, industrial marketing, business, and human resources) as the pilot, complemented by data governance and data middle office as support functions. The blueprint and roadmap have been completed.

With its vision of "digital empowerment of employees, data-driven enterprise", SPH's digital transformation is guided by the overall idea of "holistic planning, regular progress, itemized implementation, and phased effect". The Company will strive to gain digital transformation experience, as a role model in the industry. In the future, Shanghai Pharmaceuticals will further transform its organization, operation, culture and business. The Company will transform its operations to enhance core competitiveness, and it will optimize customer experience and supply chain services to bring "data realization" to patients, customers, and suppliers, release "captive value". Finally, it will fulfill its responsibility and contribute to the development of a wider ecosystem.

Under the new trend of industrial transformation, SPH has been promoting the four transformation initiatives with technological innovation as the core and the construction of digital Shanghai Pharmaceuticals. With the market-oriented system and mechanism, the Company will become a leading Chinese pharmaceutical company with international competitiveness and contribute to the construction of a healthy China.

Annual Events

January 4, 2021

An opening ceremony was held for the construction of the SPH Biopharmaceutical Industrial Base at 92 Zhangjiang Road, Pudong New Area, Shanghai. As of Dec. 31, 2021, the slab foundation was completed (Phase I).

May 13, 2021

SPH, Yunnan Baiyao, and Tianjin Pharma signed a strategic cooperation framework agreement. The three major pharmaceutical companies planned to jointly build the SKY alliance to revitalize traditional Chinese medicine with inheritance and innovation and to boost the development of TCM in a new era.

August 2, 2021

Fortune magazine released the "Fortune Global 500 of 2021". Shanghai Pharma was listed, ranking 437th, 36 spots higher than last year.

October 29, 2021

The Company's first overseas license-out was officially launched. SPH also cooperated with HUYABIO International of the United States on the overseas authorization of the self-developed anti-tumor drug SPH6162.

May 11, 2021

SPH released a plan for non-public issuance of A shares, introduced Yunnan Baiyao as a strategic investor, and joined forces to promote collaborative business innovation and development, to jointly inherit and revitalize Traditional Chinese Medicine. At the same time, the Company will further optimize its shareholding structure, improve governance and enhance market competitiveness.

June 10, 2021

The annual ranking of the top 50 global pharmaceutical companies by the American magazine Pharm Exec was released. Shanghai Pharma ranked 42nd, six spots higher than last year.

October 11, 2021

The International Biopharma Industry Week Shanghai (IBIWS) was successfully held in Shanghai under the guidance of the Shanghai Municipal Biomedical Industry Development Leading Group and co-hosted by the Shanghai Biomedical Industry Promotion Center and SPH. The Shanghai Biopharma Cutting Edge Industry Innovation Center was officially inaugurated.

December 1, 2021

CanSino SPH obtained Shanghai's first coronavirus vaccine production approval, building a vaccine manufacturing center and producing vaccines in the same year ("Shanghai Speed"). construction and production were all completed in the same year.

Annual Honors

Honor	Issuing authority
437 th in Fortune Global 500	Fortune Magazine
42 nd in the Top 50 Global Pharmaceutical Companies	PharmExec, a U.S. Magazine
58 th in Fortune China 500	Fortune Magazine
964 th in Forbes Global 2000	Forbes
2 nd in Annual Report on China's Pharmaceutical Distribution Industry	Ministry of Commerce of PRC
Top 20 Pharmaceutical Companies With Global Brand Value	Brand Finance UK, a brand valuation consultancy
122 nd in the Top 500 Chinese Enterprises, 48 th in the Top 500 Chinese Manufacturing Enterprises	China Enterprise Confederation China Enterprise Directors Association
8 th in Top 100 Chinese Pharmaceutical Companies in 2020, Consecutively awarded the 2021 Best Industrial Enterprise in China's Pharmaceutical R&D Product Line	China National Pharmaceutical Industry Information Center Top 100 Chinese Pharmaceutical Companies, Ministry of Industry and Information Technology
12 th in the Top 100 Shanghai Enterprises in 2021 4 th in the Top 100 Shanghai Manufacturing Enterprises	Shanghai Enterprise Confederation, Shanghai Federation of Economics Organizations, Shanghai Enterprise Directors Association, Jiefang Daily
Public Health Pioneer Award	The 2 nd Shanghai Health Forum, 2021
13 th in the Top 100 Manufacturing Companies in The Yangtze River Delta in 2021 25 th in the Top 100 Companies in The Yangtze River Delta	Zhejiang Enterprise Confederation, Shanghai Enterprise Confederation, Jiangsu Enterprise Confederation, etc.
2021 Outstanding Corporate Social Responsibility Report of Shanghai Enterprise	Shanghai Federation of Economics Organizations Shanghai Federation of Industrial Economics
Outstanding Contribution Award	The "Thirteenth Five-Year Plan" Enterprise Management Award of the Pharmaceutical Industry
2021 China's 100 Model Employers	51Job.com
Chinese College Students' Favorite Employer	51Job.com Yingjiesheng.com
2021 Top 100 Chinese Pharmaceutical Innovation Enterprises (CPIE100)	Healthcare Executive Magazine
2021 China's Innovative Pharmaceutical Enterprise	China State Institute of Pharmaceutical Industry

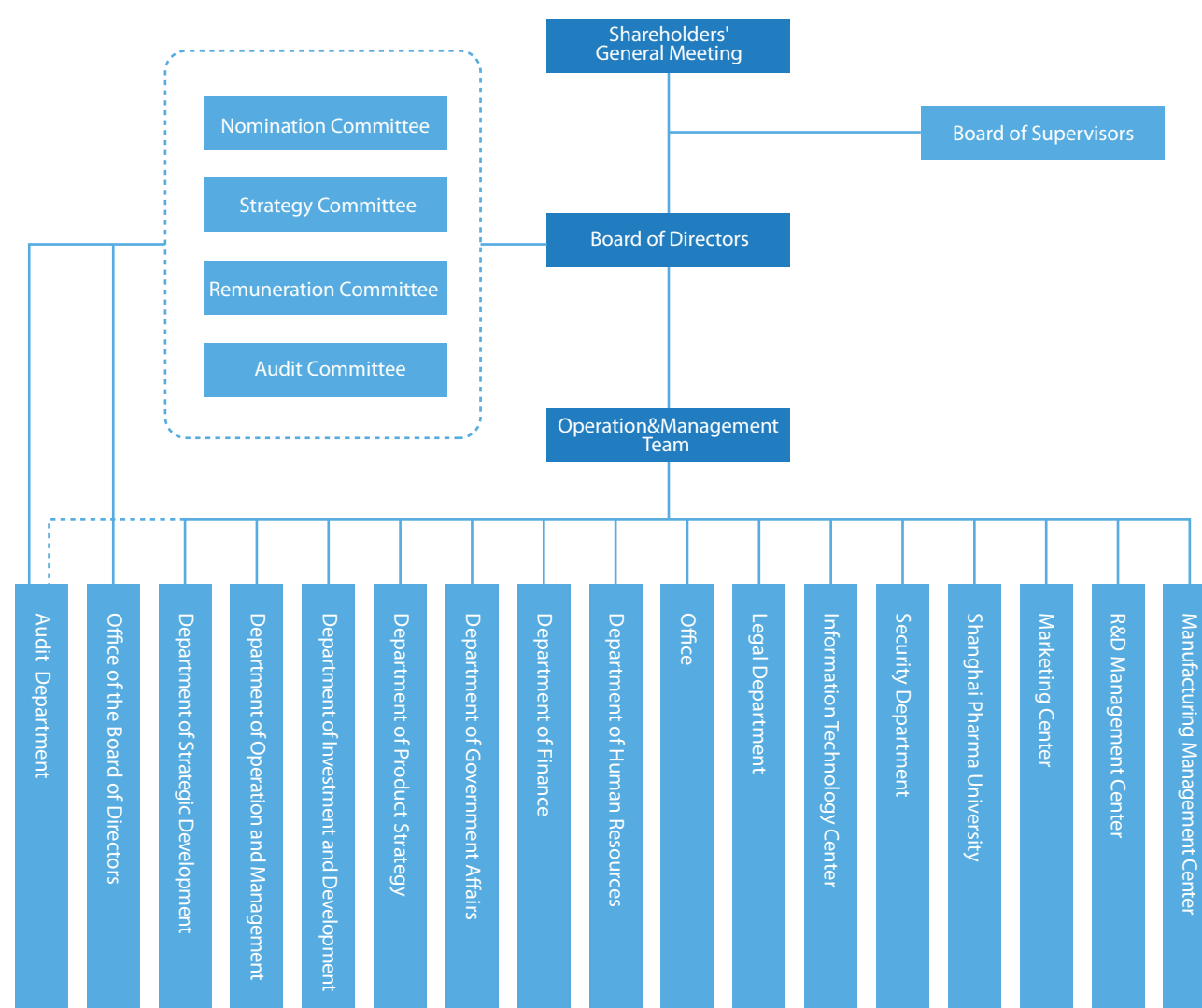
Core Brands



Corporate Governance

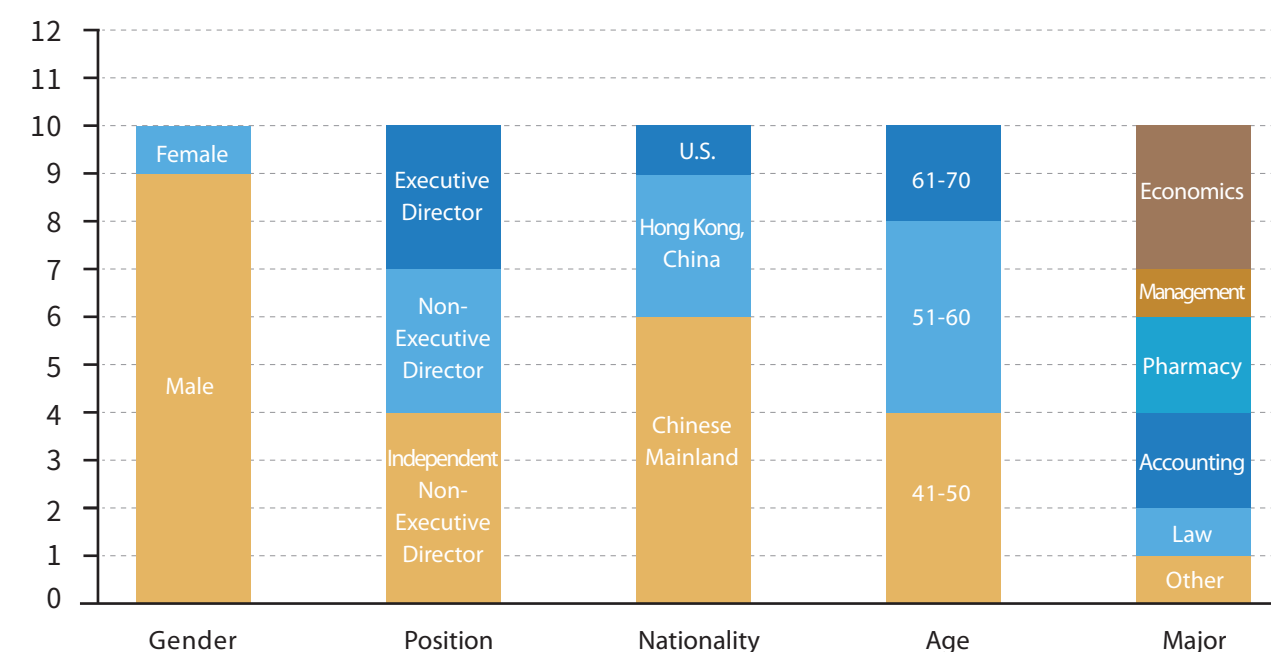
Governance Structure

The company strictly abides by the Company Law of the People's Republic of China, Securities Law of the People's Republic of China, Code of Corporate Governance for Listed Companies, Rules Governing the Listing of Stocks on the Shanghai Stock Exchange, Rules Governing The Listing Of Securities On The Stock Exchange Of Hong Kong Limited and other relevant laws and regulations formulated by regulatory authorities. SPH has been improving its governance system and building itself into a modern listed enterprise.



Board Diversity

Pursuant to Rule 13.92 of the Rules Governing The Listing Of Securities On The Stock Exchange Of Hong Kong Limited, the Company has adopted a policy concerning diversity of board members since March 2014. When evaluating candidates for the board, the Company will take into account a number of factors as the Rule states, which include but are not limited to gender, age, educational background, professional experience, and length of service, to achieve an appropriate balance. SPH's Board of directors consists of ten members. They currently include three executive directors, Mr. Cho Man (also as President), Mr. Li Yongzhong (also as Vice President) and Mr. Shen Bo (also serving as Vice President and Chief Financial Officer); three non-executive directors, Mr. Zhou Jun (Chairman), Mr. Ge Dawei (Vice Chairman) and Ms. Li An; and four independent non-executive directors, Mr. Cai Jiangnan, Mr. Hong Liang, Mr. Gu Chaoyang and Mr. Huo Wenxun.



Gender: 9 males, 1 female

Position: 4 independent non-executive directors, 3 non-executive directors, 3 executive directors





Age: 2 persons aged 61-70, 4 persons aged 51-60, 4 persons aged 41-50

Degree: 2 bachelors, 5 masters, 3 doctors

Nationality: 6 from Chinese Mainland, 3 from Hong Kong, China, 1 from the United States

Major: 3 Economics, 1 Management, 2 Pharmacy, 2 Accounting, 1 Law, 1 Other

Shanghai Pharma's Board of Directors includes a Strategy Committee, an Audit Committee, a Nomination Committee, and a Remuneration Committee, and has formulated the terms and implementation rules of each professional committee.

Committees	Members of Committee	Authority of Committees	Work Report
 Strategy Committee	The Strategy Committee under the Board of Directors of the Company consists of three directors. The current directors include Mr. Zhou Jun (non-executive director), Mr. Cai Jiangnan (independent non-executive director), and Mr. Huo Wenxun (independent non-executive director). Mr. Zhou Jun serves as the convenor/chairman.	The Strategy Committee is a specialized strategic research group under the Board of Directors. It is mainly responsible for forward-looking research, evaluation and, suggestions on the Company's development strategy and related affairs.	During the reporting period, the strategy committee was held once to review the outline of the Company's "14th Five-Year Plan" development plan.
 Audit Committee	The Audit Committee under the Board of Directors of the Company consists of three independent non-executive directors. The current directors include Mr. Gu Chaoyang, Mr. Huo Wenxun, and Mr. Hong Liang. Mr. Gu Chaoyang serves as the convener/chairman.	The Audit Committee is a specialized group under the Board of Directors, mainly responsible for the relationship between the Company and external audit institutions, reviewing the Company's finances, connected transactions, risk management, and internal monitoring systems.	During the reporting period, the Audit Committee was held nine times to discuss major issues such as the Company's regular reports and related transactions.
 Nomination Committee	The Nomination Committee under the Board of Directors of the Company consists of three directors. The current directors include Mr. Cai Jiangnan (independent non-executive director), Mr. Cho Man (executive director), and Mr. Hong Liang (independent non-executive director). Mr. Cai Jiangnan serves as the convener/Chairman.	The Nomination Committee is a specialized group under the Board of Directors, mainly responsible for researching the candidates, selection criteria, and procedures of the nomination.	During the reporting period, the Nomination Committee was held once to review the structure, number of members, composition, and diversity of the Board of Directors.
 Remuneration Committee	The Remuneration Committee under the Board of Directors of the Company consists of three directors. The current directors include Mr. Hong Liang (independent non-executive director), Mr. Ge Dawei (non-executive director) and Mr. Gu Chaoyang (independent non-executive director). Mr. Hong Liang serves as the convenor/chairman.	The Remuneration Committee is a specialized group under the Board of Directors, mainly responsible for evaluating the Company's directors, presidents, and other senior executives, and formulating policies for their remuneration.	During the reporting period, the Remuneration Committee was held twice to review the 2020 annual performance appraisal report of the Company's senior executives and the 2021 annual performance appraisal and the remuneration policies.

In 2021, SPH held 2 Shareholders' General Meetings, which discussed and approved 41 proposals; 12 board meetings, which discussed and approved 43 proposals; and 6 supervisory meetings, which discussed and approved 20 proposals.

Risk and Internal Control Management

To cope with the ever-changing risks and comply with the requirements of listed companies' governance, SPH has established procedures for identifying, assessing, responding to, and reporting risks. The procedures can identify internal and external risks and assess their probability and impact. This allows the Company to respond to risk through relevant measures. Risks and risk management outcomes are reported to the Board of Directors, Audit Committee, and senior executives regularly and systematically.

For internal control, SPH established a corporate legal person governance structure and organizational structure that fits the Company's business scale and operational needs. The Company's internal control system has been further enhanced and optimized in environment control, risk assessment, activity control, information and communication, as well as supervision mechanism.

Information Disclosure

The Company kept meeting investors' demand and compliance requirements. In accordance with China Securities Regulatory Commission's Standards for the Contents and Formats of Information Disclosure by Companies Offering Securities to the Public No.2 - Contents and Formats of Annual Reports, Shanghai Stock Exchange's Industrial Information Disclosure Guidelines for Listed Companies No.7 - Pharmaceutical Production and Notice on Further Improving Listed Companies' Disclosure on Poverty Alleviation Work, and the Hong Kong Stock Exchange's Environmental, Social and Governance Reporting Guide, the Company actively performed its information disclosure duties in innovative ways and strengthened the timeliness and transparency in information disclosure.

From January 1, 2021, to December 31, 2021, SPH issued a total of 4 periodic reports (the 2020 annual report, the Q1 report, the interim report, and the Q3 report of 2021), and a total of 98 A-share temporary announcements, and a total of 123 H-share announcements and documents.

SPH has a large number of announcements and reports. The Company's information disclosure is of high quality, which has been recognized by investors and the public.



Awards



SPH maintained the highest rating of A-level in the annual evaluation of information disclosure of listed companies held by the Shanghai Stock Exchange for five consecutive years.



SPH's 2020 A-Share Annual Report won the Gold Award for Annual Report Cover Design and the Silver Award for Annual Report Content Design in the 36th International ARC Awards in 2021.
SPH participated in this competition for the first time in 2021 and was the only pharmaceutical company to be awarded.

Investor Communication and Rights Protection

4

Performance conferences

1

Investor R&D open day

1

Site investigation by analysts and investors every month

30

Medical investment strategy meetings with many influential investment banks and securities firms at home and abroad

Over 200

Staff having received or visited domestic and overseas pharmaceutical industry analyst institutes and investment institutions through online and offline roadshows and reverse roadshows

84

Questions from small and medium investors answered by SPH's Office of the Board of Directors in the E-interaction Platform of the Shanghai Stock Exchange

About 400

Calls from small and medium investors answered



01

Sustainable Development Governance System

- ① Sustainable Development Governance Model
- ② Stakeholder Identification & Communication
- ③ Analysis of Material Issues



Sustainable Development Governance System

To stay true to its mission("Committed to Improving Health and Quality of Life"), SPH has always incorporated the idea of sustainable development into the Company's operation and management, actively fulfilled its social responsibilities, and pursued a balance between environmental, economic, and social values. The Company is dedicated to further improving the sustainable development of its governance system and enhancing its governance capabilities.

Sustainable Development Governance Model

Governance Philosophy



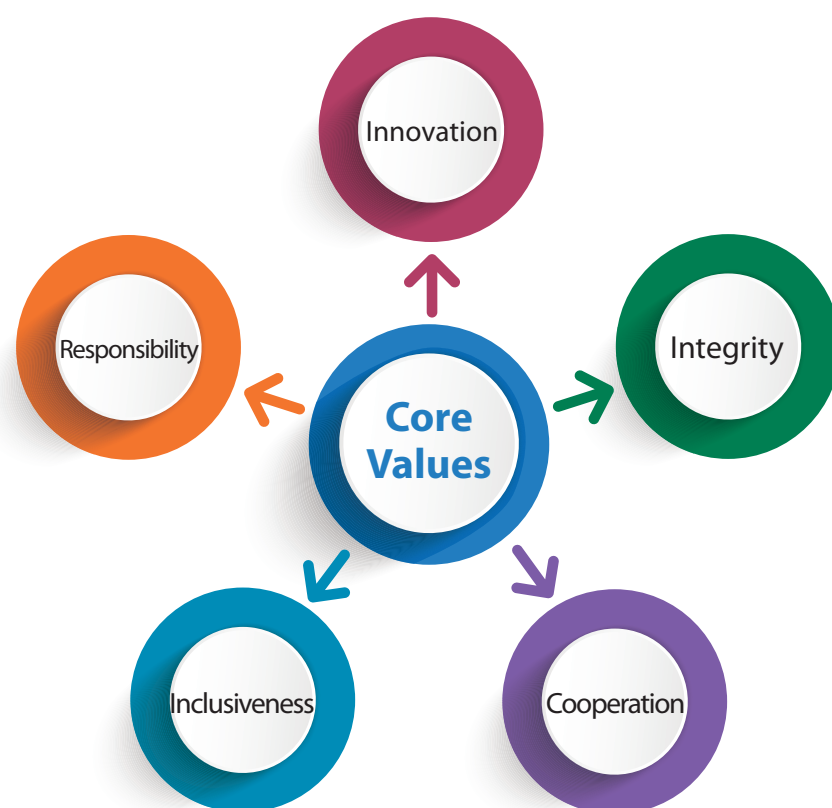
Our Vision

An Internationally Trusted and Competitive
Biopharmaceutical and Healthcare Provider

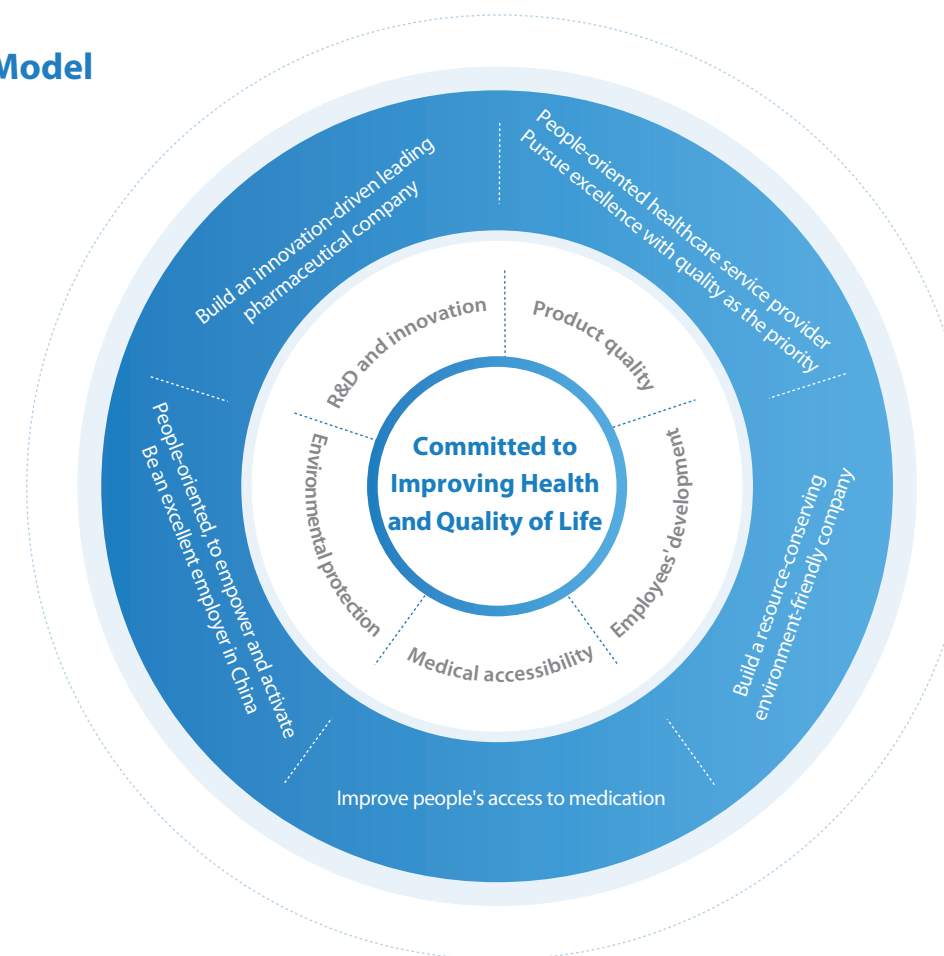


Our mission

Committed to Improving Health and Quality of Life



Governance Model



Governance Mechanism

Shanghai Pharma continuously improves its sustainable development governance system. The Company's Board of Directors is responsible for ESG governance strategy and examination of important ESG issues and ESG information disclosure. The Office of the Board of Directors and the Office are responsible for coordinating ESG work and reporting to the Board of Directors. The functional departments of the headquarters and subsidiaries are responsible for the specific implementation and reporting of ESG work. These departments include but are not limited to the Security Department, Department of Human Resources, Manufacturing Management Center, R&D Management Center, Marketing Center, Audit Department, Information Technology Center, the Group's labor union. During the reporting period, the Board of Directors reviewed and approved the outline of the "14th Five-Year" development plan, discussed and evaluated issues of high importance, such as compliance, product quality, R&D and innovation, environmental protection, and medical accessibility, and determined the plans and goals for the next five years. In the future, the Board of Directors will continue to optimize the Company's ESG governance.

SPH has produced Corporate Social Responsibility reports for 12 years, actively responded to the demands and expectations of stakeholders, and upgraded the 12th Social Responsibility Report to a Sustainable Development Report for the first time, which is a more comprehensive demonstration of the Company's efforts in the environmental, social and governance work. The Sustainable Development Report also states the Company's commitment and vision to achieving sustainable development. With its outstanding performance in sustainable development, Shanghai Pharmaceuticals was awarded the "2021 Outstanding Corporate Social Responsibility Report of Shanghai Enterprise".

Capacity Building

In order to further improve ESG governance, the Company invited ESG professional institutions to carry out special training during the reporting period. The ESG team, functional departments of the headquarters, and relevant personnel of subsidiaries were updated with the latest ESG development. They strengthened their recognition of ESG, learned the latest regulatory requirements, identified ways to improve ESG, and learned to draft ESG reports.

Stakeholder Identification & Communication

Stakeholders' participation is an important factor in promoting the Company's sustainable development. SPH attaches great importance to communication with stakeholders. Through various communication channels, the Company obtained stakeholders' expectations and suggestions on the Company's sustainable development. Based on SPH's characteristics, the Company identified key its stakeholders: board members, employees, shareholders and investors, governments and regulators, suppliers, customers and consumers, media, communities and the public, and industry and industry associations.

Stakeholders	Stakeholders' Concerns	Communication Channels
 Board Members	ESG governance Risk management Industry development Quality of products and services	Board of Directors
 Shareholders and Investors	Compliance Business performance Business development and innovation Risk management	Shareholders' General Meeting Performance conferences Roadshows and reverse roadshows Announcements on the website Investors' meeting Investment strategy meeting Site investigation Hotline for investors E-interaction Platform
 Employees	Employees' health and safety Professional training and career development Employees' salary and welfare Equality and diversity	Online communication Employee representative conference Employees' training Employees' activities Weibo, WeChat, BBS Intranet, internal publication Employee engagement survey
 Customers and Consumers	Product quality and safety Anti-corruption Protection of rights and interests Responsible marketing R&D and innovation Privacy protection Compliance operation Satisfaction and complaints	Online communication Customer service center and hotline Customer visit Customer satisfaction survey Promotion of rational drug use Academic research

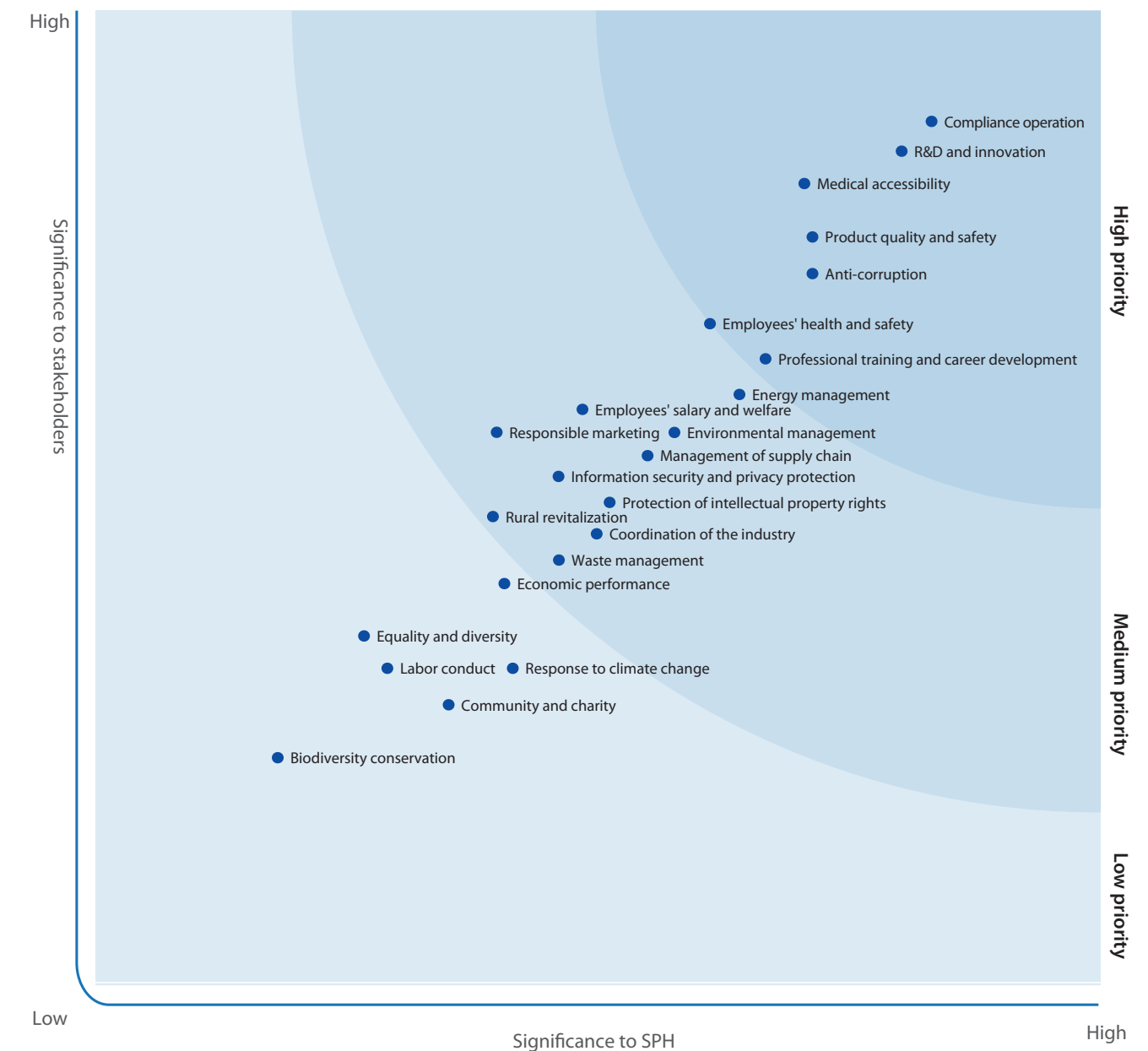
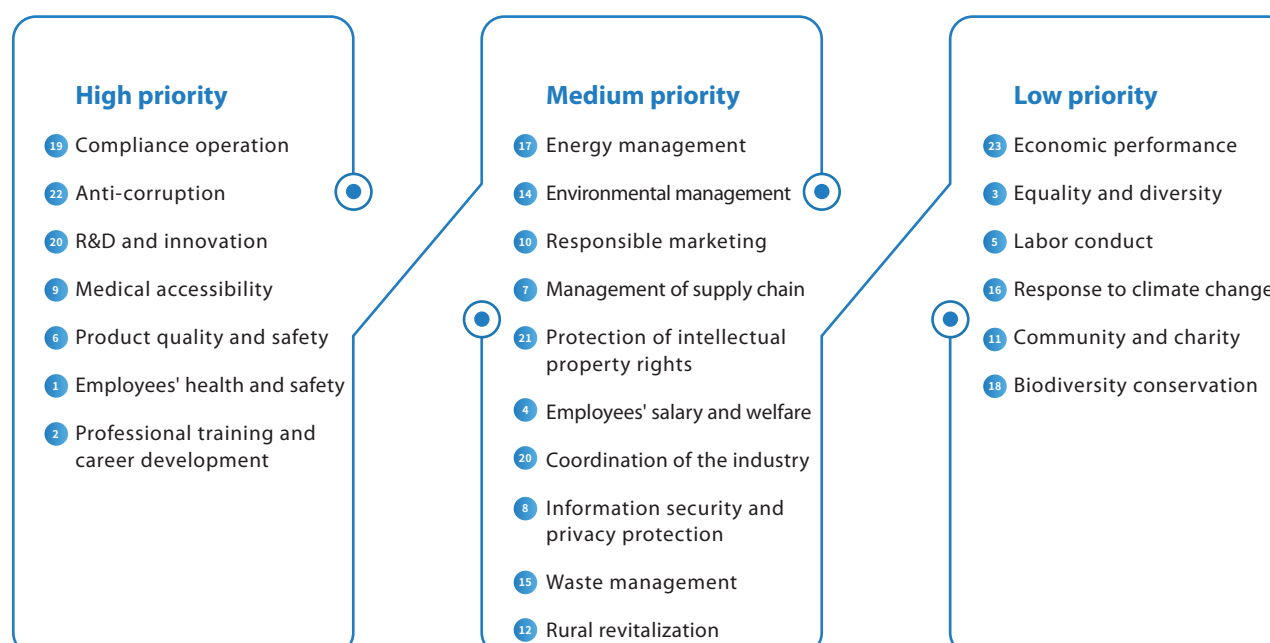
Stakeholders	Stakeholders' Concerns	Communication Channels
 Media	Open and transparent information Safe production Interviews Compliance operation Product quality and safety	Media open day Interviews and feature stories Social media platforms
 Suppliers and other Partners	Supply chain management Long-term cooperation with win-win benefits	Examination and assessment Suppliers' training Suppliers' website Regular communication
 Governments and Regulatory Authorities	Compliance operation Product quality and safety Environmental protection Policy-making Community and charity Development of the industry Protection of intellectual property rights	Information disclosure Document exchange Supervision and examination
 Communities and the Public	Community service Charity events Environmental protection	Official website and social media platforms Organization of charity events Volunteer activities Communication and interviews
 Industry and Industry Associations	Exchange and cooperation Development of the industry R&D and innovation Protection of intellectual property rights	Fora and summits Visits Research

Analysis of Material Issues

Procedures of Analysis of Material Issues

Step 1: Identify	Step 2: Prioritize	Step 3: Examine	Step 4: Disclose
Based on the government policy, framework of ESG information disclosure at home and abroad, ESG rating agencies' evaluation system, SPH combines its own development strategies and plans according to the industry characteristics and stakeholders' expectations and demands. As a result, 23 issues were identified.	Through communication with stakeholders, their expectations and suggestions were collected and classified. Then the Company put these issues in two categories: "significance to the Company's business development" and "significance to stakeholders".	The company's senior executives and external experts reviewed important issues and their ranking.	The Company disclosed on issues of high importance in reports.


Results of Analysis of Material Issues




02

Compliance Management & Responsible Operations

Party Building Leads High-Quality Development

 Guided by Party Building

 Abiding by Business Ethics



Party Building Leads High-Quality Development

Compliance Management & Responsible Operations

Guided by Party Building

SPH adheres to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, firmly implements reform and development, strives to improve the quality of Party building, and promotes the "three-pronged approach" of key work, basic work, and characteristic work. The Company also realizes the organic unity of Party work in terms of pioneering, effectiveness, and operability, and strives to form a "five linkage" Party building work pattern of "integration, systematization, normalization, standardization, and projectization", so as to provide strong political and organizational guarantee for the Company to achieve sustainable and steady development in the era of industrial transformation.

SPH continuously improves the Party building work system. Through the integration of requirements of Party building work of state-owned enterprises and the provisions of the capital markets of Shanghai and Hong Kong on corporate governance, the Company actively explores the construction of a modern enterprise system with Chinese characteristics. The Company continuously strengthens the leadership of "red pioneers". In accordance with the requirements, Shanghai Pharma carries out a bottom-up evaluation of "red pioneers". With role models' motivation at all levels, SPH promotes the close connection between the Party building assessment and the comprehensive assessment of the enterprise leadership and economic performance. The Company can thus enhance its capability of Party organization and the Party's integration into its operations. The Company also actively promotes the creation of brands, carries out an in-depth study of Party history, and promotes the construction of spiritual civilization. Focusing on difficulties and urgent tasks in production and operation, Shanghai Pharma effectively creates distinctive and effective brands of Party building with ideological and political features, making the construction of spiritual civilization a common pursuit of all employees for the reform and development of the enterprise.

During the reporting period:

- ☑ The CPC Committee of Shanghai Pharmaceutical Holding Co., Ltd. was awarded the "Shanghai Advanced Grass-root Party Organization" by the Shanghai State-owned Assets Supervision and Administration Commission.
- ☑ SPH Sine Jinzhu Party Branch was awarded "Shanghai Party Branch Construction Demonstration Site".
- ☑ 2 CPC members were awarded "Shanghai Excellent Communist Party Member" and "Shanghai Excellent Party Affairs Worker".
- ☑ SPH's The Red Secret of Drug Making was awarded "the Successful Experience of CPC Leading Enterprise Culture." by China Corporate Culture Institute.
- ☑ SPH's 21 subsidiaries were awarded "Model Unit" (the 20th) by Shanghai Municipality.



Abiding by Business Ethics

Compliance Philosophy

"Integrity" is one of the core values at Shanghai Pharmaceuticals. Shanghai Pharmaceuticals requires every employee to always abide by business ethics, adhere to compliance management, and ensure stable production through the establishment of a compliance management system. In 2021, SPH promoted the integration of regulatory resources and broke the barriers between risk management, compliance management, internal control, and other management and control systems. Based on the Internal Control Manual, SPH focused on risk control and compliance requirements. The specific requirements of commonly used regulations and policies were incorporated into each management procedure to balance risk prevention and compliance management during the internal control process.

In 2021, SPH continued its compliance management in the marketing, honest practice, information security, production quality, etc. With policy interpretation, training and publicity, system construction, risk screening, special investigations, the Company transformed its development concept and consolidated its compliance management. The Audit Department conducts a full-process audit of all subsidiaries regarding compliance marketing, procurement and supply every three years.



Clean Governance

In terms of Party conduct improvement, governance of integrity, and the fight against corruption, Shanghai Pharmaceuticals has established comprehensive and strict governance of the Party to strengthen the construction of the "four responsibilities coordination" mechanism. The Company also paid close attention to the "key minority" and key areas to carry out supervision and took a zero-tolerance policy against corruption. The Disciplinary Committee of the Company has carried out an in-depth study, publicity, and education of the Guidelines of Chinese Communist Party on Integrity and Self-discipline, Regulation of the Communist Party of China on Disciplinary Actions, and the eight central regulations. For example, the Company held a training on the "common professional crimes and their prevention" and a meeting on the leaders and cadres' integrity. Abiding by the requirements of the Rules for the Supervision and Enforcement of Discipline by the Disciplinary Inspection Organs of the Communist Party of China and the Rules for Reports and Accusations by Disciplinary Inspection and Supervision Organs, SPH focuses on supervision and accountability, practice the "four forms", and implement the requirements of comprehensive and strict governance of the Party. SPH continued to deepen Party conduct improvement, governance of integrity, and the fight against corruption.

The Disciplinary Committee of Shanghai Pharma accepted petitions and reports from Party members and the public. In accordance with the Rules for the Supervision and Enforcement of Discipline by the Disciplinary Inspection Organs of the Communist Party of China, SPH implemented centralized management of petitions and reports related to corruption and fraud. The Company settled them through communication confirmation and inspection, during which the whistleblowers are protected. During the reporting period, Shanghai Pharmaceuticals did not report any lawsuits arising from corruption.

SPH regards integrity education as an important part of employee training and carries out various types of integrity training in combination with its business model. All employees are required to study the Employees' Handbook in orientation. The handbook clearly stipulates that appropriate disciplinary actions will be taken against employees who seriously violate the integrity and self-discipline and damage the interests of the Company, such as bribery and corruption.

SPH signs integrity agreements with all suppliers during the procurement and manages the integrity and compliance obligations in the supply chain through the Supplier Integrity and Compliance Management Measures.

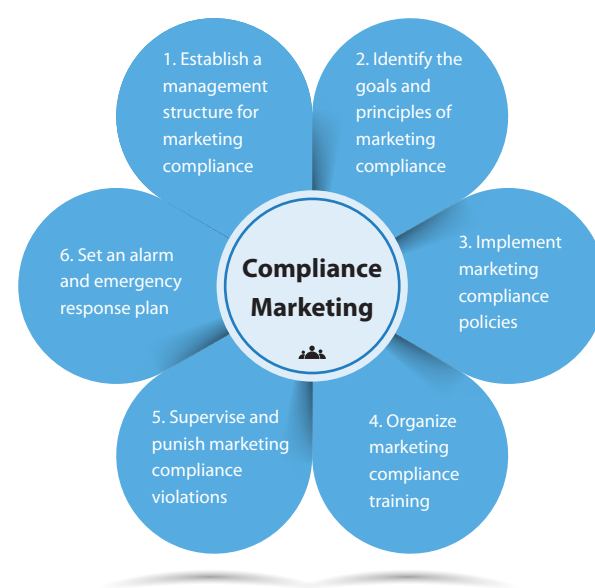
Training on Integrity

Trainee	Trainer	Content	Time(s) in 2021
CPC members	Disciplinary Committee	Common professional crimes and the prevention	1
Directors, Supervisors, and Senior Executives	Shanghai Pharma University	Training class for directors, supervisors, and senior executives	1
Sales personnel	Audit Department	Analysis of provisions on sales compliance	4
Newly appointed leaders and cadres	Audit Department	Compliance management	1

Responsible Marketing

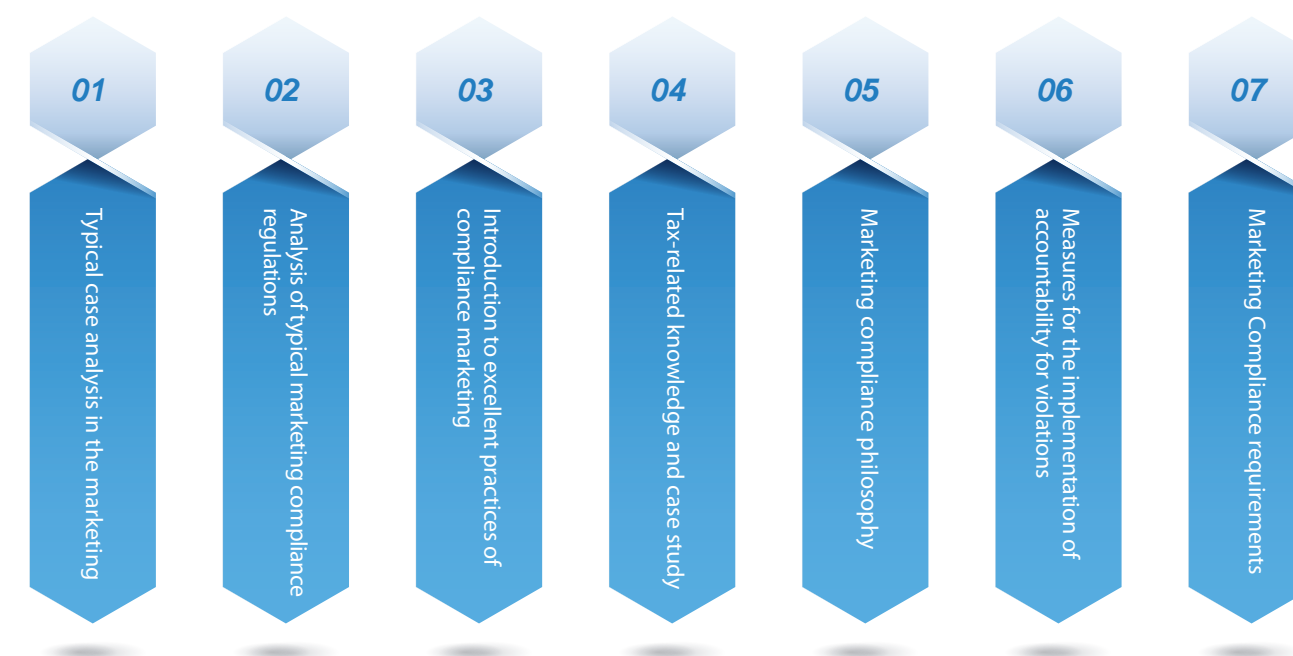
Marketing Compliance is an important guarantee for enterprises to participate in market competition and practice corporate social responsibility. SPH requires employees to remain vigilant and cautious about compliance at all times, to abide by professional ethics and fair competition, and to ensure the steady development of the Company.

SPH strictly abides by the Anti-Unfair Competition Law of the People's Republic of China, Medicinal Product Administration Law of the People's Republic of China, Interim Provisions on Banning Commercial Bribery, Measures for the Administration of the Recordation of Medical Representatives (Trial) and other regulations. Based on the organization systematization, independence of operation, full participation of all employees, and strictness of implementation, the Shanghai Pharmaceuticals Marketing Compliance System has been formulated. All promotion materials must be examined in advance by relevant staff in accordance with the authorized approval management system to ensure the objectiveness and authenticity of the content. The Compliance Marketing Manual sets strict standards for conferences, catering and entertainment, gift and reception, and other matters involved in marketing affairs, which strictly prohibits corruption or bribery and other improper behaviors. SPH actively conducts compliance inspections and takes measures to deal with violations.



Centered on the training principles of "timeliness, diversity, and effectiveness", SPH provides employees with training on laws and regulations, industry rules and regulations, and internal compliance requirements. During the reporting period, the Audit Department conducted publicity and training on compliance policy on occasions such as marketing-related activities, integrity education for cadres, and training on corporate governance.

Compliance Marketing Training



Information Security

SPH attaches great importance to information security and protection. It strictly abides by the laws and regulations related to information security and privacy protection in the countries or regions where it operates, such as the Cybersecurity Law of the People's Republic of China, Personal Information Protection Law of the People's Republic of China, Data Security Law of the People's Republic of China, and Law of the People's Republic of China on the Protection of Consumer Rights and Interests.

As the department responsible for SPH's information security and IT compliance, SPH Information Technology Center has implemented the SPH Information Security Planning Project since 2017 and formulated a blueprint for SPH's information security.

SPH has established a complete network for information security management. For example, the Company established a specialized center for security and information management, which clarified the responsibility for information security. SPH has also formulated the Information Security Management Measures and Information Security Emergency Response Plan and other management systems and has organized regular training sessions on cyber security for employees. The Company's unified identity management platform was launched in January 2020. So far, more than 60 important systems have been connected, which has strengthened employees' password management and further ensured information security.

Recovery Drills

Since 2018, SPH has started the construction of the "SPH Private Cloud" and the center for data recovery. Important systems have reached the level 6 requirements, and drills for data recovery are conducted every year.



System Certification

SHAPHAR, a subsidiary of the Group, further improved the ISO27001 and other information security systems in 2021, and will continue to improve its information security management. In addition, SPH continues to carry out, promote and implement the protection of network security, using different ratings. At present, the important information systems of the SPH's headquarters, SHAPHAR, SPH TCM, etc. have passed the security evaluation and filing process.

According to the blueprint for information security, SPH will make every effort to improve its information security system in 2022, so as to ensure the safe and stable operation for the smooth development of the Company's various businesses, serving the society and our customers.

Ethical Animal Tests

In accordance with the Regulation on the Administration of Laboratory Animals issued by the State Council, SPH strictly regulates the management of laboratory animals, especially animal welfare such as feeding, drinking, bedding, veterinary inspection, and infectious disease control.

The Rules and Regulations for Administration of Laboratory Animals are formulated by the SPH Laboratory Animal Management and Use Committee to standardize the operation of laboratory animals, effectively protecting the safety of personnel and ensuring the welfare of laboratory animals. The research team must submit the Ethical Review Form of Laboratory Animal Welfare before carrying out animal experiments. After being approved by the Laboratory Animal Management and Use Committee, the experiment should be carried out strictly within the scope of the Ethical Review Form of Laboratory Animal Welfare. The ethical review of laboratory animals includes using analgesics and sedatives to minimize the discomfort and pain of laboratory animals without affecting the experiment, performing operations that may cause discomfort and pain to laboratory animals only when necessary, and the euthanasia method in laboratory animals.

Ethical Clinical Trials

The principles of ethical review of drug clinical trials can ensure the dignity, safety, and rights of patients. SPH's Clinical Management Department strictly follows ethical requirements for the whole process in drug clinical trials.



The Committee on Ethical Drug Clinical Trials focuses on 8 aspects, including the design and implementation of the research, the risks and benefits of the trial, the recruitment of participants, the information in the consent form, the informing and consent, participants' care and protection, privacy and confidentiality, and research involving disadvantaged groups.

Clinical trials must meet at least seven criteria to be approved in accordance with the requirements of GCP. Firstly, the clinical trial protocol is rigorously designed on the premise of scientific and ethical rationality. Then, the clinical trial is strictly implemented as per the protocol, the quality of clinical research is controlled, and protocol violations and deviations are avoided or reduced. At the same time, materials for ethical review must be submitted in a timely and regular manner in accordance with the requirements. The Committee of Ethical Drug Clinical Trials examines clinical trials in strict accordance with the standards and conducts follow-up reviews of all approved clinical trials until the end of the trial.



03

Quality First to Safeguard Health Professional Drug Manufacturing Facilitates a Healthy China

-  Quality Management System
-  Exceptional Service Experience

Professional Drug Manufacturing Facilitates a Healthy China

Quality First to Safeguard Health

Quality Management System

Quality policy: "prioritizing people, creating health; winning with quality, pursuing excellence"

SPH holds the line on quality and safety, and adheres to its quality policy of "prioritizing people, creating health; winning with quality, pursuing excellence". It has established a Quality Management System (QMS) covering the entire life cycle of products, standardizing the production and operation activities of drugs, medical devices, etc. The Company continues to improve the QMS to maintain its suitability and effectiveness and ensure product safety and effectiveness and stable market supply. It also strives to demonstrate to customers and other related parties the ability to continuously and stably provide products and services that meet the requirements of applicable laws and regulations and fulfill its corporate social responsibility as a listed pharmaceutical group.

Quality System Construction

The Company has set up a Manufacturing Management Center Quality Management Department and Quality Management Committee, responsible for quality management, and formulated a series of management systems including Quality Manual, Quality System Management Review Standard, Quality Information Reporting Management System, to carry out quality control and supervision over the whole life cycle of products. SPH's subsidiaries have established their own quality management framework and QMS as per the Company's system requirements as well as relevant national laws and regulations, quality management standards and other requirements, obtained corresponding "Drug Manufacturing Certificate", "Drug Supply Certificate", "Medical Device Manufacturing Certificate" and "Medical Device Supply Certificate", and organized production and business activities in compliance with laws and regulations, including Drug Administration Law of the People's Republic of China, Vaccine Administration Law of the People's Republic of China, Provisions for Drug Registration, Measures for the Supervision and Administration of Drug Production, Regulations for Implementation of the Drug Administration Law of the People's Republic of China, Regulations for the Supervision and Administration of Medical Devices, Good Manufacturing Practice for Drugs (2010 revision).

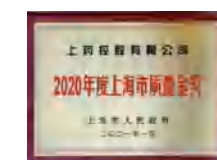


During the reporting period, in order to further define the main responsibility of each subsidiary, SPH prepared the 2021 Quality Assessment Rules, evaluated the completion of priorities related to quality management and included it into the operator performance assessment. The Company also conducted quality management review and urged the top management to effectively improve the QMS through measures such as resource allocation.

During the reporting period

- SPH's subsidiaries obtained 48 Drug Manufacturing Certificates.
- SPH Zhongxi Pharma QC Lab has been accredited by CNAS in 2021 (registration number: CNAS L15451) and its capabilities to test 48 items for chemicals and pharmaceutical excipients have been recognized.
- SPH Changzhou Pharma obtained the GMP certificate issued by the Philippine Drug Enforcement Agency.
- SPH Herbapex, SPH Sinobp, Huqingyutang Pharma, SPH Zhongxi Sunve, SPH Jiuxu and Shandong Sine passed the ISO9001 QMS certification and SPH Zhongxi Pharma passed the ISO9000 QMS certification.

Quality Honors



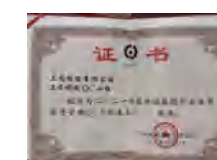
SHAPHAR

2021 Shanghai Quality Gold Award



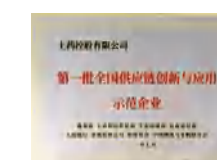
SHAPHAR

2021 Shanghai Quality Benchmark



SHAPHAR

2021 National Pharmaceutical Industry
QC Outstanding Achievement



SHAPHAR

National Supply Chain Innovation &
Application Model Enterprise



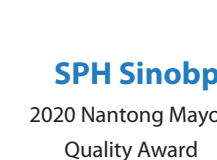
SPH SBPC

National Pharmaceutical Industry
Quality Trustworthy Team



Huqingyutang Pharma

2020 Hangzhou Municipal People's Government
Quality Award Nomination Award



SPH Sinobp

2020 Nantong Mayor
Quality Award



SPH Changzhou Pharma

Jiangsu Province
AAA Quality Credit Enterprise

Quality Risk Control

Quality risk management is an important part of the quality management system of the Company and its subsidiaries. The subsidiaries prepared quality risk management procedures, through quality risk management of products or services and their realization process, to identify, analyze, evaluate and control potential hazards I, and to ensure the safety and effectiveness of products. SPH and its subsidiaries excel at quality management, risk prevention and liability compensation to ensure the safety, effectiveness and quality control of drugs.

In 2021, the Company updated its Quality Information Reporting Management System, requiring all subsidiaries to report relevant quality information in time to ensure its effective communication and timely feedback, and lower potential quality risks. In addition, in order to further prevent quality risks, SPH conducted various special internal audits of manufacturing and business enterprises according to the quality internal audit system and the current regulatory focus, urged the enterprises to identify quality risks and improve quality management level. During the reporting period, 34 quality audits were completed, and all audited enterprises rectified the nonconformities on time.

Last year, the Quality Management Committee regularly held work meetings, to analyze the regulatory situation, brief on the quality management situation, raise risk alerts, strengthen the Company's awareness of laws and regulations, integrity and quality, and effectively control and prevent quality risk.

Quality Training

SPH's R&D units, drug and medical device production and operation subsidiaries have established management procedures and standard operating procedures (SOPs) related to training. The companies shall designate a specific department or person to be responsible for the training management. The annual training program or plan shall be reviewed and approved by the relevant person in charge. The training content shall be adapted to the job requirements. Besides theoretical and practical training, the training also covers laws and regulations, job responsibilities, skills, etc. The training's effectiveness shall be evaluated at regular intervals. All training shall be recorded and documented. All employees shall receive pre-job quality training. During the reporting period, SPH headquarters held a total of 23 online and offline quality activities, with about 2,000 participants.



Case

Quality Month Activity 2021

In September 2021, SPH held the annual quality month activity. In this event, experts, both inside and outside of the Company, shared their insights on the hot spots online and offline, to further strengthen product life cycle management, effectively prevent product quality risks, enhance employees' awareness of quality first, and create a corporate atmosphere of "everyone giving priority to responsibility and quality".



Lean Management

SPH's Manufacturing Management Center serves as its management platform and "SPH Manufacturing 2025" as its overall strategy. SPH has gradually realized total lean management, continued to advance the construction of SPH's manufacturing excellence system, and focused on essential principles of optimal quality and cost, green development and intelligent manufacturing. Driven by system capabilities, the Company aimed at excellent operation and intelligent manufacturing, upgraded the entire value chain of industrial manufacturing through benchmarking, transformed and innovated to provide continuous safe and effective drugs to the public. In 2021, the manufacturing excellence evaluation focused on standardization and systematization. After the evaluation, the main production bases continued to enhance the integral level. SPH SBPC, SPH Zhongxi Sunve and SPH Sine have reached the standard of SPH Benchmarking Factory. SPH Zhongxi Sunve and SPH SBPC applied for the "Smart Factory" of the Shanghai Municipal Commission of Economy and Informatization, continued to facilitate the "lean, automated, informatization, intelligent and green management", and improved the capacity of production bases.

As of the end of 2021:

LSS Black Belt certifications



LSS Green Belt certifications



Lean projects over



Recall and Disposal of Substandard Medicines

SHAPHAR, a subsidiary of SPH, disposed of the nonconforming drugs in strict accordance with the provisions of Article 83, Paragraph 4 of the Drug Administration Law. It signed a destruction agreement with a company qualified for hazardous waste disposal, and declared on the "Shanghai Hazardous Waste Management Information System". The disposal company sent hazardous waste transport vehicles (with special identification) to deliver the drugs to the designated site. Special drugs were destroyed under the supervision of drug regulatory authorities.

Upon the receipt of goods, the Company checked the accompanying certifications to ensure the consistency of the invoice, account and product, and conducted lot-by-lot acceptance inspection according to GSP requirements, to prevent substandard drugs from being put into storage. It properly stored and maintained drugs according to warehouse conditions, external environment and quality characteristics of drugs, automatically tracked and monitored drug shelf life in stock and took measures such as early warning of products near their expiry date and automatic locking of products beyond their labeled expiration date, to prevent the sale of expired medications.

All refrigerated and frozen goods should be delivered according to the cold chain management requirements. The transport contractors were audited and signed supplier agreements to clarify their quality responsibilities and supervise their behaviors. SHAPHAR strengthened the management of returned goods to ensure the quality and safety of drugs and prevent mixing with falsified drugs, set up a reporting mechanism for PVG, a drug recall mechanism and a system for the management and destruction of substandard products to ensure rapid response and provide effective guarantee and process traceability for safe medication.



Drug Recall

All of SPH's pharmaceutical manufacturing subsidiaries established a product recall system, to ensure fast and accurate recall of any batch of products with potential safety hazards. These enterprises have established management procedures and SOPs related to drug recalls, stipulated procedures for complaint registration, evaluation, investigation and handling for effective recalls, designated a person responsible for organizing and coordinating the recall work, and define corresponding responsibilities of relevant departments to enable the immediate recall at any time.

The companies established a drug traceability system, using an electronic supervision code system for rapid access to drug shipment records. Recalled products were identified and stored separately and properly, pending final disposal decisions. The progress of the recall should be recorded and reported, and the number of products shipped, the number recalled, and the balance of the number will be described in the report. The recall should be reported to the drug regulatory authority on time. The enterprises regularly reviewed and analyzed complaint records, to identify and analyze areas of focus, and took appropriate measures for continuous optimization and improvement. In addition, the companies continuously evaluated the effectiveness of the recall system through activities such as mock recalls and annual self-inspections. The Company has always attached great importance to customer feedback, and achieved 100% complaint response rate and 100% resolution rate in 2021.

Index	Unit	2021
Quantity of products recalled for safety and health	Pc(s)	0
Percentage of products subject to recalls for safety and health in total products sold or shipped	%	0
Number of product and service complaints*	Case(s)	550
Customer complaint response rate	%	100
Customer complaint resolution rate	%	100

*Note: The statistics cover 43 pharmaceutical manufacturing subsidiaries of SPH. Majority of complaints centered on damaged outer packaging or that drugs were not easily available. All complaints have been handled in accordance with the SPH's SOP. The complaint response rate is 100%, and the resolution rate is 100%.

Pharmacovigilance (PVG)

In compliance with the Article 38 of the Drug Administration Law, which came into effect on December 1, 2019, "Where the MAH is an overseas enterprise, an enterprise legal person within the territory of the People's Republic of China shall be designated to fulfill the obligations of the MAH and assume joint liability with the MAH", SHAPHAR has become the enterprise legal person in China designated by the MAH to fulfill the obligations of the MAH for its operating drugs. It has signed a consignment agreement with the MAH and started to fulfill the obligations of post-marketing adverse reaction monitoring, reporting and handling of the drugs in March 2020.

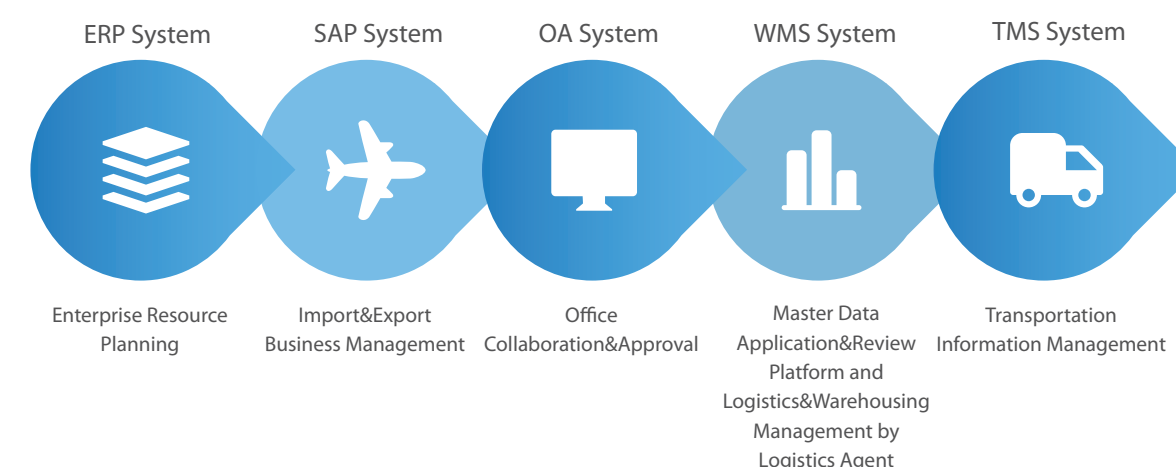
SHAPHAR has set up a PVG management organization to carry out relevant work, with a clear organizational chart, and appointed the head of the PVG management organization and the PVG specialists. From February to April 2020, the PVG organization prepared the PVG QMS documentation (version number: 2020-R11), which includes the PVG Management System, PVG Quality Management Operating Procedure and PVG-related forms, and put them into effect on May 1, 2020. Combined with the system documents such as Adverse Drug Reaction Reporting Management System, Drug Recall Management System and Emergency Plan Operating Procedure, SHAPHAR ensured the clearly defined responsibilities of the PVG organization.

The Company has established a distinct mechanism and prepared the Emergency Plan Operating Procedure in its QMS documentation to deal with drug safety issues. Its emergency management team is responsible for the research and handling of adverse drug reaction events.

Logistics Management

SHAPHAR conducted regular QMS reviews of the drug logistics suppliers as per the laws and regulations including the Drug Administration Law, and Good Supply Practice, and attained the purpose of guidance and supervision through continuous tracking, inspection and evaluation.

SHAPHAR established a computer system that meets the requirements of management and quality control of the whole operation process, and each business system built a complete modern information management system through real-time interaction of data, mutual verification and mutual supplementation. The company realized real-time computer information exchange with logistics agents, such as the application of ERP system and WMS, TMS, OMS system direct connection, and the query and use of sample sheet accompanied with goods via OA system to realize data sharing.





- SPH carried out independent technological innovation and developed hospital supply chain management service application technology (SPD).
- SPH introduced AGV (automated guided vehicle) goods-to-person storage and picking system as well as automatic dispensing machine to realize intelligent sorting.
- SPH introduced 360-degree automatic scanning and identification system for inbound and outbound to improve drug traceability.
- SPH introduced RFID pallet management system to innovate logistics operation & management technology.
- SPH introduced SmartVeQ logistics vehicle scheduling management system to innovate vehicle management mode.
- SPH developed pharmaceutical cold chain transportation and warehousing technologies and formed a leading cold chain system.
- SPH formulated a standardized documentation system for pharmaceutical logistics services and developed it into the soft power of logistics management in the industry.

To meet business needs, SPH is equipped with warehousing facilities and equipment (including hardware and software), temperature and humidity monitoring equipment, transportation equipment and various other major facilities and equipment. The Company has adopted a series of modern information systems, including ERP system for enterprise resource planning, OA system for office collaboration and approval, CRM system for customer relationship management, Cloud School for online employee training, and EBS system for financial and business integration, for the whole-process information management of product procurement, distribution, storage and operation. It has achieved equipment automation, operation intelligence, decision digitization, and has led the supply chain management of the entire life cycle of pharmaceutical products.

SPH's Modern Logistics Center has warehouses, facilities and equipment suitable for different storage conditions and quality management requirements of various products. The specialty drug warehouse is also equipped with a professional perimeter alarm system, digital video monitoring system, 110 regional network alarm system, and electronic patrol system; face recognition access control system, etc., to ensure the safe storage and transportation of specialty drugs. The Company utilizes equipment such as refrigerated trucks, refrigerated boxes or thermal containers to guarantee the transportation of cold chain commodities, and uses automatic temperature and humidity monitoring equipment to monitor the whole process.

Case

SPH Traceability Cloud Platform

SHAPHAR has built a new platform for high-quality pharmaceutical distribution with lean operations (the "SPH Traceability Cloud Platform") to realize the drug traceability based on the batch number and traceability code of SPH's operating varieties, and meet the regulatory requirements for tracking and tracing drugs at multiple levels.



Case

National Logistics Network

SHAPHAR has established multi-coordinated warehouses with 8 subsidiaries in 8 prefecture-level cities and 1 provincial-municipality in 6 provinces across China, making forward-looking and positive attempts for enterprise development and industrial development. This move will:

- 1) Optimize warehousing layout, facilitate the rational inventory layout, improve the overall warehousing efficiency and service response level, and ensure stable and timely deliveries.
- 2) Integrate logistics resource allocation, promote the national logistics integration, and realize national logistics resource sharing and regional logistics distribution coordination.
- 3) Improve supply chain services, provide more supply chain solutions and optimize integrated supply chain management.
- 4) Boost the high-quality development of the Company, enhance SHAPHAR's competitiveness in distribution in China and speed up the realization of its nationalization.

Exceptional Service Experience

SPH sticks to a customer-centric strategy, respects and protects the legitimate rights and interests of customers, and is committed to providing them with efficient and excellent services and improving their experience. Commercial clients mainly include distributors, healthcare institutions and retailers. According to their business model, the subsidiaries establish a diversified customized service management model.

Customer Experience Improvement

In order to continuously improve service quality, listen to customers, and enhance customer satisfaction, SPH's subsidiaries optimize service experience through customer service training, establishment of service standards, and customer satisfaction surveys.

Healthcare institutions	<p>SPD Operation Center</p> <p>◇ SPD Operation Center regularly conducts satisfaction surveys on SPD customers and collects customer feedback.</p>
Retail clients	<p>SPH Cloud Health</p> <p>◇ "Yiyao Pharmacy" sets up a special customer service center with well-trained staff to provide customers with professional services.</p> <p>◇ The patient-oriented pharmacy offers pharmaceutical care before, during and after sales. Professional pharmacists provide patients with sophisticated services to improve their experience.</p> <p>◇ Additional attentive services such as check reminder, diet guidance and medical education, further satisfy patient needs.</p>
Distributors	<p>SPH Kyuan</p> <p>◇ SPH Kyuan carries out customer satisfaction surveys annually. It conducts statistical analysis on the collected questionnaires, issues an analysis report, and feedbacks the customer satisfaction results to the relevant departments, as a basis for review and improvement of high-quality services and exceptional experience.</p> <p>◇ Customers may call the receptionists or go through the official website for all-round and timely consulting services with excellent service experience.</p>

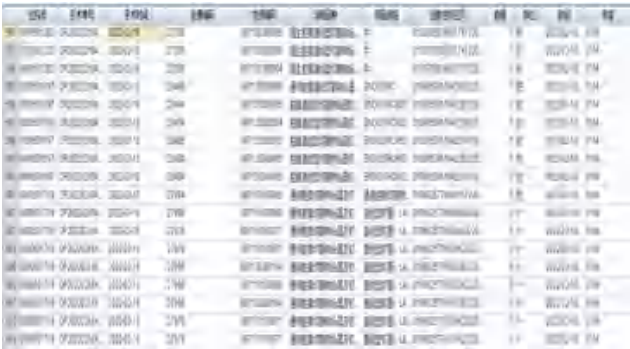
Customer Privacy Protection

Along with the development of digital technologies, privacy protection concerns have increased. SPH is well aware of the importance of privacy protection for customers and the company itself. Therefore, it strictly abides by the relevant provisions of the State and relevant departments on privacy protection, and builds a safe and credible service system to ensure user privacy. During the reporting period, the Company did not receive any complaint about customer privacy disclosure.

Case

SPD Operation Center

The SPD system filters out patient information and surgery data, and only displays supplies information on the user interface, effectively protecting patient privacy.



SPH Cloud Health

- When logging in the Yiyao platform in WeChat, customers are required to read and agree with the User Service Agreement and Privacy Policy, and informed about the way to collect and use their personal information.
- Customers shall sign the Informed Consent Form in relevant projects and be informed about the way to collect and use their personal information, and may make requests regarding personal information to SPH via the contact information in this file.
- When conducting business with partners, the relevant provisions of the customer's personal information protection shall be stipulated in the contract agreement to protect the customer's personal privacy.



Case

Privacy Protection Training

SPH Cloud Health provides online training for employees on "customer information management"



Customer Complaint Mechanism

In order to solve customer complaints in a timely manner, SPH's subsidiaries have established a standardized complaint mechanism and will promptly respond to and handle complaints upon receipt, and provide feedback on results. .

Healthcare institutions	<p>SPD Operation Center</p> <p>◇ SPD Operation Center is responsible for collecting, reporting and managing adverse events of medical supplies as per the Management System of Adverse Event Monitoring and Reporting of SPD Operation Headquarters.</p>
Retail clients	<p>SPH Cloud Health</p> <p>◇ SPH Cloud Health has set up a special complaint channel by e-mail (compliance@sphcchina.com), service hotline (4009200036) and contact number (021-32096606), to promptly respond to customer complaints.</p> <p>Huashi Pharmacy</p> <p>◇ Huashi Pharmacy has prepared the Drug Supply Quality Management System and Operating Procedure (Retail Pharmacies), specifying the confirmation, classification, handling duration and methods and operating procedures of different complaints. Complaints and handling processes will be recorded in detail in the Quality-related Accident and Complaint Handling Record, to ensure that customer complaints will be solved in a timely and proper manner.</p>
Distributors	<p>SPH Kyuan</p> <p>◇ SPH Kyuan has carried out standardized management through the Customer Satisfaction and Customer Complaint Management System, Quality Inquiry and Quality Complaint Management System, Customer Complaint Process, and specific patient complaints. Customers may give feedback via SPH Kyuan's complaint hotline, mailbox, official website, letter and interview.</p>



04

Innovation-Driven Development to Provide Healthcare Services Staying True to the Mission of Making Healthcare More Accessible



Driven and Empowered by Innovation



Building a Distribution Network to Serve Social Needs

Staying True to the Mission of Making Healthcare More Accessible

Innovation-Driven Development to Provide Healthcare Services

Through its two principles of "offering patients high quality and affordable medicines" and "enhancing patients experience", SPH is committed to providing high-quality, accessible, affordable, efficient, and intelligent medical products and services, to help establish a "Healthy China".

Driven and Empowered by Innovation

Highlights



The Company has **3** Class I novel drugs on the market and **47** new drugs that have received clinical applications or have entered the clinical research stage, including **39** innovative drugs and **8** improved drugs. Among the innovative drug pipeline, **6** drugs are in the pivotal research or phase III clinical trial stages.

In 2021, a total of **22** varieties (**29** specifications) passed the consistency evaluation of generic drugs, and the total number of evaluated drugs increased to **40** varieties (**56** specifications), ranking at the forefront of the industry.

Strategic Goal: Through technological innovation and internationalization, SPH is transforming from a generic pharmaceutical company to an R&D pharmaceutical enterprise driven by scientific and technological innovation, striving to enter the top 40 global pharmaceutical companies in the next 3-5 years.



Striving to enter the top 40 global pharmaceutical companies in the next 3-5 years.

SPH has staunchly upheld innovation and transformation. Starting from product planning, it has formulated a new drug development strategy. It further increased investment in drug research and development in the fields of Oncology, Immunology, CNS, Cerebro-cardiovascular and other major diseases. The open and diversified innovation model of "independent R&D + external cooperation" continues to build a product chain that meets new clinical needs and has technical advantages. In 2021, the Company's R&D investment reached USD 388 million (CNY 2.503 billion), a year-on-year increase of 26.94%, of which R&D expenditure is USD 308 million (CNY 1.987 billion), a year-on-year increase of 19.96%.



Awards

- ☆ National Science Progress Award: 2 First Prizes
- ☆ National Science Progress Award: 3 Second Prizes
- ☆ 2 national-level enterprise technology centers and national-level engineering technology research centers
- ☆ 11 provincial-level enterprise technology centers and technology research engineering centers and technology research engineering centers

Performance

Index	Unit	2019	2020	2021
Number of Patent Applications in the Current Year	Item	219	186	136
Number of Invention Patent Applications in the Current Year	Item	137	139	120
Cumulative Number of Granted Patents	Item	918	1,019	1,205
Number of Granted Patents in the Current Year	Item	160	101	186
Cumulative Number of Trademark Applications	Item	515	619	698
Cumulative Number of Trademark Registrations	Item	858	903	993
Cumulative Number of China Patent Awards	Item	7	7	7
R&D Investment	RMB'00,000,000	15.09	19.72	25.03
R&D Expenditure	RMB'00,000,000	13.5	16.57	19.87
R&D Personnel	Person(s)	1,200	1,347	1,418
Ratio of Researchers to Total Number of Employees	%	2.51	2.8	3.01

Innovation Ecosystem

SPH has leveraged its unique R&D resources and followed multiple paths to innovative R&D.

Self-Developed Product Pipeline

SPH consolidated its research and innovation product pipeline through both internal growth and external expansion

Strengthen Internationalization

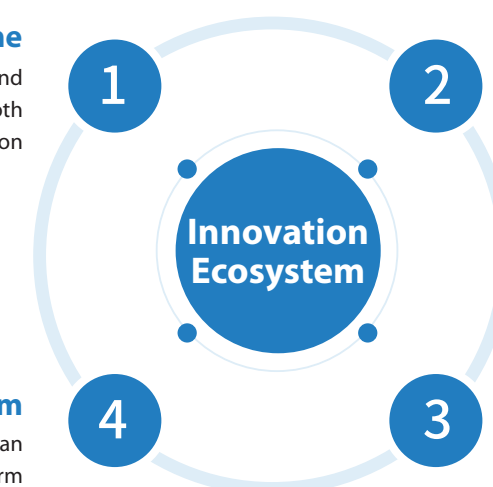
SPH strengthened its overseas R&D platforms such as San Diego, USA and Hong Kong Biotherapeutics, and actively integrated domestic and international R&D resources to achieve synergistic development.

Build an Open Innovation System

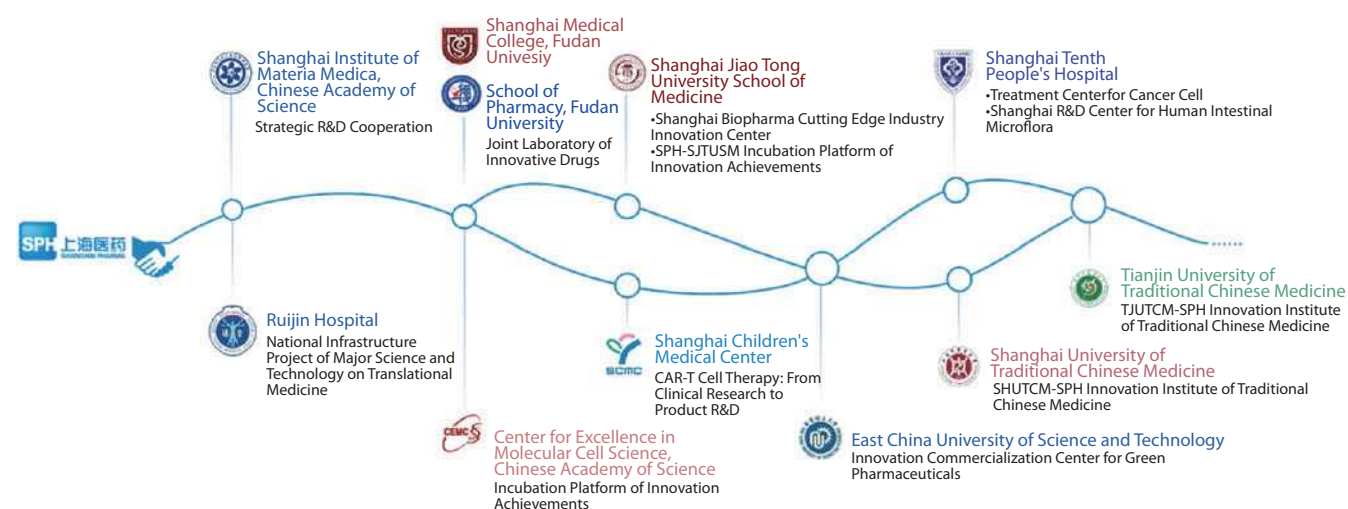
We have built an "industry-university-research" platform with universities and research institutions to promote the integration of industry and finance, and successfully transformed a number of research projects, including CAR-T cell therapy.

Explore Model Innovation

Through mixed ownership and diversified innovation models, we have gradually expanded various innovation platforms, and successfully implemented mixed ownership companies held by R&D teams.



SPH Industry-University-Research Platform



Case

Inauguration of the Biopharma Cutting Edge Industry Innovation Center

On October 11, 2021, the Shanghai Biopharma Cutting Edge Industry Innovation Center was inaugurated at the opening ceremony of the first International Biopharma Industry Week. The Center was jointly founded by SPH, SIIC, Shanghai Jiao Tong University School of Medicine, Fudan University, Center for Excellence in Molecular Cell Science, the Chinese Academy of Science and Shanghai Zhangjiang Group. With resources from well-known enterprises, universities and institutions, the Center is dedicated to establishing an efficient platform to link basic and applied scientific research and industrialization, to promote biomedical innovation in China.



Case

SPH Biopharmaceutical Industrial Base at 92 Zhangjiang Road

On January 4, 2021, the SPH Biopharmaceutical Industrial Base officially started construction and completed slab foundation on December 31, 2021. The Base, for the second consecutive year, was a major construction project in Shanghai. It focuses on therapeutic antibodies, cell therapy, gene therapy and other biomedical innovations to create a domestic incubation and transformation base. As an advanced platform of industrialization for biopharmaceuticals in China, this Base will further the development of China's pharmaceutical industry.



Case

Phase II of Shanghai Pharmaceutical Group (Benxi) Northern Pharma Co., Ltd. (ADC) Project Was Completed and Put into Production ahead of Schedule.

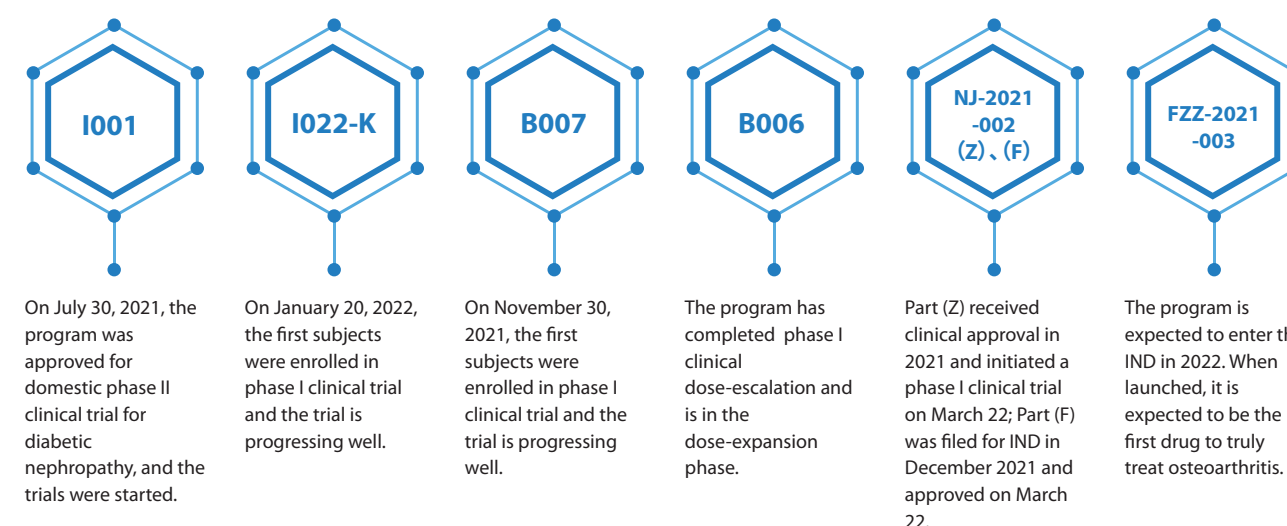
Phase II of Shanghai Pharmaceutical Group (Benxi) Northern Pharma Co., Ltd. is a pilot industrialization project for ADC (antibody-drug conjugate) drug research and development. Construction began in August 2019, to manufacture and market antibody-drug conjugates. The core processes and equipment are all from international first-class companies. This project was put into operation at the end of 2021, ahead of schedule. The completion of the project helps consolidate SPH's leading position in the development and industrialization of the antibody-drug conjugate and provides competitive advantages in the market.



Further Expansion of Innovative Drugs

During the reporting period, SPH accelerated the expansion of its innovative drug pipeline and achieved progress in several varieties. As of the end of the reporting period, the Company has **3** Class I novel drugs: Ankore (recombinant human adenovirus type 5), Kerlikon (Urecholine) and Pefikon (Bifidobacterium triadicum), on the market, and **47** new drugs that have received clinical applications or have entered the clinical research stage, including **39** innovative drugs and **8** improved drugs. Six of the innovative drugs are in the pivotal research or clinical phase III stages.

Key New Drug Projects under Development



Case

The First License-out of Shanghai Pharmaceuticals

SPH6162 is a small-molecule chemical drug developed by the SPH Research Institute, which specifically targets the key kinase for DNA damage repair in the cell cycle, thereby inhibiting the self-repair process of tumor cells and destroying their resistance to radiotherapy drugs, leading to the tumor's death. SPH6162 is a synthetic lethal agent for certain types of mutated tumor cells, and there are no drugs with the same target in the world. In early trials, SPH6162 showed better target kinase selectivity, higher activity and tumor tissue distribution than other drugs with the same target.

In October 2021, SPH also cooperated with HUYABIO International of the United States on the overseas authorization of the self-developed anti-tumor drug SPH6162, marking a milestone as SPH's first project to receive overseas authorization.

Introduction of Global Innovative Drugs

In 2021, SPH strengthened its competitive advantage in the digestive and immune drugs by accelerating cooperation with innovative pharmaceutical companies and introducing a number of new drugs.

Case

Co-develop a 690 Million New Drug for Chinese Gastric-intestinal patients

In October 2021, SPH Sine and Guizhou Sinorda Biomedicine reached a cooperation agreement on the production, sales and development of X842. X842 is a new potassium competitive acid blocker (P-CAB) for oral administration, which inhibits gastric acid secretion by competitively blocking the potassium ion activity in H-K-ATPase. It has the advantages of rapid and consistent efficacy, strong and long-lasting acid inhibition, and low adverse effects.

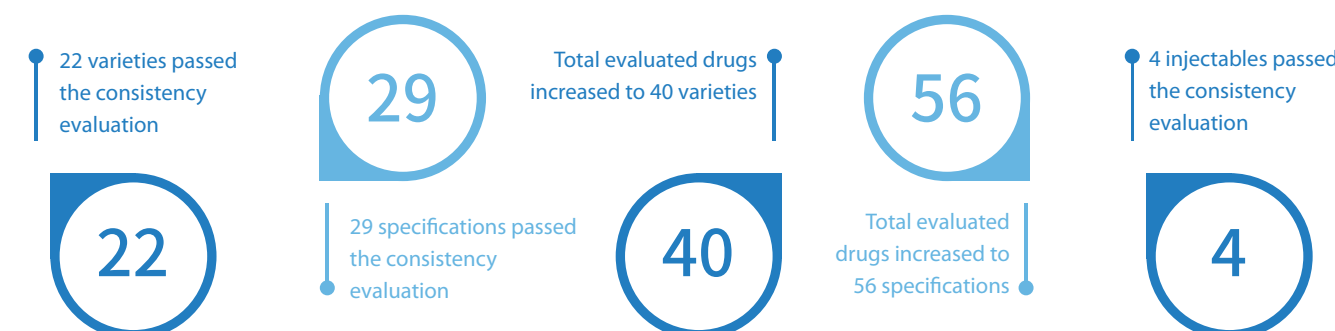
Case

Introduction of Two New Probiotic Drugs to Cement the Advantages Of Microecology

On October 28, 2021, SPH Sine and KoBioLabs held an online signing ceremony to cooperate on the new probiotic drugs KBL697 and KBL693. The two single-strain live bacteria drugs used in the treatment of various immune system diseases have entered the clinical stage and have completed phase I clinical studies in Australia. The available preclinical animal models and phase I clinical results demonstrate the therapeutic potential and safety and tolerability of both probiotics, providing safe and effective long-term oral treatment options for patients with immune system disorders. At the same time, both strains are listed in the Chinese food list and can be further extended to food, health care, and special medical food in the future.

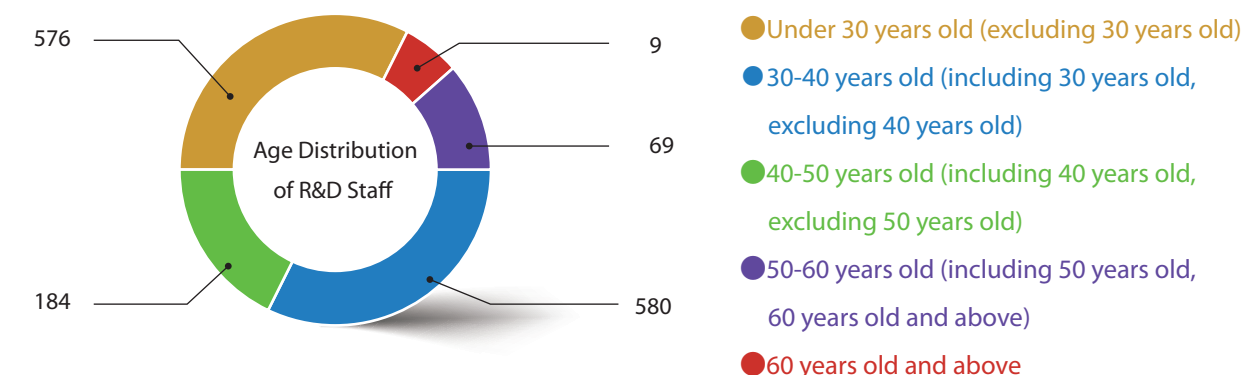
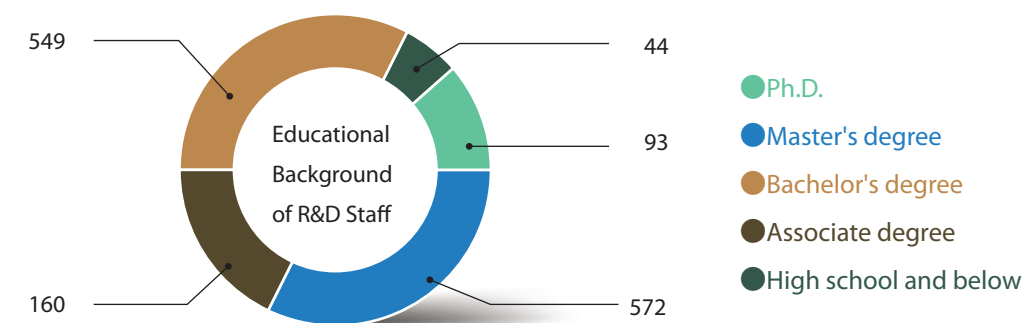
Enhance the Consistency Evaluation

In 2021, a total of **22** varieties (**29** specifications) passed the consistency evaluation of generic drugs, and the number of total evaluated drugs increased to **40** varieties (**56** specifications), ranking at the forefront of the industry. Among them, the consistency evaluation of injectables achieved a breakthrough. A total of **4** varieties (Ceftriaxone Sodium for Injection, Lansoprazole for Injection, Lidocaine Hydrochloride Injection and Dopamine Hydrochloride Injection) were approved.



R&D Team

SPH has established a high-level and diversified R&D team to improve its R&D capability. In 2021, the Company's R&D team had **1,418** employees. The total number of personnel in the R&D Management Center increased from 340 at the beginning of 2021 to 838, with a growth rate of 146%, and the number is expected to reach 1,148 in 2022. The number of personnel in the New Drug Registration and Clinical R&D Department increased from 45 to 118 in 2021.



Intellectual Property Rights

Intellectual property rights are not only the basis for the competitiveness of pharmaceutical companies, but also the key to enhancing international competitiveness of their brands. In recent years, SPH has established a series of intellectual property management systems through the standard patent management, patent strategy, patent database and early warning platform, patent rights protection, etc.

In the context of the drastic changes in China's pharmaceutical industry, SPH focuses on the strategic goal of "building an international leading pharmaceutical company driven by technological innovation" to drive R&D, innovation and transformation. The Company's intellectual property management has three main parts:

Strengthen the patent layout, and form patent portfolio protection for innovative varieties

Combined with the patent link system, actively challenge to obtain the first patent of generic drugs, and strive to clear the obstacles and go to market ahead of schedule

Focus on early incubation, license transfer, equity cooperation and transformation platforms of innovative projects to effectively prevent and control intellectual property risks in external cooperation.

By the end of 2021, SPH's core subsidiaries such as SPH SBPC, SPH New Asia, SPH Growful, SPH XTCM, SPH Sinobp, SPH Zhongxi Sunve have all passed the intellectual property management system GB/T 29490-2013 "Enterprise Intellectual Property Management". Therefore, SPH's capabilities in patent protection, patent warning, risk management and control have been effectively improved.

Building a Distribution Network to Serve Social Needs

SPH is the second largest pharmaceutical distribution company and the largest service platform for imported drugs in China. It continues to build a full life cycle service system for innovative drugs, providing hospitals, patients and partners with innovative supply chain services for modern medication and medical care. The Company also builds a platform for R&D, manufacturing and sales of rare disease and children's drugs. With "Internet +", SPH is vigorously promoting the development of an innovative business.

Distribution network covers China's
31 provinces, municipalities and autonomous regions

Retail network spreads across China's
16 provinces and cities

Covers more than
32,000 medical institutions

The total number of retail pharmacies exceeds
2,000

SPH's Distribution network covers
China's 24 provinces, municipalities
and autonomous regions



Building an Innovative Drug Service Platform

As the largest imported drug and vaccine provider in China, SPH responsibly serves the needs of Chinese patients, actively seeks cooperation with multinational pharmaceutical companies, and accelerates the introduction of global innovative drugs, to help Chinese patients benefit from high-quality drugs.

SPH has built the No.1 brand of innovative drug services in China, supporting half of the market, and completed the first order of CAR-T product, Axicabtagene Ciloleucel Injection. In 2021, SPH reached in-depth cooperation with a number of pharmaceutical companies including AstraZeneca, Roche Diagnostics, Rongchang Group, Hanhui Pharma, Bristol Myers Squibb, and Antengene to provide them with clinical trial support, bonded imports, national distribution, supply chain optimization and innovative value-added services, building a full life cycle service system for innovative drug.

Internet + Smart Healthcare

Through business model innovation, Shanghai Pharma has entered into the "Internet+" era, improved drug channels, and met the public's needs. An intelligent outpatient pharmacy in cooperation with SPH's subsidiaries was established. The system realizes the automatic dispensing and packaging of medicines in outpatient departments and pharmacies. It can interact with the relevant hospital systems to realize automation and smart medicine management.



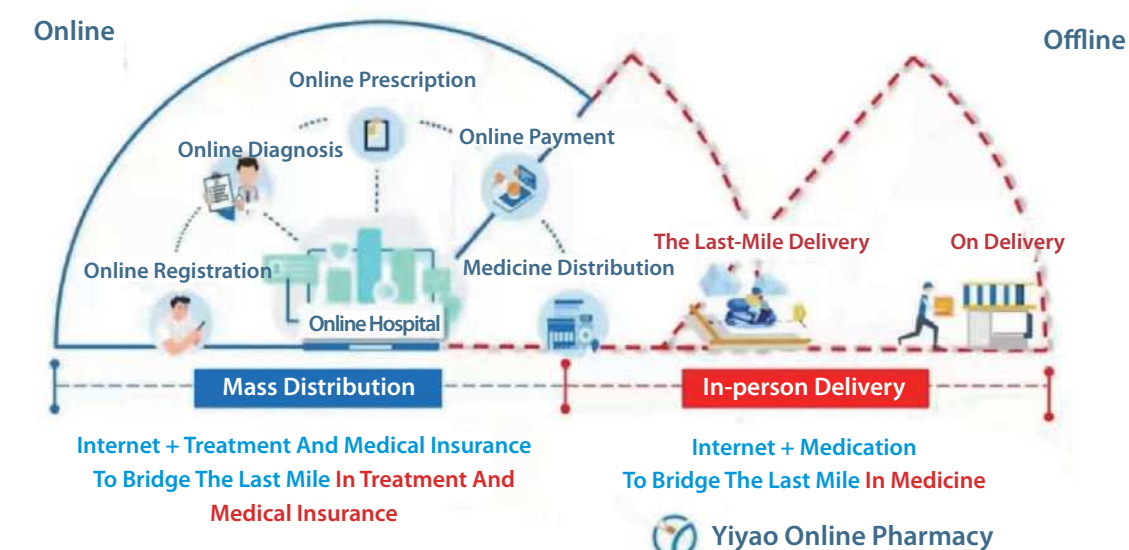
SPH Health Commerce Co., Ltd. was founded on March 18, 2015. As China's leading "Internet+" pharmaceutical technology platform, SPH Health Commerce Co., Ltd. is patient-centered and provides professional pharmacy-based innovative drug services. Its E-prescription + cloud pharmacy-based "Internet+" service for general and slow medicines created a Chinese model of pharmaceutical division. With deep integration of online and offline operations, SPH developed a medicine ecosystem, and provided valuable and accessible innovative drugs for more vigorous development.

SPH Health Commerce Co., Ltd. owns a series of "Yiyao" brands of innovative drugs. These brands provides a full life cycle of innovative drugs from the clinical research and development stage before the launch, to the professional pharmacy stage of out-of-hospital self-financed drugs, the medical insurance stage, the collection stage, and the iteration stage, with a nationwide integrated layout. In the field of general and chronic medicines, SPH Health Commerce Co., Ltd. accurately meets patients' needs and improves the accessibility of medical and pharmaceutical resources through online and offline integrated management.

"Yiyao Pharmacy" is the first channel for innovative drugs to enter China. In 2021, nearly 50 new innovative drugs were launched, and the first nationwide orders were completed, accounting for about 80% of the first orders of new special drugs on the market.



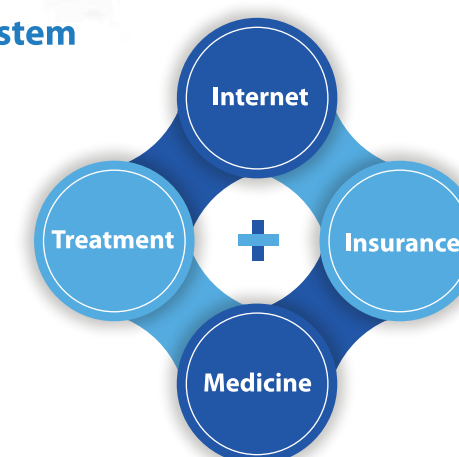
Smart Pharmacy Upgrades People's Medication Experience



Build a Multi-tiered Medical Insurance System

In March 2020, the CPC Central Committee and the State Council issued the Opinions on Deepening the Reform of Medical Insurance System, which further clarified the need to boost the development of a multi-tiered medical insurance system, promote the reform of payment methods, and the supply-side reform of medical services. The Opinion clarified that by 2030, a medical insurance system in which basic medical insurance plays a dominant role, medical aid provides supporting financial cover for medical expenses, and supplementary medical insurance, commercial health insurance, charitable donations, and medical mutual aid activities co-exist will be established. Shanghai MediTrust Health Technology Co., Ltd., a subsidiary of Shanghai Pharmaceuticals is the leader in innovation in the medical and health industry. It is dedicated to using intelligent technology to drive the dual platforms of healthcare and insurance, formulating a system of "Internet + Treatment + Medicine + Insurance", in order to provide professional support for China's insurance program and multi-tiered medical insurance system.

It's a new model of access to medical care and medication, reduces patients' burden, and meets people's needs. As a hot issue in the health insurance market, Huiminbao (a government endorsed basic healthcare insurance) added 46 new insurance products in 2021, with nearly 60 million new policies.



Case

"Shanghai Huiminbao" Was Launched, Supported By MediTrust's Exclusive Medicine Service

In order to build a multi-tiered medical insurance system, Shanghai Huiminbao was launched on April 27, 2021. Shanghai Huiminbao is guided by the Shanghai Medical Insurance Bureau, supervised by the Shanghai Banking and Insurance Regulatory Commission, technically supported by the Shanghai Data Center, coordinated by the Shanghai Insurance Association, and underwritten by nine insurance companies. It focuses on insurance for large medical expenses, which can provide medical coverage of up to 2.3 million yuan for each participant with the insurance of 115 yuan a year, covering three major aspects:

- 1) specific inpatient self-financed medical expenses; 2) specific high drug expenses; 3) proton and heavy-ion medical expenses.

Meet the Medication Needs of Special Populations

"Make rare disease drugs accessible and establish a leading enterprise of orphan drugs with Chinese characteristics"

Rare diseases have become an important issue in China and the world. As a leading pharmaceutical company in China, SPH has long been steadfast in the research, development, and production of rare disease drugs, with a total of 21 varieties of existing drugs for the treatment of rare diseases, involving 34 rare diseases. SPH is one of the companies with the largest number of rare disease drug approvals in China.

Shanghai SPH Rare Disease Co., Ltd., an SPH-owned platform for rare disease drugs, was officially established on December 29, 2020. It is committed to ensuring the supply of rare disease drugs, accelerating the implementation of rare disease projects, introducing innovative cooperation for rare diseases at home and abroad, and building a rare disease drug platform integrating R&D, production, and sales to meet the demand of special groups.

Guarantee the Supply of Rare Disease Drugs

SPH establishes a quality management of the Marketing Authorization Holder, ensuring the safety, efficacy, and quality of the R&D, production, operation, and use of drugs. SPH also upholds reasonable pricing and guarantees the national supply of rare diseases.

Accelerate the Rare Disease Projects

SPH has built two production bases for rare disease drugs in Jinqiao, Shanghai and Benxi, Liaoning Province.

Introduce Innovation Cooperation Projects for Rare Diseases at Home and Abroad

SPH cooperates closely with alliances, domestic and overseas enterprises and famous hospitals and universities, with special attention on rare disease drugs that are not available in China. SPH uses domestic and foreign R&D platforms to introduce overseas rare disease drugs that have entered the clinical stage in the field of oncology, motor neuron, endocrine system, cardiovascular, metabolism, etc. Currently, 16 products are being investigated.

Build a Rare Disease Business Platform That Integrates R&D, Production and Sales

SPH established cooperation platforms for clinical research of rare diseases with medical institutions such as Peking Union Medical College Hospital, Ruijin Hospital and West China Hospital. SPH also plans to establish a Rare Disease Innovation Institute and Rare Disease Drug R&D Engineering Center in Shanghai Lin-gang Special Area.

In the future, SPH Rare Disease Co., Ltd. will actively contribute to "Healthy China 2030", and integrate "care, responsibility, innovation and cooperation" into its mission. It is committed to building an important R&D base for rare disease drug innovation, a transformation base with global influence, a high-end international production base for rare disease drugs, and a supply base for urgent rare drugs. It is determined to become a leading enterprise in rare disease drugs with Chinese characteristics, so that more patients can have access to safe and life-saving drugs in a timely manner.



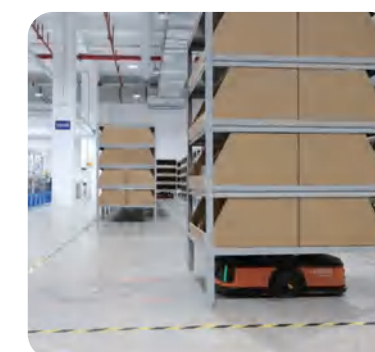
SPH RD and KC Pharm Work Together for ALS



Certificate of Donation to Rare Disease Fund

Smart Delivery to Bridge the Last Mile

Subsidiaries of Shanghai Pharmaceuticals enjoy rich national logistics network resources, covering 17 provinces and municipalities across the country (including SPH KDL HEALTH), and has more than 800,000 square meters of storage facilities nationwide. Shanghai Pharmaceutical Logistics Center Co., Ltd. is among the first modern comprehensive logistics experimental bases in Shanghai, and it is the first in China to pass the examination of the standardization pilot project of pharmaceutical logistics. Shanghai Pharmaceutical Logistics Center Co., Ltd. builds smart logistics, realizes whole process GPS tracking, and uses the transportation management system (TMS) to visualize the entire process. Relying on information from multiple platforms, it bridges the last mile of delivery with faster speed and more flexibility.



Robots in Smart Warehouse

Go Global to Benefit the World

SPH has expanded its reach to Africa, Southeast Asia, Central Asia, Europe, and North America to benefit patients worldwide through a wider range of products, broader coverage, and faster accessibility.



The Ethiopia pharmaceutical project is under construction and will be the second production and marketing base of Shanghai Pharmaceuticals in Africa, after Sudan. It will be the first pharmaceutical company producing penicillin and cephalosporin in Ethiopia.



In 2021, SPH launched 10 overseas registration projects for Class A products, which will provide services to the Philippines, Vietnam, Singapore, Malaysia, Thailand, and other Southeast Asian countries, as well as more than ten countries and regions in North America, Europe, and Africa.

05

People-Oriented & Mutual Development

Adhering to a People-Centered Philosophy to Create a Sustainable Future

- Compliant Employment Management
- Promising Career Development
- Generous Compensation & Benefits Package
- Occupational Health Protection
- Superior Employee Care



Adhering to a People-Centered Philosophy to Create a Sustainable Future

People-Oriented & Mutual Development

Highlights



Vision and Mission

Human resources are the core competency of a company. As a responsible employer, SPH upholds the core values of "innovation, integrity, cooperation, inclusiveness, and responsibility". The Company is open and inclusive, and provides fair opportunities and a safe environment, as well as diversified incentive mechanisms and development opportunities.

Vision



People-oriented, empowering, enabling,
to be an outstanding employer in China

Mission



To give employees the power to fly high

Compliant Employment Management

Compliant Recruitment and Employment

Shanghai Pharmaceuticals strictly abides by the Labor Laws of the People's Republic of China, the Labor Contract Law of the People's Republic of China, and other national and regional labor regulations, rules, and policies. SPH has formulated corresponding internal management policies on recruitment, contract, and attendance in each subsidiary to ensure compliance and protect the rights and interests of employees. Shanghai Pharma conducts age confirmation in the recruitment process to prohibit child labor. The Company signs labor contracts with all employees, takes attendance and eliminates forced labor. The Company has also established trade unions to protect the rights and interests of employees and provide a communication platform for their feedback and complaints. SPH always conducts legal employment. There was no illegal use of child labor or forced labor during the reporting period.

Diversity and Equal Opportunities

Shanghai Pharmaceuticals always adheres to the principle of fairness and impartiality, and recruits employees based on job requirements without discriminating based on educational background, religion, nationality, marital status, gender, disease, or race.

SPH adheres to the market-oriented employment mechanism and promotes talent selection through open recruitment. By establishing a unified recruiting management platform and standardized recruiting management procedures, the Company continuously strengthens its staffing and talent reserve through diversified talent acquisition methods such as social media recruitment, campus recruitment, internal recommendation, and internal recruitment. SPH is focused on high-quality talents in the fields of technology innovation, advanced manufacturing, quality management, marketing, and internationalization.

At the same time, Shanghai Pharmaceutical actively promotes campus recruitment for fresh graduates every year. Since the COVID-19 epidemic, to enable more fresh graduates to get recruitment information remotely and ensure timely employment, SPH adopted online and online + offline seminars in 2021 to answer students' questions, which was well received and appreciated by students. The same year, Shanghai Pharmaceuticals was awarded the title of Chinese College Students' Favorite Employer and listed as one of China's 100 Model Employers.



Employees Structure

Index		Unit	2019	2020	2021
Total Number of Employees		Person(s)	47,778	48,136	47,056
Employment Type	Contract Employees	Person(s)	40,535	41,162	40,314
	Others	Person(s)	7,243	6,974	6,742
Gender	Male	Person(s)	23,523	23,572	23,205
	Female	Person(s)	24,255	24,564	23,851
Age	50 and above	Person(s)	7,944	7,916	7,790
	30-49	Person(s)	29,706	30,690	30,391
	Under 30	Person(s)	10,128	9,530	8,875
Educational Background	Others	Person(s)	19,135	16,984	16,172
	Associate Degree	Person(s)	15,220	15,732	15,121
	Bachelor's Degree	Person(s)	11,905	13,611	13,816
	Master's Degree and Above	Person(s)	1,518	1,809	1,947
Turnover Rate		%	19	19	10
Turnover Rate by Gender	Male	Person(s)	9	9	5
	Female	Person(s)	10	10	5
Turnover Rate by Age	50 and Above	Person(s)	4	4	2
	30-49	Person(s)	10	10	5
	Under 30	%	5	5	3
Turnover Rate by Location	The Mainland of China	%	19	19	10
	Hong Kong, Macao and Taiwan and Abroad	%	0	0	0

Honored Employer



Privacy Protection

Shanghai Pharmaceuticals strictly abides by the Personal Information Protection Law of the People's Republic of China to protect the security of employees' personal information and prevent the intentional or unintentional disclosure of private information to non-related people. As for recruitment, assessment and salary, only authorized personnel can manage employees' information such as work experience, performance and salary.

Promising Career Development

System Building

In 2021, SPH introduced Hay Job Evaluation to evaluate its staff. On the basis of the existing five major sections (marketing, production, technology, management, and services), we have designed a total of 48 corresponding sub-sections to form a complete value chain, laying a solid foundation for human resources management.

Appraisal and Promotion

Every year, SPH carries out target setting and performance appraisal for each employee. The promotion channel for employees is divided into two tracks: professional and managerial. The promotion is linked to employees' performance, capability and needs. At the same time, the Company piloted internal recruitment channels to provide employees with diversified development opportunities.

For the management of leaders and talents, SPH issued the Management Measures of Leaders in 2021, forming a clear guidance for the selection, cultivation, and management of leaders and talents. Meanwhile, the Company actively promotes succession and tracks the Individual Development Plan (IDP) of 153 deputy leaders in 2021 to provide support for their career development.

Talent Retention and Incentives

SPH set up medium and long-term incentive system for core managers and R&D personnel, including but not limited to equity incentive, incentive bonus, project bonus, honorary recognition, etc.

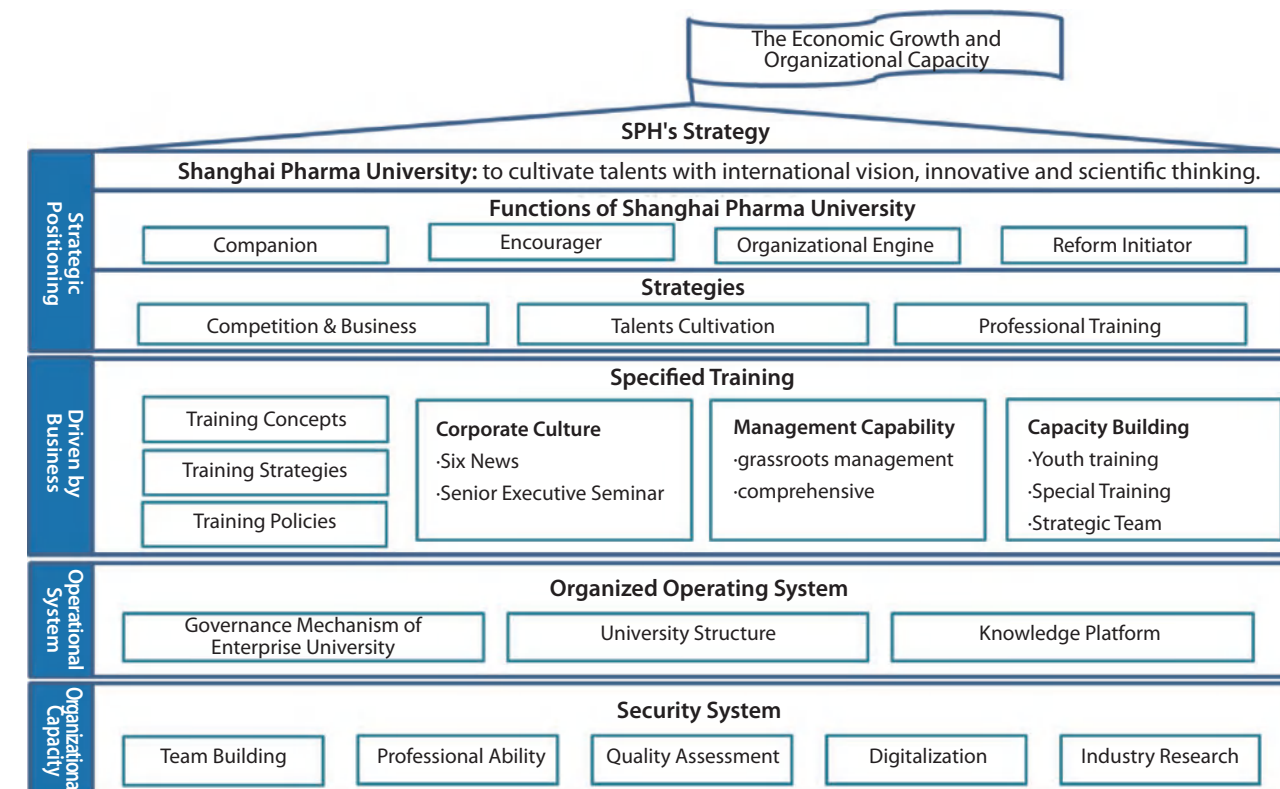
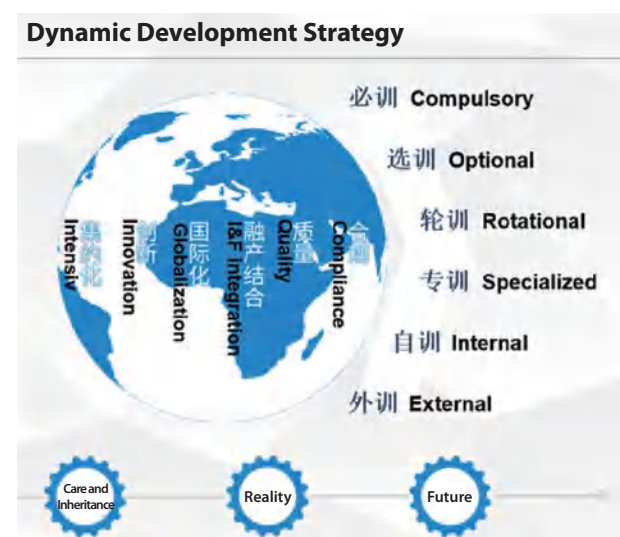
SPH advocates a performance culture and explores multiple performance allocation methods. In 2021, the Company optimized the salary system for standard positions in R&D. It also upgraded the overall performance appraisal of the R&D Management Center and the medium and long-term incentive programs of the innovative drug R&D team.

SPH has conducted employee engagement surveys for many years and carried out corresponding improvement actions based on the results. The overall engagement score in 2020-2021 is 78%, above the average of Chinese market and healthcare industry. 82% of the employees said they would not leave Shanghai Pharmaceuticals, showing positive data in terms of employee retention.

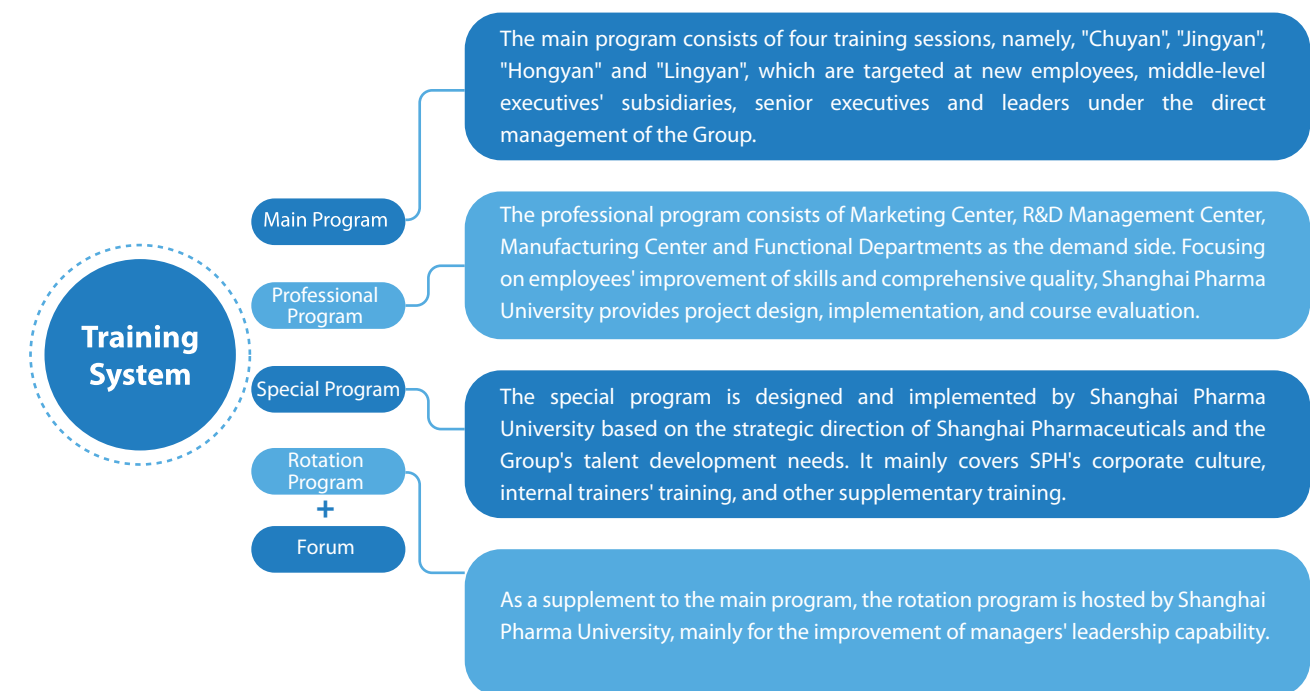
Training and Development

Employees' development is essential to enterprise growth, Shanghai Pharma is highly involved in the growth and development of its employees, providing a systematic training and specified learning and development channels.

Focusing on the Dynamic Development Strategy, SPH has formulated Training Management Measures, Management Measures of Internal Trainer, Talent Cultivation Management System, and other policies. The Company adheres to four basic principles: special attention, service strategy, comprehensive coverage, and integrated support. With Shanghai Pharma University as the core, we have designed a scientific and systematic training program and courses for employees of all levels and positions. The "4+1" training system includes the main program, professional program, special program, rotation program, and forums, to establish a talent cultivation system with a global vision. Employees can choose training courses according to their own development goals and job requirements. These efforts will help both employees and the Company in their growth journeys.



Shanghai Pharma University 14th Five-Year Plan



Shanghai Pharma University conducts annual research on overall demand for the next year. Based on the results, SPH accurately formulates annual teaching plans that meet its strategic development and employees' needs. In 2021, Shanghai Pharma University conducted 59 courses with 6,804 participants. It also held 50 fora on internationalization, digitalization, and healthcare reform policies. In addition, other departments of the Company also carried out special training sessions based on their functions. In 2021, Shanghai Pharmaceuticals had a total of 367,183 training attendees and an average of 43 hours of training per employee.

Meanwhile, the Company continues to establish strategic alliances with universities and jointly establishes national practice bases and bases for students with master's degrees to enhance their practical ability through internships, guidance, exchanges of experts, and specialized training.

Index		Unit	2021
Percentage of Trained Employee		%	86
Percentage of Trained Employees by Gender	Male	%	85
	Female	%	86
Percentage of Trained Employees by Position	Managerial and Professional Personnel	%	100
	Technicians and Others	%	80
Training Attendees		Time(s)	367,183
Training Hours		Hour(s)	1,724,157
Average Training Hours		Hour(s)	43
Average Training Hours of Employees by Gender	Male	Hour(s)	43
	Female	Hour(s)	42
Average Training Hours of Employees by Position	Managerial and Professional Personnel	Hour(s)	84
	Technicians and Others	Hour(s)	25

Cultivation of Technicians

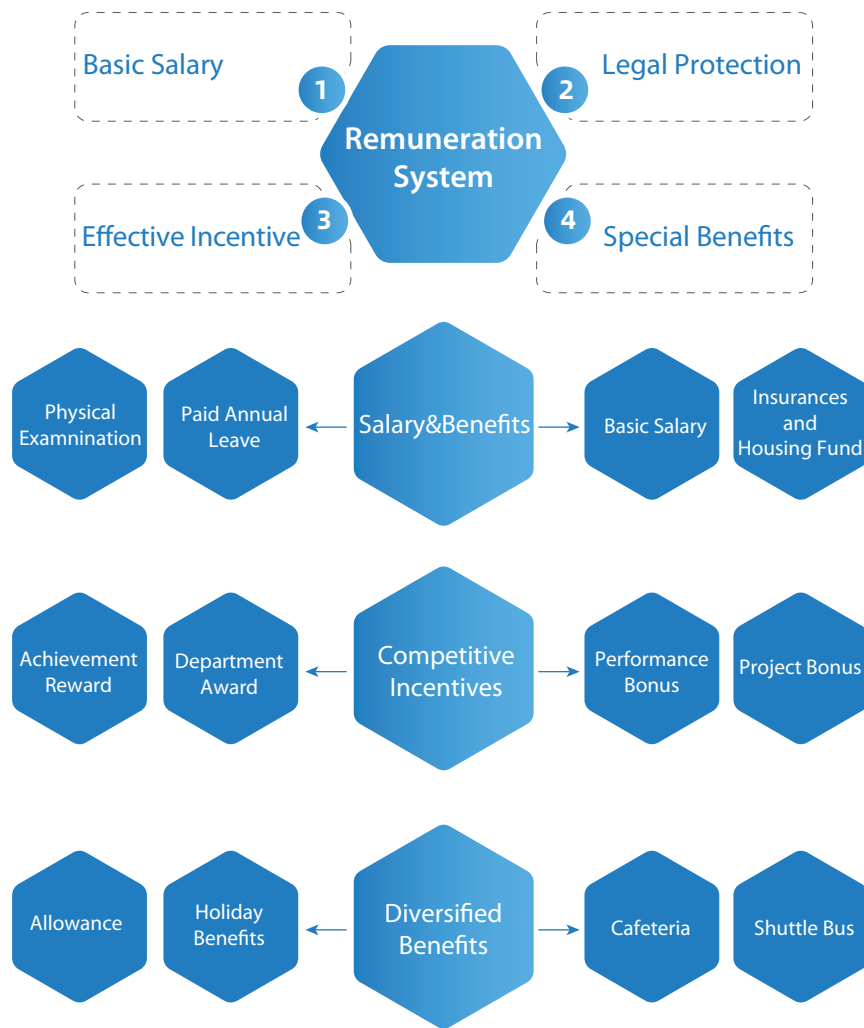
Shanghai Pharmaceuticals is one of the national models excelling at the integration of production and education. The Company actively promotes the cultivation of high-skilled personnel and has gradually formed a relatively mature training system. In 2021, SPH held systematic technician training. As a result, a number of technicians with excellent skills have emerged. A total of 10 people have been awarded the title of "Shanghai Artisan".

Shanghai Pharma also pays attention to the cultivation of a high-skilled teams. The Company organized the 2021 SPH Group Vocational Skills Competition, including pharmaceutical preparation workers (advanced level), and drug inspectors (advanced level). 125 contestants from 29 SPH subsidiaries (including 10 outside Shanghai) signed up for the competition. Before the competition, the Company carried out targeted theoretical training and operational training for the contestants. Through the competition, the Company has enhanced training and practice. In the future, SPH will continuously improve the skills of front-line employees, and train high-skilled teams adept at learning and innovation, providing support for the development of Shanghai's biomedical industry.

Generous Compensation & Benefits Package

SPH adheres to the concept of salary payment based on position, ability, performance, and market. SPH has formulated a Remuneration Management System. The Company will continuously improve regular salary increase and upgrade the income level of its employees.

According to the characteristics of different positions, SPH has constructed a differentiated salary system for management, marketing, R&D, quality management, and production. The system effectively mobilizes the enthusiasm and creativity of all employees and promotes the achievement of the Company's strategic goals.



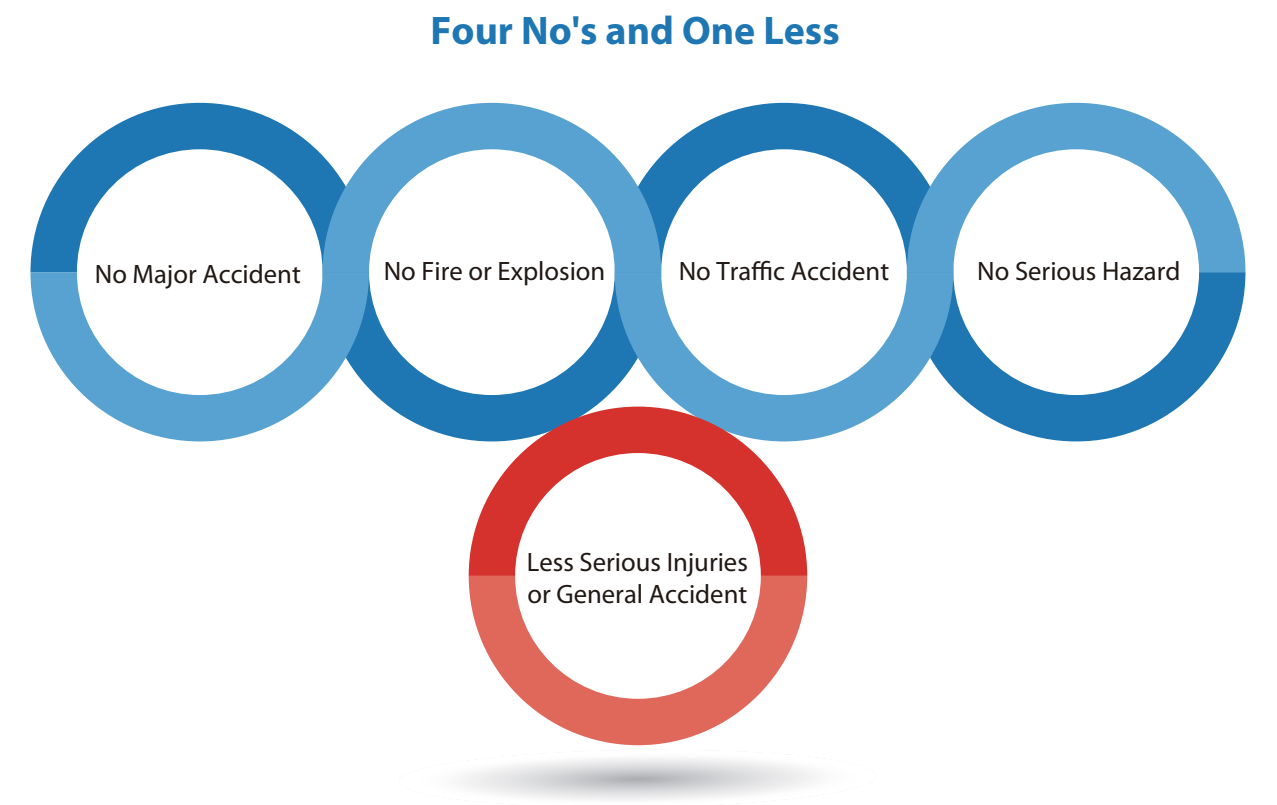
Occupational Health Protection

Employees' health and safety are a top priority for SPH, which makes every effort to provide a healthy and safe working environment.

Production Safety

In accordance with the Production Safety Laws of the People's Republic of China and other relevant regulations, Shanghai Pharmaceuticals continues to strengthen the production safety responsibility system and control the risk of accidents. The Company strives to further increase these efforts to ensure that production safety and business operations go side by side.

The Company has established a complete set of Management Standards and Systems of Production Safety, including 40 systems, such as Safe Production Management Standards, Safe Production Classification and Grading Measures, Performance Assessment of Safety Management and Environmental Management, and Accident Accountability System of Safe Production and Environmental Protection. We have increased the guarantee for production safety funds, materials, technology and personnel. We also continuously strengthened standardization and informatization of production safety and improved the risk prevention and control mechanism. SPH also carried out education activities to improve employees' safety knowledge. Through risk assessment, safety hazard investigation and timely response, the Company can achieve the goal of "four no's and one less" in production safety.



The Company has established a Production Safety Management Committee to guide and manage the production safety of the whole Group. SPH also set up a Department of Safety Management with full-time and or part-time safety management personnel. Through all-year-round supervision and inspection, such as planning, auditing, and assessment, the Company effectively realized its safety goals.

Case

On January 6, 2021, the directors of Shanghai Pharmaceuticals and its 27 direct subsidiaries signed the 2021 Production Safety Letter. This Letter defines the annual objectives and responsibilities in production safety.

During the reporting period, the Company and its subsidiaries followed the "Three-Year Action Plan for Production Safety" in accordance with the requirements of the Office of Shanghai Production Safety Commission and State-owned Assets Supervision and Administration. The Company comprehensively promoted dual prevention by risk classification and hazard management. Key tasks include "limited space", "idle places", "laboratory hazardous chemicals", "anti-habitual violation", and "non-flame retardant colored steel plate".

2 **National Demonstration Enterprise of Safety Culture Construction** (1 to be certified)

7 **Shanghai Demonstration Enterprise of Safety Culture Construction**

Shanghai Zhongxi Sunve Pharmaceutical Co., Ltd. was awarded **Shanghai Excellent Group for Fire Safety**

Xiamen Traditional Chinese Medicine Factory Co., Ltd. and other enterprises was awarded **the Excellent Organizations, Teams, and Individuals in the provincial and municipal "Ankang Cup" competition**



Index	Unit	2019	2020	2021
Health and Safety Investments	RMB'0,000	15,922	19,236	17,702
Safety Training (%)	%	2.47	2.5	2.95
Hours of Safety Training	Hour(s)	791,149	1,538,316	1,667,117
Number of Safety Drills	Time(s)	438	511	639
Number of Participants in Safety Drills	Person(s)	27,387	29,579	32,636
Manufacturing Accidents	Time(s)	11	7	10
Number of Work-Related Deaths (Accident of Production Safety)	Person(s)	1	2	0
Work-related deaths (%)	%	0.00003	0.00006	0
Days Loss due to Work-Related Deaths	Day(s)	7,280	12,407	840

- Statistics are from 27 secondary subsidiaries of Shanghai Pharmaceuticals.
- In response to the two work-related death (accident of production safety) in 2019 and 2020, the Company has conducted in-depth investigation and accountability review to prevent similar accidents.

Certification of Safety Management System

Shanghai Pharma encourages its subsidiaries to promote production safety, occupational health, and safety management system. During the reporting period, a total of 64 subsidiaries completed the standardization of production safety and maintained full coverage of production safety management. A total of 26 subsidiaries have passed the ISO45001 certification of occupational health and safety management system. The Group encourages all subsidiaries to enhance the certification work and to improve occupational health and safety management.



Safety Culture

SPH promotes a safety culture. In order to consolidate the document "Notice on 2021 Shanghai Safe Production Month activities," the Group set up an activity program for the Safe Production Month. The theme is "Eliminate dangers and build a safety line". In 2021, combining the "Safety Production Month" and "Fire Prevention Month", a total of 71 units organized 639 drills of various types, with a total of nearly 33,000 participants. Through various drills, the Company improved its emergency response ability and raised employees' safety awareness.

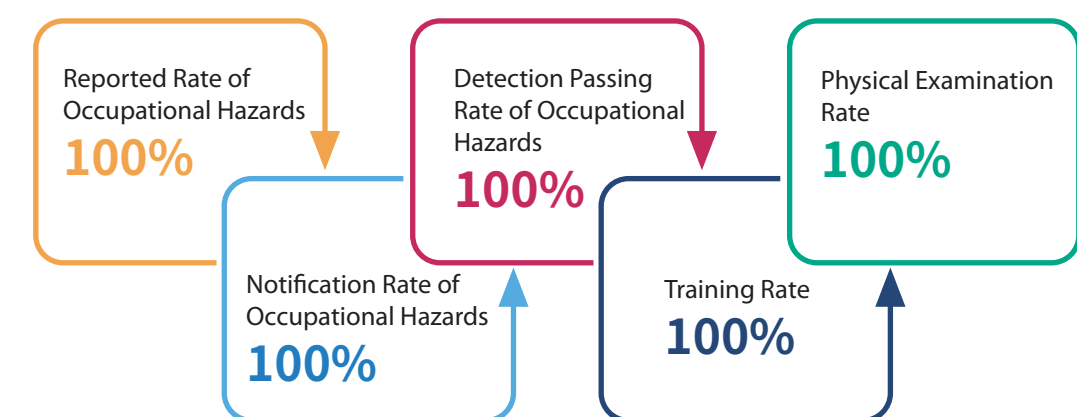


Management of Special Drugs

The Company has formulated a safety management system and emergency plan for special drugs, determined the first responsible person for the production and safety management of special drugs, and determined the responsibilities of each department. SPH also conducted regular training to emphasize the importance of the safety of special drugs, and strictly followed the production plan and operation procedures. The special drugs are managed by double securities, with cameras and automatic alarm systems installed to avoid occupational hazards in the production.

Occupational Health

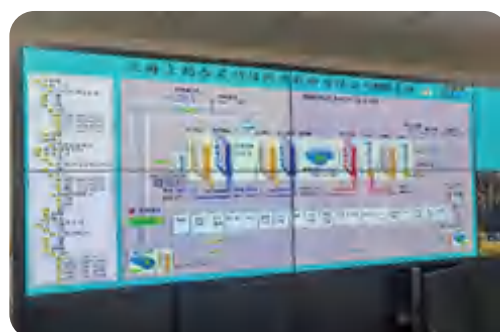
According to the Labor Contract Law, the Trade Union Law, the Production Safety Law, Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases, Provisions on the Administration of Occupational Health at Workplaces and other laws and regulations, SPH has formulated the Occupational Health Management System, with the objective of "Five 100%" to protect the health, safety and interests of employees. The Company is dedicated to achieving full occupational hazard management and ensuring that no work-related illnesses occurred throughout 2021.



Index	Unit	2019	2020	2021
Physical Examination Rate	%	100	100	100
Number of People completing Physical Examination	Person(s)	4,209	5,358	5,693
Employees with Work-related illnesses	%	0	0	0
Report Rate of Occupational Hazards	%	100	100	100
Detection Passing Rate of Occupational Hazards	%	100	100	100
Notification Rate of Occupational Hazards	%	100	100	100

Case

SPH Xing Ling Sci & Tech Pharmaceutical Co., Ltd.'s extraction system adopts fully automated facilities to reduce personnel exposure to ethanol and other occupational hazards. The entire extraction process can be operated remotely from the central control room. Personnel only need to regularly inspect the production line. The time of exposure to hazardous materials is greatly reduced. The cost of this automated system is about USD 3.1 million (RMB 20 million).



Case

Shanghai Sine Tianping Pharmaceutical Co., Ltd. purchased a new set of automatic packaging production lines. This greatly reduces the noise impact on workers and optimizes the working environment.



Occupational Protection

Shanghai Pharmaceuticals implemented the "Three Simultaneous" review system of new reform and expansion projects to strengthen labor protection. We conducted research on the environment of grass-roots production enterprises, created a pleasant work environment, and improved the quality of life of our workers. We promoted the occupational health infrastructure. Through inspection and supervision of production enterprises with occupational hazards, we innovated the process, updated and upgraded production facilities, and took every measure to control and eliminate hazards, creating a safe work environment. We continuously enhance employees' safety and health in special climatic conditions, such as heat, cold, flood, and typhoons.. SPH also assigned special personnel to regularly monitor occupational hazards, provided workers with personal protective equipment against work-related illnesses, and organized regular physical examinations for employees. The Company also provided employees with pre-work and regular occupational health training, with an initial training of no less than 8 hours and continuing education of no less than 4 hours.

Superior Employee Care

Democratic Management

In accordance with the Trade Union Law of the People's Republic of China, Constitution of Trade Unions of the People's Republic of China, and other laws and regulations, SPH has strengthened its grass-roots trade unions, expanded the coverage of trade unions and enhanced the cohesion of trade unions. Currently, there are 144 trade unions at the second and tertiary levels in the country. The Company follows a democratic management system at the Employees' Representatives Conference. SPH actively promotes transparent management and open consultation, supports workers' participation in the democratic management of the Company, and safeguards the legitimate rights and interests of employees. SPH is devoted to building harmonious labor relations and promoting the Company's sustainable and healthy development.

Employees' Representatives Conference

In strict accordance with the Trade Union Law of the People's Republic of China, Company Law of the People's Republic of China, Labor Law of the People's Republic of China, Provisions on the Democratic Management of Enterprises, and Regulations of Shanghai Municipality on Employees' Representatives Conference, SPH fully covered the Employees' Representatives Conference of the headquarter and 70 direct second and third tier subsidiaries in Shanghai. SPH set up a multi-level system of Employees' Representatives Conference, with different focuses on various positions, to effectively link functions among the multi-level Employees' Representatives Conference. The Rules of Implementation of the SPH Employees' Representatives Conference clarify the right to recommendation, consideration, approval, review, supervision, democratic election, and democratic evaluation of the Conference. The rules and regulations or major matters of immediate interest to the employees must be considered and examined by the Employees' Representatives Conference before implementation. These efforts guaranteed employees' right to information, participation, expression, and supervision.

In order to strengthen the subsidiaries' standardized operation of the Employees' Representatives Conference, the Company's Trade Union has established a "Three Reports" system, namely annual forecast report, immediate forecast report, and post-meeting report. The Company also regularly checks the implementation and operation to promote the orderly function of the Employees' Representatives Conference.

On July 26, 2021, SPH held the Sixth Session of the Second Employees' Representatives Conference. The Conference heard the "Administrative Work Report" and "Report on the Work to Support and Protect Employees".



Open Factory Affairs

The Company constantly improves the democratic management of factory affairs. The Company formulated and implemented The Rules of Open Factory Affairs, allowing all subsidiaries to make necessary adjustments. The Open Factory Affairs include three channels: 1. the special form consists of bulletin boards, factory press conferences, open factory affairs networks, special meetings, etc., 2. The exclusive form consists of the Board of Directors, Board of Supervisors, factory managers' office meeting, the joint meeting of the Party, administration and workers, the meeting of middle-level leaders, etc. 3. Open letters, notices, Intranet, radio, TV, newspapers, magazines, wall posters, etc. These channels greatly improved employees' right to information by regarding major decisions about their enterprise, their interests and the Party.



Equal Consultation and Collective Contracts

Through equal consultation and collective contract, SPH fully protects employees' right to expression. SPH established a sharing mechanism for the interests of the enterprise and the employees. The trade unions of each enterprise and their administrations conduct equal consultation on rules, regulations, or major matters directly related to employees' interests, such as salaries, working hours, rest and leave, safety and health, insurance and benefits, professional training, labor discipline, etc. The Company also signed collective contracts and special collective contracts on salaries, female employees, and labor safety and health. The collective contracts' signing rate of state-owned and state-controlled enterprises within the Company is 100%.

Special Collective Contracts on Salaries

In the consultation of salaries, we attach importance to the standardization of procedures such as opinion gathering, offer initiation, pre-consultation, formal consultation, deliberation and approval by the Employees' Representatives Conference, and filing by the Department of Human Resources and Social Security. These procedures improved the consultation and co-decision mechanism. The signing rate of special collective contracts on salaries in state-owned and state-controlled enterprises in the Company reached 96.5%. The average income of employees has doubled in the past 10 years. The income of employees and the development of the enterprises are following similar trends.



Mass-Based Economic and Technological Innovation Activities

In 2021, based on the characteristics of the pharmaceutical industry, SPH focused on the key points and difficulties in production and operation, innovating both economically and technologically. The Company organized a competition on the production line named "Cost Reduction and Efficiency Increase". Some of the competition events were commended at the municipal level. The "My Position, My Innovation" project included proposals from staff. Some of the proposals won prizes in the municipal-level employees' innovation competition. These efforts have played a positive role in enhancing employees' skills and forming the core competency of the enterprises.



Enrich the Life of Employees

We attach importance to stimulating employees' sense of ownership to serve the overall development of the enterprises. By building various platforms and organizing cultural and sports activities with innovative content, we promote employees' work-life balance and all-round development, to enhance their sense of belonging and mission.

Singing Ceremony of the 100th Anniversary of
the founding of the Communist Party of China ▼



Celebration of the International Working
Women's Day ▼



Outdoor Activities to Study the History of the Communist
Party of China, Celebration of the 100th Anniversary of the
founding of the Communist Party of China ▼



Table Tennis Games ▼



Support and Protect Employees

SPH deeply cares for the work and life of its employees. The Trade Union's "general + specific" services provided great support to all employees. Moreover, SPH actively responded to employees' desire for a better life through various forms of support. These efforts effectively enhanced employees' sense of growth, happiness, and security.

Deepen Practical Projects

We care for the physical and mental health of our employees. The Company continued the Three-Year Rest and Recuperation Plan, with a total of 1,440 employees sent to various convalescent facilities, with a subsidy of RMB700 thousand from the Group's Trade Union. The Company follows a membership system, providing exclusive coverage. Members of the Shanghai Federation of Trade Unions received an exclusive basic protection plan. Apart from funds from Shanghai Municipal Government, the Group's Trade Union bore the remaining premiums of RMB100 per person, with a total contribution of nearly RMB2 million. In 2021, 53 members received claims of more than RMB1 million in total.

Support for Employees in Difficulty

The Party and SPH Group vow that "No employees will be impoverished due to illness". In 2021, of the SPH Trade Union greatly increased financial assistance to employees in need, from RMB2,400 to RMB6,000 /year/person; one-time temporary assistance was raised from RMB600 to RMB1,000 /person; assistance for children of employees in difficulty was increased from RMB1,600 to 3,000 /school year at the high school level, and from RMB2,400 to 5,000 /school year at the university level. In 2021, a total of 1,398 employees in difficulty received financial assistance of more than 1.63 million yuan, an increase of 70% year-on-year.

The "Love and Help" Program

Based on the existing "Love and Help" Program and the overall situation of the employees, the SPH Trade Union revised the Program and broadened the scope of assistance in 2021. The Program now includes additional employees who suffer from illness, rare diseases, or have incurred huge medical fees. In 2021, 43 employees were supported by the "Love and Help" Program, for which the Group's Trade Union paid nearly RMB1 million, relieving these employees of the heavy pressure of medical expenses and improving their quality of life.

Care and Support in Special Times

The Group's Trade Union continues to care for employees during periods of heat every year. SPH allocated more than RMB500,000 for summer heat prevention and cooling during the heat wave in 2021. Following the COVID-19 outbreak, the Group's Trade Union promptly responded to employees' need in its subsidiaries and allocated special funds for epidemic prevention and control to protect the employees in high-risk areas.

06

Green Development & Low-carbon Operation

Building an Ecological Civilization to Protect Lucid Waters and Lush Mountains

- Environmental Management
- Response to Climate Change
- Energy Management
- Pollution Control
- Green Operation
- Biodiversity

Building an Ecological Civilization to Protect Lucid Waters and Lush Mountains

Green Development & Low-carbon Operation

To become a resource-saving and environmentally-friendly company, SPH complies with laws and regulations, while keeping the bottom line, and steadily improving. The Company, prompted all its subsidiaries to gradually improve their environmental and energy management systems.

Highlights



About
RMB125.64 mm
Investment in
Environmental Protection

71 Technical Renovation Projects	RMB21.93mm Total Investment	3,890,000 kWh Electricity Saved	3,869 t Steam Saved	250,000 m³ Gas Saved	111,800 t Water Saved	RMB6.01 mm Capital Saved
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Environmental Management

Management System

In compliance with local laws and regulations, and industry standards related to environmental protection, (e.g., Environmental Protection Law of the People's Republic of China, Energy Conservation Law of the People's Republic of China, Law of the People's Republic of China on Prevention and Control of Water Pollution, Law of the People's Republic of China on Prevention and Control of Atmospheric Pollution, Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste, Law of the People's Republic of China on Prevention and Control of Pollution from Environmental Noise, Cleaner Production Promotion Law of the People's Republic of China, Regulations on the Administration of Construction Project Environmental Protection) SPH established a sound environmental management system, including Environmental Protection Responsibility System, Environmental Events Reporting System, Measures for Safety Management and Environmental Management Performance Assessment, Accountability System for Safety Production and Environmental Protection Accidents, and Energy Information Management Measures for Energy-Using Enterprises, and prepared a series of normative documents such as Basic Requirements for Enterprise Environment. All subsidiaries should strictly abide by applicable regulations and company requirements, to minimize the impact of operations on the environment.

SPH's Security Department is responsible for the Company's environmental and energy management, formulating relevant management systems, and implementing daily supervision and management. The subsidiaries strove to meet various energy conservation and environmental protection management requirements in daily production and operation, and regularly summarized and reported the progress on saving energy and protecting environment.

5 subsidiaries

implemented PV projects

23 subsidiaries

passed ISO14001 certification

15 subsidiaries

passed ISO50001 certification

7 subsidiaries

passed clean production acceptance

Environmental Responsibility Goals

100% implementation rate of "three simultaneous" system in new projects

100% operation rate of pollution control equipment and facilities

100% annual compliance rate of pollution emission monitoring

100% compliant solid waste disposal rate

The whole process of production and operation in compliance with legal requirements

On December 31, 2020, the Company issued the notice of 2021 Priorities on Safe Production, Environmental Protection, and Public Security, defining eight major tasks of environmental protection in 2021:

- 1 Reporting of information in the CSR report
- 2 Management after obtaining pollutant discharge permit
- 3 Completion of environmental tasks proposed by the Group
- 4 Regular self-examination and self-correction of environmental protection work
- 5 Employee environmental training and Environment Day promotion
- 6 Standardization of environmental management
- 7 Establishment of management system, clean production audit, green factory
- 8 Enterprise on-site guidance, audit and assessment



During the reporting period, SPH's subsidiaries received no penalties for environmental violations, and excessive or illegal pollutant discharges.

Case

On January 11, 2021, at the Company's Safety and Environmental Protection Committee (SEPC), 20 subsidiaries signed the 2021 Environmental Mission Statement, which outlined their annual goals and responsibilities on environmental protection. SPH's Security Department evaluated the subsidiaries' annual environmental protection work based on daily inspections, mid-year audits, and year-end assessments and the final results served as a reference for the performance assessment team to the business operators. The outstanding enterprises on safety and environmental protection of the year were commended at the SEPC.



Case



SPH held the 2021 Environmental Management Conference at its subsidiary SPH Qingchunbao. Environmental management staff from 15 key subsidiaries attended the meeting. A total of 12 agenda items were completed at the two-day meeting, including a review of environmental management in 2021. The attendees exchanged and discussed 11 environmental protection tasks, including the standardization of hazardous waste management, environmental management account checklist, experience in standardization of sewage stations, 123 basic requirements for environmental protection, reporting requirements for the Company's security platform and assessment requirements for environmental audit. The meeting was a comprehensive and systematic review of SPH's environmental protection work. All participating companies were required to convey the concept to other subsidiaries after the meeting.

Awards

- SPH was awarded the "Third Prize of 2021 Comprehensive Evaluation of Energy Statistics in Shanghai" by the Shanghai Municipal Bureau of Statistics.
- Huqingyutang Pharma was awarded the title of "2021 Hangzhou Municipal Green and Low-Carbon Factory" by the Hangzhou Municipal Bureau of Economy and Informatization.

Environmental System Certification

SPH continues to promote the certification of environmental systems of its subsidiaries. By the end of 2021, 23 SPH's subsidiaries have been certified ISO14001 Environmental Management Systems, and 15 subsidiaries have been certified ISO50001 Energy Management Systems.

List of Enterprises Certified by ISO14001 Environmental Management Systems

- Shanghai SPH Sine Pharmaceutical Laboratories Co., Ltd.
- Shanghai Sine Tianping Pharmaceutical Co., Ltd.
- Shanghai Harvest Pharmaceutical Co., Ltd.
- Shanghai Sine No.2 Pharmaceutical Laboratories Co., Ltd.
- Shanghai Sine Jinzhu Pharmaceutical Co., Ltd.
- Shanghai Sine Wanxiang Pharmaceutical Co., Ltd.
- Shandong Sine Pharmaceutical Co., Ltd.
- Shanghai SPH New Asia Pharmaceutical Co., Ltd.
New Asia Pharmaceutical Factory
- Shanghai SPH New Asia Pharmaceutical Co., Ltd.
Pioneer Pharmaceutical Factory
- SPH New Asia Pharmaceutical (Minhang) Co., Ltd.
- Liaoning Meiya Pharmaceutical Co., Ltd.
- SPH No. 1 Biochemical & Pharmaceutical Co., Ltd.
- Shanghai Zhongxi Sunve Pharmaceutical Co., Ltd.
- Shanghai SPH Zhongxi Pharmaceutical Co., Ltd.
- Zhejiang Jiuxu Pharmaceutical Co., Ltd.
- Chiatai Qingchunbao Pharmaceutical Co., Ltd.
- Hangzhou Huqingyutang Pharmaceutical Co., Ltd.
- SPH Dongying (Jiangsu) Pharmaceutical Co., Ltd.
- Shanghai Pharma Group Changzhou Kony Pharmaceutical Co., Ltd.
- Changzhou Pharmaceutical Factory Co., Ltd.
- Nantong Chanyoo Pharmatech Co., Ltd.
- Liaoning SPH Herbapex Pharmaceutical (Group) Co., Ltd.
- Techpool Bio-Pharma Co., Ltd.



List of Enterprises Certified by ISO50001 Energy Management Systems

- Shanghai Sine Jinzhu Pharmaceutical Co., Ltd.
- Shanghai Sine Tianping Pharmaceutical Co., Ltd.
- Shanghai Zhongxi Sunve Pharmaceutical Co., Ltd.
- Shanghai SPH Zhongxi Pharmaceutical Co., Ltd.
- SPH No. 1 Biochemical & Pharmaceutical Co., Ltd.
- Shanghai SPH New Asia Pharmaceutical Co., Ltd.
- Shanghai SPH New Asia Pharmaceutical Co., Ltd.
Pioneer Pharmaceutical Factory
- SPH New Asia Pharmaceutical (Minhang) Co., Ltd.
- Shanghai Zhonghua Pharmaceutical Co., Ltd.
- Hangzhou Huqingyutang Pharmaceutical Co., Ltd.
- Liaoning Meiya Pharmaceutical Co., Ltd.
- Changzhou Pharmaceutical Factory Co., Ltd.
- Shandong Sine Pharmaceutical Co., Ltd.
- Liaoning SPH Herbapex Pharmaceutical (Group) Co., Ltd.

Emergency Plan

In compliance with the requirements of the Department of Environmental Protection, SPH carried out risk assessments and improved risk prevention measures for environmental emergencies, identified and controlled potential environmental safety hazards, prepared emergency plans for environmental emergencies and conducted drills, and enhanced environmental emergency response capabilities. All subsidiaries prepared and documented the Corporate Emergency Plan for Environmental Emergencies, and organized emergency drills and training as per the Plan.

Environmental Protection Training

Based on new regulations and management requirements, SPH formulates plans and conducts energy conservation and environmental protection training every year. Through centralized training and interpretation of new regulations and requirements, it improves the work performance of enterprise environmental management personnel, and implements the accountability system for enterprise ecological environmental protection. Each subsidiary prepares standardized documentation such as slides for three-level education for new employees, and conducts environmental protection education to enable them to understand national regulations and standards, corporate pollution prevention and control measures as well as management requirements, and abide by environmental protection rules and regulations, and fulfill their responsibilities. Operators of pollution control facilities are trained at least twice a year, to consolidate and upgrade their operation level, and ensure the normal operation of these facilities.

Case

On April 13, 2021, a training was held at the SPH headquarters, both online and offline, on corporate environmental management and establishing management accounts in line with relevant regulations after obtaining pollution discharge permits. All environmental managers of the Group's subsidiaries attended the event. Their environmental management level has been greatly improved through a comprehensive presentation of how the enterprises conduct environmental management work in accordance with the requirements of the Group, and how they establish environmental management accounts as per the regulations after obtaining pollution discharge permits.



Environmental Protection Publicity

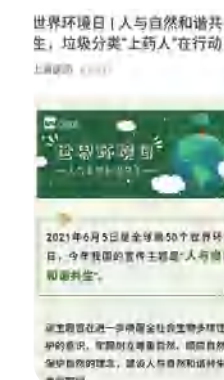
SPH promotes environmental awareness, advocates green life, and pursues green development. The Company issues documents every year, requiring its subsidiaries to carry out diversified environmental protection publicity activities the Environment Day. In 2021, to celebrate the 100th anniversary of the founding of the Communist Party of China and implement the requirements of the Beautiful China, I'm a Contributor — Action Plan to Raise Public Awareness of Ecological Conservation (2021-2025), SPH's subsidiaries organized environmental protection publicity activities to advocate the concept of ecological environmental protection, and mobilize all staff to participate in ecological protection.

Case

World Environment Day "Harmonious Coexistence of Man and Nature" Publicity Activity

On May 7, 2021, the Company issued the Notice on Carrying out 2021 Environment Day Publicity Activities, requiring subsidiaries to conduct environmental protection activities on June 5 (World Environment Day), promote activities and submit summary reports. All subsidiaries completed the tasks as required, and submitted the publicity summary of the Environment Day.

On June 5th, SPH's official WeChat account released an article, titled "World Environment Day | Harmonious Coexistence of Man and Nature; Garbage Sorting, SPH Staff in Action", to publicize the Environment Day and the Group's green manufacturing concept. A total of 3,152 people participated in its mini-game for environmental protection.



Response to Climate Change

Climate change is an urgent global challenge. SPH is well aware of its impact on business, , and has taken positive measures to mitigate climate change.

Identification of Climate-Related Risks and Opportunities

Identification of Climate Change Risks and Opportunities		Potential Financial Impact
Policy and Legal Risk	Climate-related laws and policies will continue to be updated, putting forward higher requirements for environmental management compliance.	Increased operating costs
Technical risk	The development and use of new energy technologies and equipment upgrades will increase production costs and weaken product competitiveness.	Increased operating costs
Reputation Risk	Under the dual carbon goal, the Company's proactive and effective response to climate change and support of low-carbon transformation will affect the views of investors and the public, and failure to meet public expectations may affect its reputation.	Decreased operating revenue
Market Risk	The market's increasing focus on the environmental friendliness of products and services may affect the demand for certain products and services.	Increased operating costs Decreased operating revenue
Acute Transformational Risk	Extreme weather conditions (e.g. typhoons, floods) may result in company shutdowns, asset damage, and casualties.	Increased operating costs Decreased operating revenue
Chronic Transformational Risk	Continued hot weather and intense heat may cause the Company to suspend production and pose a health risk to employees.	Increased operating costs Decreased operating revenue
Products & Services	Climate change has widespread impacts on human health, increasing illness, death and injury, and raising the demand for certain medical treatments. The Company develops and manufactures targeted drugs, which will enhance the competitiveness of its product chain while meeting health needs.	Increased operating revenue
Energy Source	The development and use of new energy technologies will help achieve the dual carbon goal and reduce energy costs.	Decreased operating costs
Resource Efficiency	The application of energy-efficient technologies will improve resource efficiency, cut emissions, reduce resource consumption expenditures, and mitigate climate change.	Decreased operating costs
Resilience	The Company's continuous efforts in reducing energy conservation and consumption will improve its climate change resilience.	Decreased operating costs

Responses to Climate Risks

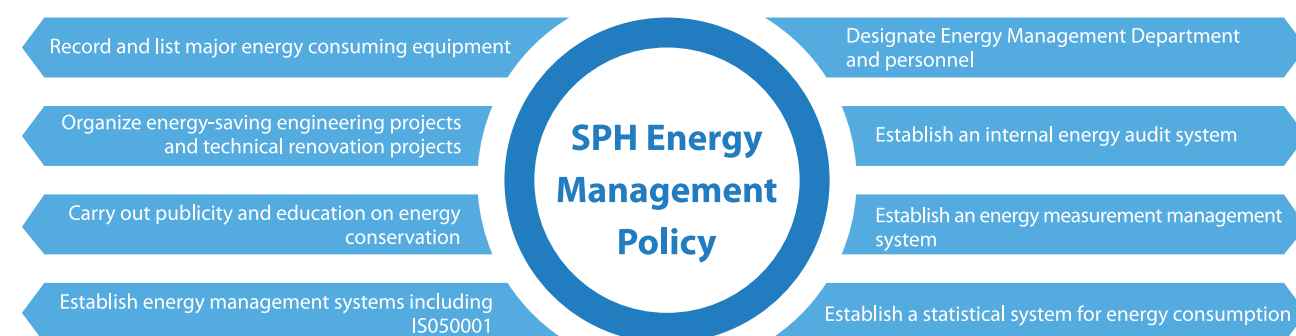
Carbon Emission Monitoring	In 2021, SPH invited four companies, including Shanghai Tsumura Pharmaceutical Co., Ltd., SPH SBPC, SPH New Asia, and SPH Sine, to prepare the official report on carbon emission trading pilot enterprises in Shanghai and the monitoring plan for 2021. The documents were submitted to the Shanghai Municipal Bureau of Ecology and Environment.
Strengthening Energy Management	SPH strengthened energy management and continued to promote energy conservation and consumption reduction (see "Energy Management" for details).
Using Clean Energy	Five SPH subsidiaries, including Shanghai SPH Sine, SPH Sine Jinzhu, SPH Sine Tianping, Zhejiang Jiuxu, and SPH Changzhou Pharma, implemented photovoltaic projects to reduce carbon emissions by the use of clean solar energy.
Coping with Extreme Weather	The Company issued the notice of 2021 Priorities on Safe Production, Environmental Protection, and Public Security, requiring enterprises to strengthen flood control and typhoon prevention. All subsidiaries were required to conscientiously fight against typhoon and flood, prepare supplies for rescue, conduct emergency disaster relief plan drills, strengthen stand-by mechanism in disaster weather, and achieve "defined individual responsibility, material reserves, strict emergency plans, feasible emergency security and smooth information communication".
Enhancing Professional Knowledge	In June 2021, the Company organized an EHS training, and invited leaders from the Shanghai Energy Conservation and Comprehensive Utilization Department and experts from Shanghai Energy Efficiency Center to explain requirements for carbon peak, carbon neutrality and energy conservation in the "14th Five-Year Plan". This training enabled all subsidiaries to understand the government's ecological policies, and reminded them to be prepared, laying a foundation for achieving carbon peak and carbon neutrality.

General Secretary Xi Jinping made the pledge that China would strive to peak carbon emissions before 2030 and achieve carbon neutrality by 2060. These goals are the inherent requirements for China to achieve sustainable and high - quality development, and it is also an inevitable choice to promote the building of a community with a shared future for mankind. In order to implement Xi's Thought on Ecological Civilization, , the Company will make efforts to meet the carbon peak and neutrality targets through various means:

- 📄 Promote subsidiaries' participation in green power transactions.
- 📄 Encourage subsidiaries to purchase new energy sources such as wind power and photovoltaics.
- 📄 Consume green electricity and obtain corresponding green certification.
- 📄 Promote the use of advanced energy-saving equipment and facilities to increase energy efficiency, such as the use of high-efficiency equipment including magnetic levitation air conditioners, heat pumps, spray dryers and MVR evaporators.
- 📄 Establish an energy information platform to monitor the rational use of energy.

Energy Management

We always practice green development, optimize the management of energy, water resources and packaging consumables, improve energy efficiency and help energy conservation and emission reduction via optimized energy structure and modified production technology, to become a resource-saving enterprise.



In 2021, the Company issued the Notice on Strengthening Energy Management of Energy-Consuming Units, requiring manufacturing subsidiaries to strengthen energy management, use energy rationally, improve energy efficiency, and reduce energy consumption; to summarize their energy management work in 2020 using 19 criteria including energy conservation goals, organization, system and measures, and develop energy management work plans for 2021, identifying energy-saving goals and measures.

During the reporting period, the industrial subsidiaries carried out 71 technical renovation projects for energy and water conservation, with a total investment of RMB21.93mm, saving 3,890,000 Kw/h of electricity, 3,869 tons of steam, 250,000 m³ of gas, 111,800 tons of water, and RMB6.01mm of capital. In the annual energy-saving work assessment of the Shanghai Municipal Economy and Informatization Commission in 2021, this was rated as "beating" the target. In 2022, we will continue to urge all subsidiaries to implement energy and water conservation plans during their clean production and energy-saving work, to reduce energy and water consumption and use energy and water more reasonably and efficiently.

Case

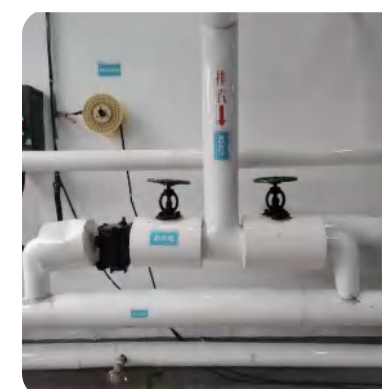
1.Shanghai Sine No.2 Pharmaceutical Laboratories Co.,Ltd. invested a total of RMB160,000 in the recycling project of lithium bromide condensed water in June 2021. This project is about the recycling and utilization of the condensed water from the central air-conditioning lithium bromide chiller. It will save RMB12, 500 of natural gas, 16.25 tons of standard coal, 5,000 tons of water and RMB50, 000 per year.

2.Shanghai Sine Yan'an Pharmaceutical Co.,Ltd. implemented the energy-saving technical renovation project of gelatin dissolver and drying system in the soft capsule workshop. With an investment of RMB10, 000, the project can save 1,500 kWh of electricity, 2,474 m³ of natural gas, 100 tons of water, and RMB10, 000 in total cost.

3.SPH No. 1 Biochemical & Pharmaceutical Co., Ltd. invested RMB5.4mm in the central heating renovation project.. Through the modification of the heating system, 50,400 tons of water can be saved annually.

4.Shanghai SPH New Asia Pharmaceutical Co., Ltd. New Asia Pharmaceutical Factory invested in the renovation of refrigerating units, and use new evaporative condenser freezer to solve the problem of unreasonable energy consumption of power equipment in the shutdown and overhaul. With an investment of RMB680,000, the project may save 100, 000 kWh of electricity and 1,000 tons of water annually.

5.Shanghai SPH Zhongxi Pharmaceutical Co., Ltd. Invested RMB100, 000 in the renovation project of steam traps in the plant. It can save 884 tons of water per year.



Pollution Control

SPH strictly controlled emissions of exhaust gas, waste water, solid waste, noise and other pollutants in its production and operation activities, and reduced the emissions through pre-control, continuous monitoring, self-examination and self-correction, to alleviate its environmental impact:

- 📄 All manufacturing subsidiaries obtained national pollutant discharge permit or registered through the Classification Management Catalogue to Pollutant Emission Permit for Stationary Sources of Pollution.
- 📄 The subsidiaries carried out self-monitoring and reporting of pollutant discharge permit implementation reports in accordance with regulatory requirements.
- 📄 According to the self-monitoring plan, all subsidiaries entrusted qualified third-party monitoring agencies for annual monitoring of all discharge outlets, to ensure stable and compliant pollution emissions.

During the reporting period, the total amount and concentration of exhaust gas and waste water discharged all met the standard.

Hazardous Waste Management

The hazardous wastes generated by the Company include waste residues and organic waste liquids in production as well as contaminated packaging materials. SPH developed standards for hazardous waste management, requiring manufacturing subsidiaries to establish hazardous waste management systems and procedures; set up temporary storage warehouses; put up signs and labels; entrust qualified institutions to handle hazardous wastes; and fill in duplicate forms for transfer of hazardous waste, document the process and keep records. In 2020, hazardous waste management was standardized.



During the reporting period, all subsidiaries completed the annual self-examination and self-correction in accordance with the 79 work requirements specified in the Standardization Requirements for Hazardous Waste Management.

General Waste Management

On June 22, 2021, the Company issued the Notice on Further Regulating General Industrial Solid Waste Management, requiring subsidiaries that generate general industrial solid wastes to strengthen internal management; execute the discharge permit management system; establish a sound system of responsibility for pollution prevention and control of the entire process of general industrial solid waste generation, collection, storage, transportation, utilization and disposal; make accounts for general industrial solid waste management; and truthfully record the type, quantity, flow direction, storage, utilization, disposal and other information of industrial solid waste to allow traceability, and take measures to prevent industrial solid waste from polluting the environment. In 2022, the company will prepare a standard of general solid waste management to further reinforce its waste management.

Waste Gas Management

The Company's exhaust gas typically includes non-methane hydrocarbons, nitrogen oxides, sulfur dioxide. All subsidiaries' exhaust gas emissions met the requirements of environmental impact assessment and pollutant discharge permit; the exhaust gas emission concentration complied with the national, industry and local standards; the annual discharge of waste gas and major pollutants conformed to the total amount control target approved by the ecological environment authority or the pollutant discharge permit; the number of exhaust gas outlets was consistent with that stated in the environmental impact assessment and pollutant discharge permit; the height of the exhaust funnel and the location of the sampling outlet complied with the current relevant national regulations and the environmental protection graphic signs of the discharge outlets were set up in accordance with the requirements; the enterprises prepared self-monitoring plans as per the pollution discharge permits, completed self-monitoring and obtained monitoring reports.



Waste Water Management

The Company's waste water mainly comes from industrial wastewater and domestic sewage. In 2020, SPH formulated the standardization management requirements for sewage treatment facilities, and launched a pilot project in SPH New Asia Pharmaceutical (Minhang) Co., Ltd. In February 2021, SPH issued a notice requiring all manufacturing subsidiaries to complete the renovation before September in line with the above-mentioned requirements, including the standardization requirements for the color codes and names of facilities, equipment, handrails and fences, as well as the requirements for safety signs and management system. In 2021, a total of 48 sewage treatment stations were renovated to ensure the normal operation of pollution control facilities.



Noise Management

The Company requires all its manufacturing subsidiaries to use low-noise processes and equipment, and if necessary, to take noise reduction control measures such as noise elimination, sound insulation and sound absorption. The noise reduction devices for venting of pressurized gas should be tailored to the gas.. The noise from production equipment to the factory boundary shall not exceed the provisions of the national standard Emission Standard for Industrial Enterprises Noise at Boundary (GB12348). Each enterprise prepared a self-monitoring plan in accordance with the pollutant discharge permit requirements, and entrusted a third party to carry out routine noise monitoring at the factory boundary, and all monitoring results were up to standard.

Green Operation

Green Packaging

For sustainable development, SPH purchases kraft paper cartons instead of colored cartons, and promotes the use of more environmentally friendly packaging materials; optimizes the packaging size, and changes some drugs' small packaging of single bottles to large packaging to reduce material consumption.

Dosage Form	Type of Packaging Material	Material	Unit	Consumption
Tablet	Inner Packaging	PE/PVC/AL	kg	611,117
	Label	Coated Paper	kg	18,148
	IFU	Coated Paper	kg	229,825
	Pack	SBS Board	kg	976,476
	Carton	SBS Board	kg	27,095
	Carton Liner	Corrugated Board	kg	55,753
	Container	Corrugated Board	kg	470,790
Capsule	Inner Packaging	PVC/AL/Composite Film	kg	146,364
	IFU	Paper	kg	54,775
	Pack	Paper	kg	593,656
	Container	Cardboard	kg	352,811
Injection	Ampoule, Vial, Tube-Type Bottle	Glass	kg	1,075,971
	Packaging	Aluminum-Plastic Caps with Rubber Stopper	kg	572,686
	IFU	Paper	kg	197,763
	Pack	Paper	kg	720,831
	Container	Cardboard	kg	361,084
Pill	Inner Packaging	Plastic/Paper-Aluminum-Plastic Composite Film	kg	62,336
	IFU	Paper	kg	5,451
	Pack	Paper/Plastic	kg	81,408
	Container	Cardboard	kg	35,420
Others (Aerosol, Solution, Paste, etc.)	Inner Packaging	Plastic/Aluminum Film	kg	58,391
	IFU	Paper	kg	44,459
	Pack	Paper	kg	105,356
	Container	Cardboard	kg	409,981
API (including raw materials used in the production of preparations)	PVC, AL, Composite Film, Paper Barrel, Aluminum Drum	Plastic, Cardboard, Aluminum Film, Aluminum	kg	1,071,095

The statistics cover the packaging materials of SPH's blockbuster products in 2021.

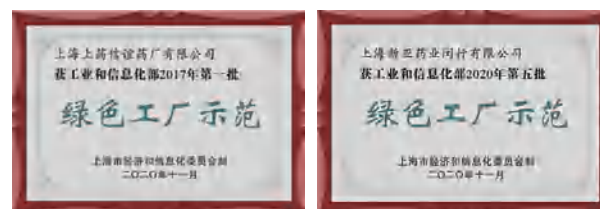
Green Office

SPH actively advocates low-carbon, eco-friendly and economical work habits, and continuously raises employees' awareness of energy conservation and environmental protection:

- ◇ Cut down travel expenses by encouraging online meetings. In 2021, the Company held 522 video conferences, with a total duration of 1,420 hours (average value of 2.72 hours).
- ◇ Operate a paperless office. More than 40,000 users created accounts in the Company's Office Automation system (OA), initiated over 7.22 million processes, and uploaded more than 6.37 million documents. Considering 10 pages per document 12 million sheets of paper saved, if it was to be printed twice.
- ◇ The air conditioner temperature in the office area should not be lower than 26 degrees in summer and not higher than 20 degrees in winter.
- ◇ Use stainless steel cutlery instead of disposable ones in the cafeteria.
- ◇ Save electricity. Smart sensor lighting is used in the lobby and public corridors. Lights in office building corridors, restrooms and other office places are turned on at 8:30 and turned off at 17:30. The Company calls on staff to cultivate electricity-saving habits, to achieve "the lights go out and the machines on power off when people leave".
- ◇ Classify garbage. The garbage generated in the building is strictly classified in storage, handling and disposal from the office to the garbage dumping station.
- ◇ Save water. The restrooms of the building use sensor faucets and water-saving toilets.

Green Factory

SPH is on a path to "green manufacturing". By the end of 2021, 6 subsidiaries, including SPH Sine, SPH Zhongxi Sunve, SPH Zhongxi Pharma, Shanghai SPH SBPC, SPH New Asia Pharmaceutical (Minhang) Co., Ltd. and SPH New Asia were awarded the title of National Green Factory by the Ministry of Industry and Information Technology. 4 subsidiaries including SPH Sine Jinzhu, Changzhou Pharmaceutical Factory Co., Ltd., Chiatai Qingchunbao (Deqing) Pharmaceutical Co., Ltd., and Huqingyutang Pharma have won the title of Local Green Factory.



Clean Production

Most of our subsidiaries have completed the clean production audit, and some of them have started second and third rounds.. In 2021, 7 subsidiaries passed the clean production audit. These companies invested a total of RMB30.78mm in the implementation of clean production protocols, saving 1.89 million kWh of electricity, 193,000 m³ of water, 3.87 tons of solid waste and 6,664 tons of steam per year, reducing 0.12 tons of VOC emissions, saving 2.14 million sheets of label paper, and attaining economic benefits of RMB41.94mm annually.

On September 9, 2021, the Shanghai Municipal Commission of Economy and Informatization and the Shanghai Municipal Bureau of Ecology and Environment released the list of enterprises implementing clean production in Shanghai in 2021. 3 subsidiaries of the Company were included on the list of enterprises for voluntary implementation of cleaner production audits. These companies are currently undergoing clean production audits.

Biodiversity

Biodiversity is an important foundation for human well-being, survival and development. SPH pays particular attention to the biodiversity in all its production locations, and devotes itself to the cause of biodiversity conservation.

No endangered animals in animal experiments

Ethical animal testing

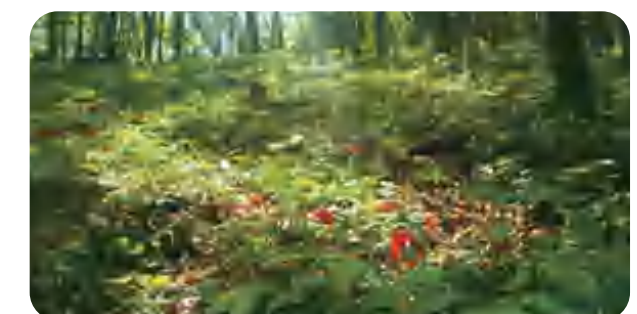
No company sites in natural reserves

Standardized raw material bases and conservation of wild species

Compliant source of medicinal materials and prevent ion of damage to wild vegetation

Case

SPH's subsidiary SPH Shenxiang Health Medicine (SPH Shenxiang) owns 1,500 mu of wild ginseng demonstration bases in Liaoning and Jilin, 40 mu of Dendrobium devonianum Paxt base and 230 mu of Dendrobium officinale base in Longling and Gengma, Yunnan, respectively. For years, the company has benefited from the cultivation of core varieties including wild ginseng and dendrobium, established and improved the integrity and traceability of the data collection system including planting, management and harvesting, and realized real-time image monitoring and traceability of the entire industrial chain. In 2020, SPH Shenxiang's wild ginseng planting base in Liaoning was awarded as a "Wild Ginseng Breeding Demonstration Base".



07

Committed to Public Welfare and Devoted to the Society Shouldering Corporate Social Responsibilities Towards a Better Life

- Focus on Public Welfare
- Community Investment
- Response to the COVID-19 Pandemic
- Feature: A Blueprint for Rural Revitalization

Shouldering Corporate Social Responsibilities Towards a Better Life

Committed to Public Welfare and Devoted to the Society



More than **14,000** people have benefited from poverty alleviation and rural revitalization in the past three years.

Caring for life and health is an important part of SPH's brand concept. In pursuit of business development, the Company remains true to its original aspiration. Over the years, it has been engaged in charities and public welfare undertakings and committed to public welfare sectors such as medical and health care, science popularization and education, culture and art. SPH remains an excellent corporate citizen, assumes its corporate social responsibilities and gives back to the community.

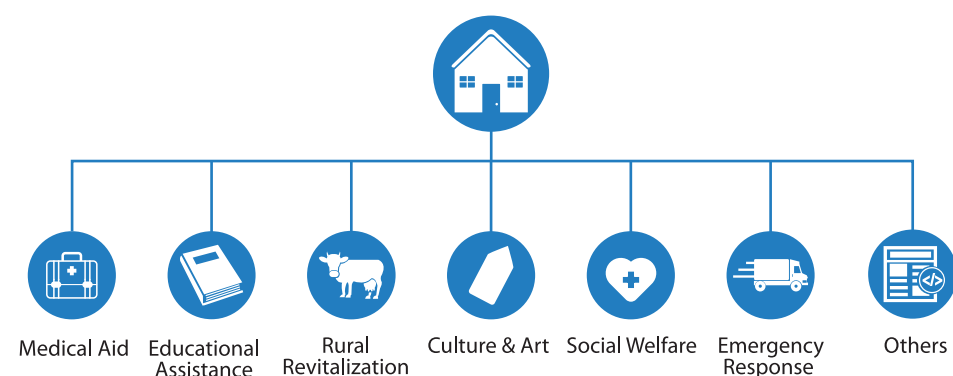
Forge ahead into a sustainable future with good deeds

SPH

Serve the public

Focus on Public Welfare

SPH carried out various public welfare activities, developed a series of brands including "Millions of Citizens Meeting Sine", "Growful Healthcare", "Let Me @ You", rare disease assistance, and sponsored social welfare projects such as the "Silver Snake Award". In 2021, the Company's total charitable donations reached RMB44.97mm. Going forward, we will continue to expand the boundaries of public welfare and fulfill our social responsibilities with tangible actions.



SPH's Public Welfare Sectors

Quantitative Performance

Index	Unit	2021
Public Welfare Activities	Event	95
Volunteer Service	Time(s)	1,702
Volunteer Service Duration	Hour(s)	7,713.5
Total Donation Amount	RMB' 0,000	4,496.65
Rural Revitalization	RMB' 0,000	644.01
Medical Aid	RMB' 0,000	2,440.64
Educational Assistance	RMB' 0,000	306.94
Social Welfare	RMB' 0,000	788.17
Fight Against Covid-19	RMB' 0,000	139.16
Others	RMB' 0,000	177.73

Medical Aid

Case

"Silver Snake Award" – A Series of Public Welfare Activities

The 18th "Silver Snake Award" presentation ceremony of the Shanghai Health System, the highest award for local medical staff, was exclusively supported by SHAPHAR and held on August 11 2021. The year marks the beginning of the "New Decade" of cooperation between SHAPHAR and Shanghai Health Youth Talent Reward Foundation in the "Silver Snake Award" series of public welfare activities. SHAPHAR takes pride in providing services. Since the establishment of the "Silver Snake Home" in 2009, it has taken an active part in relevant public welfare activities, and has helped people with outstanding medical workers via advanced medical technology and health services.

From May 28 to 29, to celebrate the 100th anniversary of the founding of the Communist Party of China, the Shanghai Health Youth Talent Reward Foundation organized the "Silver Snake Awards" to carry out free clinical treatment and party building activities in Fuzhou. Over the years, SHAPHAR has sponsored many medical awards such as the "Silver Snake Award" and "Benevolent Physician", and participated in charity clinics offered by the winners across China, helping experts and physicians with advanced medical techniques and healthcare services and contributing to the development of public health and the cultivation of top medical talents in Shanghai.



Case

I Do Practical Work for the Masses

In 2021, Party organizations at SPH launched 585 key projects labelled "I Do Practical Work for the Masses", and solved 178 urgent problems. After the Group's investigation, the production and operation environment of 286 employees in 19 positions were improved; some subsidiaries built talent apartments to solve the accommodation issues for young employees; some enterprises facilitated the "Happy Enterprise" project to improve the quality of life of employees. Party organizations at all levels continue to explore new ways to serve workers, and solve difficult problems.

Party organizations at SHAPHAR called on their members to provide citizens with blood pressure measurement, recovery of expired drugs, blood sugar test, and health knowledge publicity services; ensure orderly Covid vaccinations; visit nursing homes to carry out free medical examinations for the elderly; enter subway stations to cooperate with the police to maintain traffic order; and go to rural areas to distribute student subsidies and holiday gifts to poor children.



▲SHAPHAR's Donations to Temporary Child Care Center

The "I Do Practical Work for the Masses – New Asia Pharmaceuticals Smart Class" project promoted accelerated digital education for the elderly in the community, and taught them to use their smart phones, including the use of health and travel codes as well as the National Anti-Fraud Center APP, the installation of APP for online medical treatment, and the use of WeChat and camera apps. Starting from June 23, 2021, the project has organized 6 special courses and served 120 elderly people so far.



▲New Asia Pharmaceuticals Smart Class

SPH Zhonghua Pharma Party branch proposed a list of "I Do Practical Work for the Masses" to solve urgent problems in the population, such as established a "Healthy House"; expressed solicitude for the Party members and people in need; delivered cool summer gifts; celebrated a birthday for 100-year-old retired workers; cared for employees' eye health; and held lectures on hypertension. The company strives to give everyone a stronger sense of gain, happiness and security, and form a long-term mechanism with personal connections.



▲SPH Zhonghua Pharma's "Healthy China" Eye Health Activity

Case

"A Little Red Flower" – A Public Welfare Activity for Orphan Drugs

In 2021, in the spirit of corporate social responsibilities and the speech made by General Secretary Xi Jinping, SPH Shangke, together with the HR and Government Affairs departments at SPH, as well as SPH RD organized a rare disease public welfare activity in 2021 SPH Spring Campus Recruitment named "A Little Red Flower" - Rare Disease Drug Public Welfare Challenge. The "Little Red Flower" stamps collected by the participants at the job fair were exchanged for tannin vasopressin injection (RMB998 per bottle) for patients with diabetes insipidus (donated by SPH). On May 13, 2021, the company provided 69 bottles of tannin vasopressin injection exchanged in this event to the China Primary Health Care Foundation for treating diabetes insipidus.



Case

SPH Cloud Health's "County Disease Mobile Public Welfare Screening Project"

SPH Cloud Health's "County Disease Mobile Public Welfare Screening Project" was selected as an excellent case in the 2021 China Corporate Social Responsibility Review. The large-scale mobile public welfare screening project brought the "four diseases and four cancers" (dyslipidemia, hypertension, diabetes, chronic obstructive pulmonary disease, breast cancer, gastric cancer, prostate cancer and cervical cancer) screening vehicles to various counties, focusing on the combined mobile screening of these chronic diseases and cancers. Since its launch for more than a year, the activity has covered 8 provinces, with a total of over 64,000 screenings, helped high-risk groups obtain early screening, diagnosis and treatment, as well as the middle-aged and elderly to improve their health awareness, and enjoyed great popularity among local residents and health departments.



Case

SPH and Hengrui Pharma Set Up the "Shangyuan Charity" Special Fund

On October 13, 2021, SPH and Hengrui Pharma formed an alliance with the Shanghai Charity Foundation (SCF) and established the "Shangyuan Charity" Special Fund. SPH and Hengrui Pharma signed donation agreements with the SCF, each contributing RMB5mm to jointly set up the "Shangyuan Charity" Special Fund. This fund will be used for philanthropic projects in the medical, pharmaceutical and healthcare sectors, and public welfare projects including assistance for children with disabilities in Shanghai and regions requiring support such as Xinjiang, Tibet, Yunnan and Qinghai, covering rural revitalization, disease relief, physician training and care for disadvantaged groups. The companies contribute to serve Shanghai in the east-west cooperation and paired-up assistance.

This donation from SPH and Hengrui Pharma is for public welfare and follows the guiding principles of the Central Government and implements the decisions of the CPC Shanghai Municipal Committee and the Municipal Government on the eastern-western collaboration and assistance. It aims to promote the fight against poverty, apply a people-centered philosophy of development, stay on the path of common prosperity, and help deliver tangible results in poverty alleviation.



Flood Relief

Case

SPH Pulls Together to Support Flood Control and Disaster Relief

Starting on July 20, 2021, Henan Province saw extremely heavy rainfall and floods in many of its cities, especially in Zhengzhou and Xinxiang. On the evening of July 27, SPH Kyuan Xinhai Henan Pharmaceutical Co., Ltd. (SPH Kyuan Xinhai Henan Pharma) received a notice from the Provincial Health Commission that 13 severely affected counties and cities in Henan, including Xinxiang, Anyang, Hebi, Zhoukou, and Jiaozuo, were in urgent need of digestion, fever, and skin drugs for the treatment of post-disaster infectious diseases.

As a provincial commercial platform, SPH Kyuan Xinhai Henan Pharma reported to the Company in a timely manner. Upon receipt of this information, many of SPH's manufacturing subsidiaries took immediate action to donate medicines. They went all out to raise supply and urgently dispatched drugs. SPH New Asia and many other associate companies provided strong support to the people of Henan.

From receiving the notice on the evening of July 27 to 9:00 am on July 28, all SPH staff worked to prepare the supplies. The first batch of disaster relief drugs were sent to Xinxiang, another batch of medicines arrived at Huixian in the afternoon, and the subsequent batches were delivered to the settlements in succession.

In the face of this urgent task, SPH responded swiftly, assembled quickly, and deployed precisely, donating drugs with a market value of RMB2mm, and a purchase cost of RMB1.08mm, which was highly recognized by the Provincial Government and Provincial Health Commission.



Culture & Art

Case

MISA 2021

The 2021 Music in the Summer Air (MISA), exclusively sponsored by SPH, under the theme "rebirth, growth and recovery in the post-pandemic era", was held in the Shanghai Symphony Orchestra Concert Hall, City Lawn Music Plaza and Third Space for two weeks. A total of 23 shows were staged and 14 concerts were broadcast live on 11 networks and new media platforms, with nearly 8 million viewers. During the music festival, SPH's brands including Sine, Lei's, Shenxiang, Dragon & Tiger, Yutianshi, Healtheries, Wuxietang participated in the MISA night market activities; two major brands, namely, Dragon & Tiger and Yutianshi, distributed cooling products and facial masks for CSR and to promote these time-honored brands. More than 1,000 reports related to this event were published in mainstream newspapers and online new media at home and abroad. As the chief sponsor of the event, SPH greatly enhanced its brand value through youthful and popular cultural projects.

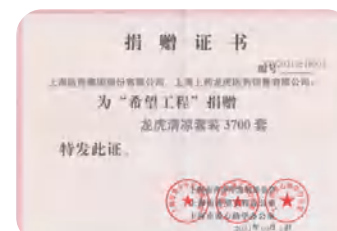


Case

SPH Dragon & Tiger's Donation to Support Youth Development Foundation Flower Expo Volunteer

On May 21, the oath of volunteers for the 10th China Flower Expo and the inauguration ceremony of Party and Youth League organizations were held at the Century Pavilion.

SPH donated 3,700 sets of "Dragon & Tiger" heatstroke prevention materials and mosquito repellents to volunteers at the Flower Expo to keep them cool in hot weather and enable them to welcome visitors from all over the world with high spirits and enthusiasm.



Case

SPH Shenxiang • Hand-made Sachet Activity

On May 16, 2021, the Party Branch of SPH Shenxiang organized its Party member volunteers to join hands with the 2nd "Integration of Love • Contrast Color" Public Welfare Art Exhibition. They called on the community to care for people with mental disabilities through hand-made TCM sachets, art bazaars and auctions.

On the same day, the 2nd "Integration of Love • Contrast Color" Public Welfare Art Exhibition, co-hosted by Shanghai Yuemiao Care Center for the Disabled and Tianmu Community Cultural Service Center, and co-organized by commonweal organizations including Shanghai Disabled Persons' Federation and SPH Shenxiang, opened in Shanghai Charity Xintiandi Park. This art exhibition consists of three parts: The Call of the Soul, Accompanied by Family Members and Motivated Fellow Artist, which not only exhibited a number of excellent works, but also set up an integrated market center for special groups to empower them via art, improve their living environment, create more opportunities for social interaction and enhance their sense of self-worth and social value.



Community Investment

SPH puts a high value on community relations. All staff play an active part in community affairs, invest in various aspects, and strengthen the positive interaction with the community, and create conditions for the Company's sustainable development while contributing to the community.

Case

Science Popularization Innovation Leads the Era

The "Millions of Citizens Meeting Sine" working group is directly managed by the Party Committee and Youth League Committee at SPH Sine. It consists of seven people with an average age of 30 old, four of whom are Party members. The group was established in 1999, and has been working for 20 years. It has won more than 40 awards, such as the National Customer Satisfaction Service Star Team, Shanghai Youth Civilization, and Shanghai Science Education Achievement Award. Adhering to its mission of "quality medicine, credibility and friendship", the team was founded to dispel rumors about injections and medicines, advocate the concept of scientific and rational drug use, and show the public the achievements of Pudong's development and the outlook of a century-old enterprise.



Case

In 2021, volunteers with nutritionist and pharmacist qualifications from SPH Qingchunbao Science and Technology Association joined activities of the Hangzhou Science Popularization Lecture into the Community. They promoted health care in the community several months of a year (usually spring and autumn), with each class lasting from 30 to 60 minutes. The lecture topics were chosen by communities from a list, providing them with a tailor-made curriculum.



Case

On November 13, 2021, the "Intangible Cultural Heritage Entering the Community in Huangpu District" activity, co-organized by the Huangpu District Intangible Cultural Heritage Office and the Shanghai Great World Intangible Cultural Heritage Center, was held at the Shanghai Haogu Culture Art Gallery. As the protection unit of the national intangible cultural heritage project, "Liushen Wan Making Skills", SPH Leiyunshang invited TCM experts to provide free clinics for residents. The half-day event received more than 50 residents and was unanimously praised by participants.



Response to the COVID-19 Pandemic

COVID-19 continued its worldwide spread in 2021. As a leading pharmaceutical manufacturer and distributor in China, according to the deployment of the Party Central Committee, the State Council and the CPC Shanghai Municipal Committee and the Shanghai Municipal People's Government on epidemic prevention and control, SPH rolled out scientific and effective measures. The Company continues to act as the "vanguard" and "main force" for the supply of drugs and medical supplies in Shanghai and across China, demonstrating impressive speed, wisdom and responsibility.

Case

CanSino SPH's Mass Produced COVID-19 Vaccine Hits the Market

Since the outbreak of the COVID-19 pandemic, SPH has made every effort to promote the R&D and industrialization of the COVID-19 vaccine. SPH and CanSino Biologics Inc. jointly established CanSino SPH to produce the recombinant novel coronavirus vaccine (adenovirus vector vaccine named Convidecia). Supported by multiple departments including the CPC Shanghai Municipal Committee, the Shanghai Municipal People's Government, the CPC Baoshan District Committee and the Baoshan District People's Government, CanSino SPH has leveraged SPH's strengths in the full industrial and commercial value chains, started the construction in March, and built a GMP-compliant filling workshop with an annual output of 100 million doses only three months, and spent 6 months building a COVID-19 vaccine factory with an annual production capacity of 200 million shots from preparation manufacturing to filling procedure and put it into trial production. As of the end of 2021, CanSino SPH has obtained the first production license for COVID-19 vaccine in Shanghai, as well as a preparation production approval, becoming the first novel coronavirus vaccine producer in Shanghai.

The launch of the gigafactory and Convidecia is of great significance for the mass production of vaccines, and for ensuring the vaccine R&D efficiency and production capacity in the face of major outbreaks of infectious diseases, and will provide safe and reliable solutions to protect people's safety and health.



Case

SPH Logistics Ensures Urgent Delivery to Jinan Warehouse

At 3:00 pm on January 29 (Friday), SPH Logistics received an emergency call from the Effective Medicine Department of SHAPHAR. Due to the approaching Spring Festival and the impact of the pandemic in the north, the carriers could not deliver the drugs in time. The company was expected to deliver narcotic and psychotropic drugs to its Jinan Warehouse to stabilize sales of effective medicines.

SPH Logistics immediately set up an emergency distribution team. The transport fleet worked out a delivery plan, trained distribution personnel, and equipped them with epidemic prevention supplies. At 10:00 pm that evening, the transport team raced against time to complete the loading, review and handover in only one hour. In the early hours of the morning, two cars and six drivers headed to Jinan. In order to prevent virus contamination during transportation, and to ensure the timely and safe delivery of drugs to all sales channels and to the patients, the transport team slept in the rucks. After 36 hours and more than 2,000 kilometers, the fleet delivered the drugs to customers in time.

Guided by customer needs and guaranteed by professional distribution, "taking prides in service" is not only a slogan, but also an action guideline for all SPH Logistics staff.



Case

SPH Sinobp Participates in Community Epidemic Prevention and Control

In August 2021, the pandemic outbreaks in Nanjing, Yangzhou and Zhangjiajie, made the task of epidemic prevention and control in Nantong increasingly harder. The Party Branch of SPH Sinobp organized 10 Party member volunteers to the frontline of nucleic acid testing. Together with community staff, notified residents, took temperature, maintained order, registered information, supported the community's anti-epidemic efforts, fulfilled their original mission with practical actions, and demonstrated the demeanor of Party members at SPH Sinobp.



Case

SPH Herbapex Donated Anti-Epidemic Drugs to the Embassy in Japan

The virus is merciless but the world is full of love. As COVID-19 is continuing to spread around the world, every country goes all out in its fight against the pandemic. At this critical period for epidemic prevention and control, it is reported that Japan is seeing a strong rebound in coronavirus infections across the country, and the insufficient medical resources of the Chinese Embassy in Japan and the shortage of epidemic prevention drugs has led to a surge in the number of confirmed cases.

All people share a common responsibility for the fate of their country. In the spirit of helping the world feel better, SPH Herbapex coordinated the formula granules dispensing and delivery personnel. They worked overtime to prepare 50 boxes of 7,500 doses of Qingfei Paidu Tang (a formula of traditional Chinese medicine, which seems to ease symptoms in patients with COVID-19), valued at over RMB0.32mm, and sent the drugs to the Beijing Foreign Affairs Office, to help win this battle.

The compatriots at the Chinese Embassy in Japan are expected to strengthen their confidence and determination to defeat the epidemic, be brave in the fight against the pandemic, and build a "Great Wall of Steel" for epidemic prevention and control.

As a pharmaceutical company, SPH Herbapex should uphold its social responsibilities and provide assistance for people in need at home and abroad. Under the effective leadership of the Party Central Committee, the full efforts of medical workers, as well as the support of all walks of life, China has full confidence and capability to win this battle against the epidemic.



Feature: A Blueprint for Rural Revitalization

RMB
12.80mm

Total Investment in
the Past Three Years

14,000

Total Number of People Who Have
Benefited from Poverty Alleviation
and Rural Revitalization in the Past
Three Years

48

Total Poverty Alleviation and
Revitalization Projects Participated
in the Past Three Years

The rural revitalization strategy was proposed as a key move for the development of a modernized economy at the 19th National Congress of the Communist Party of China. It is the only way to achieve common prosperity and an important guarantee for China's second centenary goal.

Looking Back on the Road to Poverty Alleviation

According to General Secretary Xi Jinping's overall requirements for targeted poverty alleviation, SPH has fully implemented the decisions and plans of the Party Central Committee to eliminate absolute poverty, and responded to the "100 Enterprises Helping 100 Villages" program of the Shanghai State-owned Assets Supervision and Administration Commission (Shanghai SASAC). Focusing on targeted poverty alleviation and elimination, the Company allocated funds to specific regions, and accurately implemented poverty reduction measures, to help revitalize poverty-stricken areas.

SPH Sine, SHAPHAR, and SPH TCM under SPH respectively paired up with Shijia Village (Micheng Town), Xianfeng Village (Juli Town), and Kanglang Village (Niujie Township), in Midu County, Dali Prefecture, Yunnan Province, and carried out a series of poverty alleviation measures from 2018 to 2020, boosting local economic development, improving medical and health conditions, and enhancing people's quality of life in Yunnan. Under the leadership of the CPC Central Committee, the solicitude and care of the Yunnan Provincial Party Committee and the Provincial Government, and the long-term assistance from SPH, all the people of Midu made unremitting efforts and officially removed Midu County from the list of poverty-stricken counties on May 17, 2020. SPH helped Midu eliminate poverty with "sincere care+ concrete action".



Looking Forward to a New Life

The year 2021 marks the beginning of an effective transition from consolidating poverty alleviation outcomes to achieving rural revitalization. Along with the victory in the fight against poverty, SPH remains centered on the "five major revitalization" strategy, further responds to the call of the Party Central Committee to consolidate and expand the achievements made in poverty alleviation in coordination with the extensive drive for rural vitalization, considers the pair-up assistance as an important part of corporate social responsibilities of a state-owned enterprise, and continues to implement the "100 Enterprises Helping 100 Villages" program of the Shanghai SASAC. SPH Sine, SHAPHAR, and SPH TCM continues to play their roles in providing assistance, in building health clinics and medical service stations, cultivating rural doctors, helping children with congenital heart disease, constructing kindergartens, schools and roads, as well as planting Chinese herbs. Besides the above-mentioned public welfare assistance, combined with its own characteristics and the actual local needs, SPH develops scientific plans, clarifies priorities, boosts local economic development, improves medical and health conditions, enhances the quality of life in Yunnan, helps the targeted areas to achieve the goal of shaking off poverty without falling back in it, as well as comprehensively promotes the rural revitalization and the realization of all-round common prosperity. Over the past three years, it has implemented 48 poverty alleviation and revitalization projects, including infrastructure construction, educational support, planting of Chinese herbal medicines, benevolence supermarkets, and free school breakfast (lunch), with an investment of over RMB12.8mm, benefiting more than 14,000 people (including 6,400 poor people).

The key to rural revitalization and common prosperity lies in promoting the steady development of agriculture and increasing farmers' income. In accordance with the spirit of the CPC Central Committee on consolidating the achievements of poverty alleviation and the plans of the CPC Shanghai Municipal Committee and the Shanghai Municipal People's Government, SPH continues to carry out the Shanghai SASAC's "100 Enterprises Helping 100 Villages" program. In the next five-year transition, SPH will strictly implement poverty relief policies after counties being removed from the poverty list, and take concrete measures and actions to help the pair-up areas to improve their self-development and sustainable development capabilities, lay a solid foundation for rural revitalization, and make unremitting efforts to achieve common prosperity.

Continued Paired Assistance and Infrastructure Improvement

Case

SPH TCM – Work Together to Strengthen Pair-Up Assistance

SPH TCM paired up with Kanglang Village, Niujie Township, Midu County, Yunnan Province. After three years of joint efforts, the village successfully completed poverty alleviation in 2020. From June 4 to 5, 2021, a team of SPH TCM came to Kanglang Village again to consolidate the achievements in poverty alleviation and promote the rural revitalization. As early as 2019, SPH TCM helped set up a benevolence supermarket and a clinic in the village to improve the living and medical conditions. This time, the delegation once again purchased some daily necessities for the benevolence supermarket, and some essential medical equipment for the clinic. The delegation respectively visited the families of Party members in exceptional poverty, Party members of longest years' standing and the most beautiful villagers, and took practical actions to fulfill the requirements of the activities of "I Do Practical Work for the Masses" and "Enterprises make contributions to the society". The activity of "Love at Zero Distance – SPH TCM Free Clinic" was highly recognized and praised by the local people as in previous years, and it served more than 150 people for consultation, diagnosis and treatment.



Case

SPH Sine – Improve People's Livelihood and Consolidate Infrastructure Construction

In the past three years, based on the arrangements of the "100 Enterprises Helping 100 Villages" program of the Shanghai Municipal People's Government, SPH Sine formulated and completed the "6 Projects + 6 Mechanisms" work plan according to the overall requirements for poverty alleviation of Shijia Village. It built a party building activity center, a 4.35 km-tarred road, public toilets, a standard clinic, a square for cultural activities of the Yi ethnic group.

In 2021, SPH Sine continued to provide assistance, including the construction of a new three-sided drainage ditch (more than 500 meters) and a new industrial road (2 kilometers) in Dajiaban Village. The drainage ditch project will ensure the integrity of the soil and rock structure of the village to avoid landslides and soil erosion. So far, the first phase of the drainage ditch (300-meter project) has been completed. The second phase of construction will begin after quality inspection. Once completed, the industrial road will allow large agricultural vehicles to directly access farmland and help improve industrial efficiency and quality.

Devoted to Building a New Production System and Revitalizing Rural Industries

Industrial revitalization is the focus of rural revitalization and the foundation of development. Based on the summary of previous experience in paired assistance, SPH has innovated assistance methods, facilitated the construction of a new agricultural industry system. Through technical support for Chinese herbs planting, industrial support and project cooperation, the Company has supported pair-up areas to optimize the development environment and industrial structure and promoted the revitalization of rural industries.

On the basis of integrated development of rural industries and superiority in resources, SPH has selected Chinese herbal medicine varieties with great market potential, stable yields and secured benefits; deepened industrial cooperation in the cultivation of Chinese herbs; boosted the development of competitive industries according to local conditions; coordinated production and sales of local agricultural products; signed the purchase agreement for local agricultural products; and accelerated the unblocked distribution chain and precise coordination between production and sales to increase the income of the local people.

Case

In 2015, supported by the CPC Yunnan Provincial Committee and the Yunnan Provincial People's Government, SPH signed a strategic cooperation agreement with Dali, Yunan Province, to invest RMB280mm in restructuring Dali Taxus Biological Co., Ltd., to expand SPH's API industry chain of anti-tumor drugs. As of the end of 2021, the base had a forest area of 50,000 mu and more than 5 million Taxus seedlings of different varieties, and planted rare quality medicinal herbs in Yunnan such as Panax notoginseng, Dendrobium, Eucommia ulmoides, to realize the overall development of modern forestry and Chinese herbs. Through scientific planning, SPH also deployed standardized planting bases for Panax notoginseng, safflower, salvia and Dendrobium in Dali, Lincang and Baoshan.



Case

SPH TCM – Increase Industrial Assistance to Help Build an Industrial System

It has always been the original intention of SPH TCM to leverage respective resources and seek win-win outcomes. In 2021, the company continued to intensify the industrial cooperation with Kanglang Village in the cultivation of Chinese medicinal materials, planting safflower of 1,500 mu, radix dipsaci of 500 mu and Scutellaria baicalensis of 200 mu. In addition to economic support, it provided technical guidance to the local, including growing seedlings and planting. At the end of the year, the total output value of safflower reached RMB7.43mm; the gross output of radix dipsaci was RMB2.52mm; the output value of Scutellaria baicalensis totaled RMB0.92mm; the output value was RMB10.87mm in total. It helped the paired regions to enhance the effectiveness of poverty reduction and achieve better development.

Case

SPH Zhonghua Pharma – Boost Industry Development Via Mutual Assistance

SPH Zhonghua Pharma remains true to its original aspirations and fulfills its corporate social responsibilities in public welfare activities. 2021 marks the 110th anniversary of the establishment of the company. It continues to contribute to the "rural revitalization". SPH Zhonghua Pharma uses Yunnan specialties in the R&D of new products. For instance, the Dragon & Tiger Baweiqing Tea uses black tea from Honghe County, and the radix isatidis in its hand sanitizer also comes from Yunnan.



Intensify Educational Assistance and Revitalize Rural Culture

The healthy development of rural education is of great significance to rural revitalization. To implement the rural revitalization strategy, we must strengthen rural education, ensure basic education, improve the learning environment, and enable children in rural areas access quality education. Over the years, SPH has increased its efforts to assist students and is committed to promoting rural revitalization via education.

Case

SPH TCM – Promote Cultural Construction and Facilitate Educational Development

On June 4, 2021, the Party Committee of SPH TCM and the General Party Branch of Kanglang Village jointly conducted a public welfare activity themed "Love Offerings". The two-year project outlines the Party organizations' focus on Party building and cultural construction, full, accurate and comprehensive implementation of the new development philosophy.



SPH TCM donated 140 sets of student desks and chairs to Kanglang Elementary School, and offered grants to 20 poor students as well as scholarships to 20 outstanding students.

Case

SPH Zhonghua Pharma – Weave Dreams for Rural Students

Honghe County, Yunnan Province, where Yunnan Zuofu Primary School is located, was paired up with Shanghai in the poverty alleviation program. For children living in the alpine area, the most basic needs are met, but educational resources and school supplies are scarce. SPH Zhonghua Pharma is concerned about the children in remote mountains. In less than two months, the company's Third Party Branch raised money, school supplies, sporting goods valued at RMB39,195 from its employees. On March 30, 2021, a video donation ceremony was held at the School.



Case

SPH Sine – Brighten Small Wishes and Sow New Hope

On November 13, 2021, entrusted by the Labor Union at SIIC, SPH Sine prepared materials for children in Shijia Village. The Labor Union purchased a batch of winter clothes for 87 elementary and middle school students in the village to help them get through the cold weather.

In order to help children overcome educational obstacles, the SIIC Labor Union donated more than RMB20,000 to protect students who may miss out on school because of their poor families. As the village is located in a mountainous area, the lack of sports facilities leads to a relatively monotonous after-school life. SPH Sine donated a complete set of basketball equipment to the village, hoping that the students can enjoy sports after study.



Case

SHAPHAR – "Grow Under the Party Flag"

On the morning of June 1, 2021, representatives of the Party Branch, Labor Union and Youth League Branch at SHAPHAR visited Xianfeng Elementary School and participated "Grow Under the Party Flag" activity. The delegation offered their highest salutations to the teachers, encouraged the children to study hard, build noble ideals, become moral citizens with intellectual ability, physical vigor, aesthetic sensibility, and work skills, and strive to contribute to the rural revitalization and the development of their hometown. The representatives also watched the investiture ceremony of the Young Pioneers, tied red scarves around the students' necks, and sang the Young Pioneers song together with all teachers and students.

The delegation sent books, stationary, toys and other learning and daily necessities as gifts to 273 children in the school, and urged them to cherish their time, work hard and always pursue self-improvement.





08

Win-Win Industry Collaboration Genuine Cooperation



Industry Promotion



Supply Chain Management

Genuine Cooperation

Win-Win Industry Collaboration

Industry Promotion

Under the impact of the COVID-19, the world is witnessing dramatic changes unseen in a century. Riding on the wave of global technological advances, Chinese pharmaceutical players should ride the wave of global technological advances. Large pharmaceutical conglomerates and emerging biomedical innovation companies need to further strengthen their integration and development in the entire drug discovery industry chain. As a leading enterprise in Shanghai's biopharmaceutical industry in China, SPH integrates innovation and industry with a strong sense of social responsibility and is dedicated to promoting pharmaceutical innovation in the country.

Construction of Industry Standards

SPH hosted and participated in the formulation and revision of major technical standards:

(1) SPH led the national key project, Technologies, Applications and Regulations on Real-Time Monitoring and Control of the Manufacturing of Solid Oral Preparation (2017YFF0210100).

(2) SPH Hua Yu Chinese Herbs Co., Ltd., a subsidiary of SPH, prepared two international standards, Traditional Chinese medicine- Salvia miltiorrhiza seeds and seedlings (ISO20311:2017) and Traditional Chinese medicine-Salvia miltiorrhiza root and rhizome (ISO21314:2019); and participated in one international standard, Traditional Chinese medicine-Lonicera japonica flower (ISO21317:2019).

(3) SPH TCM, a subsidiary of SPH, led the preparation of one industrial standard Quality Grades of Croci Stigma (T/CATCAM 002-2018), and participated in two industrial standards, Fast determination of carbendazim residue in Chinese herbal medicine and their prepared slices-Colloidal gold immunoassay (T/CATCAM 010-2019) and Pollution-free ginseng radix et rhizome and decoction pieces-Limit of the pesticide residue, heavy metal contents and harmful elements (T/CATCAM 001-2018).

(4) SPH Shenxiang, a subsidiary of SPH, participated in the industrial standard, Grade Quality Standards of Wild Ginseng (20160602)

(5) SHAPHAR, a subsidiary of SPH, took the lead in formulating the first domestic association standard, Specification for hospital integrated logistics service for medical products (T/CFLP0023-2019), which has been upgraded to industrial standard.

(6) Subsidiaries of SPH jointly participated in and actively implement the association standard, General Technical Requirements for Quality Evaluation and Standard Development of Narrow Therapeutic Index Drugs (T/SHPPA002-2020).

(7) SPH Zhongxi Sunve, a subsidiary of SPH, formulated the association standard, Assessment of Technical Specification for Green-Design Product Hydroxychloroquine Sulphate (T/SHPPA004-2019), the very first standard in the chemical APIs industry.

(8) SPH Sine, a subsidiary of SPH, participated in the association standard, Guidance for extractable study on packaging system of Inhalation Aerosols 2020-03-16.

(9) SPH Sine, a subsidiary of SPH, led the revision of a national standard, Ribavirin Aerosol (XGB2022-016).

(10) SPH Sine Wanxiang, a subsidiary of SPH, led the revision of a national standard, Piracetam Granules (XGB2022-017).

(11) SHAPHAR, SPH KDL HEALTH, SPH Luoda, SPH Health Commerce Co., Ltd., and two Marketing Authorization Holders reached strategic cooperation. They worked together to compile the association standard, Autologous CAR-T cell therapy medication supply chain management specifications led by the Shanghai Center for Drug Evaluation and Inspection and Shanghai Pharmaceutical Profession Association. The standard was officially released on the National Public Service Platform for Standards Information in October 2021.

Participation in Industry Organization

SPH participated in organizations and associations in the industry:

Associations

China Pharmaceutical Enterprises Association

China Pharmaceutical Industry Association

China Pharmaceutical Innovation and Research Development Association

China Food & Drug Administration

China Food and Drug Corporation Quality and Safety Promotion Association

China Association of Scientists

China Shippers' Association

China Pharmaceutical Innovation and Development Enterprise Alliance

China Medicinal Biotech Association

China Association of Pharmaceutical Commerce

China Association of Traditional Chinese Medicine

Price Association of China

China Association of Quality

Shanghai Traditional Chinese Medicine Trade Association

Shanghai Pharmaceutical Trade Association

Shanghai Medical Insurance Association

Shanghai Biopharmaceutics Industry Association

Shanghai Pudong Biopharmaceutics Industry Association

Shanghai Pharmaceutical Association

Shanghai Association for Quality

Shanghai Trade Investment Development Association

Shanghai Industrial Internet Association

Shanghai Young Entrepreneurs' Association

Shanghai Pharmaceutical Profession Association

Promote Industrial Exchange and Cooperation

Case

2021 Pujiang Healthcare Industry & Finance Integration and Innovation Summit Showcased the Power of Originality

On October 12, as an important part of the "International Biopharma Industry Week Shanghai (IBIWS) 2021", the "2021 Pujiang Healthcare Industry & Finance Integration and Innovation Summit" was held at the Shanghai World Expo Exhibition & Convention Center. Guided by the Shanghai Municipal Biomedical Industry Development Leading Group, the event was co-initiated by Shanghai Industrial Investment (Holdings) Co., Ltd. (SIIC), Shanghai Pharmaceuticals Holding Co., Ltd. (SPH), Shanghai Biomedical Industry Equity Investment Fund (Shanghai Biomedical Fund) and Biopharma Cutting Edge Industry Innovation Center, and was hosted by Healthcare Executives magazine.

2021 marks the fourth year for the Pujiang Summit. Themed "Innovation Ecology and China's Opportunities", this year's summit focused on two hot topics: the development of rare diseases drugs and pediatric drugs, and nucleic acid drugs and vaccines technology. The summit conducted nine project roadshows to build a platform for cooperation between the pharmaceutical industry and finance. By creating a global track for pharmaceutical innovation, the summit aimed to identify outstanding R&D projects in research institutions or enterprises. The summit showcased the originality of Chinese medicine driven by scientific innovation and to become an important stage to promote China's innovation internationally.



Case

World-class Conference: SPH at the 2021 IBIWS

Under the guidance of the Shanghai Municipal Biomedical Industry Development Leading Group and co-hosted by the Shanghai Biomedical Industry Promotion Center and SPH, The International Biopharma Industry Week Shanghai (IBIWS) was successfully held in Shanghai from October 11 to 14, 2021.



Themed "Striving Together, Shaping Tomorrow", IBIWS 2021 organized over 20 high-level events both online and offline. Internationally well-known enterprises and investment institutions gathered at various biomedical industry parks, where the events were held to witness achievements of Shanghai's biomedical industry and create opportunities for investment and cooperation in the biomedical field. The discussions promoted in-depth exchanges, facilitated the convergence of global resources, and maximized investment attraction and industrial implementation.

Case

Enhancement of Prevention and Protection of Rare Disease

In 2021, SPH Kyuan Xinhai Pharmaceutical Co., Ltd. and China Alliance for Rare Diseases signed a letter of intent for "Strategic Partnership for Enhancing Management and Supply for Rare Diseases in China". Both parties will cooperate in key areas such as pharmacy services capacity, disease education, policy research, etc., to improve the prevention and protection of rare diseases.

Case

Gathering for Love and Rare Diseases

On December 18-19, 2021, the "2021 China Conference on Rare Diseases" was successfully held in Beijing. The Conference is one of the most prestigious domestic conferences on rare diseases. This yearly event aims to interpret the latest policies for rare diseases in China, enhance prevention and control, and explore feasible protocols for the domestic market. It is also a world-renowned platform for communication among practitioners at home and abroad.



SPH actively promotes the R&D of rare disease drugs, and strengthens cooperation with major domestic institutions, enterprises and universities. At the 2021 China Rare Disease Drug Development Special Session, SPH and China Alliance for Rare Diseases signed a strategic partnership agreement. The two parties will join hands in policy analysis, academic exchanges, diagnosis and treatment, and the commercialization of successful research outcomes. Under the leadership of the Party and the government, SPH will coordinate all available resources to fulfill its social responsibility for the development of rare disease drugs in China, raise prevention and treatment standards of rare diseases and contribute to the "Healthy China: No one left behind" initiative.

Publications

At the end of May 2021, Shanghai Pharma University completed the University's first translation publication, Epidemics: The Impact of Germs and Their Power Over Humanity. The publication promoted academic exchange at home and abroad.



Talent Empowerment

Approved by the Shanghai Municipal Human Resources and Social Security Bureau, SPH has set up a "Shanghai Continuing Education Base for Pharmaceutical Professionals and Technicians". It has organized programs to provide professional knowledge and update policies for pharmaceutical practitioners from different fields. More than ten online courses have been designed with government departments such as the Drug Administration and experts to empower front-line workers in the industry.

Supply Chain Management

Suppliers are important partners for SPH's sustainable development. Following the "quality first, reasonable price, mutual benefit, and win-win cooperation" principle, SPH has formulated the "Procurement Bidding Management Measures", "Supplier Integrity and Compliance Management Measures", and "Centralized Procurement Management Measures". These documents optimized and upgraded the supply chain management system, and further improved centralized procurement to ensure that products meet quality standards and the process is in compliance with relevant regulations. They also ensure the long-term and stable production of safe and effective drugs, in cooperation with suppliers to fulfill SPH's social responsibility.

For some products (large volume, high price, and general standards), SPH adopted procurement methods such as open bidding, bidding upon invitation, competitive negotiation, single-source and inquiry procurement. The products include APIs, excipients, and packages, laboratory instruments and information management systems, laboratory reagents and supplies, production equipment, and services. They were provided by the Group's production bases and research institutes.

Orderly Management

Led by the SPH Manufacturing Management Center, a procurement working group was established, with members from the Audit Department, Legal Department, Finance Department, Supply Chain Management Department of Manufacturing Management Center, Department of Engineering Project, Department of Asset Management, Department of Quality Management, Department of Lean Production and personnel from other relevant departments. The Audit Department is responsible for the compliance of the process. The Legal Department focuses on the compliance of the agreement/contract terms. The Finance Department focuses on the optimal business status and suppliers' payment methods. The Supply Chain Management Department focuses on summarizing and organizing information, formulating the procurement plan, preparing bidding documents, and following up on the implementation.

Quality Management of Procurement

In order to strengthen quality control, the Company implemented a comprehensive quality control in the approval, audit, and assessment of suppliers.

Examination Approval

Issuing research letters. Suppliers with prior administrative penalties in environmental protection, safety, quality, and ethics will be disqualified.

Quality Audit

The quality audit team sets standards and conducts supplier audits. Those who fail the audit will be disqualified.

Quality Assessment

The annual inspection of suppliers covers the product, delivery, service, sample inspection, administrative punishment.

Quality Check

Samples are sent to third-party institutions for inspection. The Company will not pick suppliers who fail sample inspection or have received administrative penalties.

Sustainable Supply Chain

SPH cares about suppliers' environmental, social and governance performance and is committed to building a sustainable supply chain. All suppliers are required to sign an Integrity Agreement. SPH's Measures for Supplier Integrity and Compliance requires suppliers to comply with laws, regulations, departmental rules, and other regulatory documents related to anti-corruption and anti-unfair competition.

Our subsidiaries are actively building green supply chains. We encourage suppliers to complete certification and include EHS compliance as a key assessment item. Suppliers who complete the certification will be included in the list of preferred suppliers. At present, some suppliers have passed the certification of forest production and marketing chain, social responsibility certification, and laboratory CNAS certification.

Case

SPH Sine

SPH Sine advocated supplier's action in environmental protection. In order to support suppliers to reduce the use of explosive and dangerous chemicals, and prevent safety hazards and damage to the environment, SPH Sine has paid the extra cost for environment-friendly efforts.

Case

SPH XTCM

In the production process, all carton materials are changed to white cardboard, and the original composite film material on the surface of the carton is replaced with water film material to promote the use of environmentally friendly products.

Case

SPH Qingchunbao

SPH Qingchunbao conducted an Environment Assessment of Related Parties to evaluate the overall environmental behavior of suppliers to determine whether they are qualified. Suppliers displaying substandard processes are urged to improve their environmental performance and promote the environmental protection.

Case

SPH Sine

Suppliers of APIs and excipients of key drugs are required to meet the national EHS regulations and pass relevant qualifications on health, environmental protection, and safety.

We provide all kinds of training, support and guidance to suppliers



Training by SPH Qingchunbao



Guidance from SPH Qingchunbao



Training by SPH Herbapex



EHS Training by SPH Herbapex

Index		Unit	2021
Total Number of Suppliers		Supplier(s)	678
Number of Suppliers by Place	Mainland of China	Supplier(s)	669
	Hong Kong, Macao and Taiwan	Supplier(s)	0
	Abroad	Supplier(s)	9
Number of Suppliers by Material Type	APIs	Supplier(s)	165
	Excipients	Supplier(s)	248
	Primary Containers	Supplier(s)	115
	Outer Packaging Materials	Supplier(s)	150
Number of Suppliers by Significance	Strategic/Exclusive Suppliers	Supplier(s)	57
	Important Suppliers	Supplier(s)	261
	Common Suppliers	Supplier(s)	360
Number of Suppliers with GMP Certification		Supplier(s)	220
Number of Suppliers with Overseas Certification		Supplier(s)	12
Number of Suppliers with Certification of Quality Management System		Supplier(s)	269
Number of Suppliers with Certification of Occupational Health and Safety Management Systems		Supplier(s)	167
Number of Suppliers with Certification of Environmental Management system		Supplier(s)	178
Number of Suppliers with Open Cooperation Agreement, Letter of Commitment, or Integrity Compliance Agreement		Supplier(s)	672
	Clean Procurement	Person(s)	302
	Environmental Protection	Person(s)	82
	Occupational Safety	Person(s)	82
Hours of Training for Suppliers	Others	Person(s)	19
	Clean Procurement	Hour(s)	264.5
	Environmental Protection	Hour(s)	56.5
	Occupational Safety	Hour(s)	57
Total Number of Suppliers' Annual Evaluation	Others	Hour(s)	17.5
		Supplier(s)	586
	Number of Suppliers' Annual Evaluation on APIs	Supplier(s)	147
	Number of Suppliers' Annual Evaluation on Excipients	Supplier(s)	205
	Number of Suppliers' Annual Evaluation on Primary Containers	Supplier(s)	104
Number of Suppliers' Annual Evaluation on Outer Packaging Material		Supplier(s)	130
		Supplier(s)	1
Number of Disqualified Suppliers		Supplier(s)	1

•The above-mentioned statistics are from the suppliers of APIs and excipients and packaging materials for key products listed by SPH and its subsidiaries in 2021.

•Six suppliers have not signed procurement contracts with SPH in 2021 and are therefore not involved in the signing of the Integrity Agreement.

2022 Outlook

We are witnessing major changes worldwide. The COVID-19 pandemic is ongoing globally. China is transforming from a big pharmaceutical country to a strong pharmaceutical country. The Chinese pharmaceutical industry is embracing a strategic upgrade during the "14th Five-Year Plan", to achieve high-quality development. As a leading enterprise in China's biopharmaceutical industry, Shanghai Pharmaceuticals has greater responsibilities and a crucial mission.

Improve Governance System

We will continue to improve our governance system and optimize compliance management. And we will abide by business ethics, strengthen integrity and anti-corruption efforts, to contribute to a clean industry.

Deepen Innovation

We will deepen scientific and technological innovation reform. We will deepen technological innovation reform and build an effective platform for innovation. With patients' unmet needs as the core principle and value, we will further improve our R&D efforts. The Company is dedicated to providing people with outstanding medical products and services through innovation.

Strengthen Talent Cultivation

We will improve our human resources system and optimize promotion and development channels. SPH will implement the training plan designed at Shanghai Pharma University during the "14th Five-Year Plan". The Company will also strictly adhere to the principle of production safety and care for our employees, to ensure their sustainable growth.

Increase Medical Accessibility

Following a "making good medicine, selling good medicine, and delivering good medicine" concept, we will build a superior manufacturing systems to ensure the quality and safety of our drugs. We will also construct major drug and logistics bases to ensure supply. With information technology and digitalization, we will provide our patients with more intelligent, efficient, and convenient medical services.

Enhance Environmental Protection

We will uphold the concept of green growth, through our response to climate change and the national goals in carbon peaking and carbon neutrality. The Company will also protect biodiversity and fully support the green transformation of the pharmaceutical industry and the national economy.

Shoulder Social Responsibility

We will continue to help vulnerable groups and organize various activities to promote public welfare. The Company will also maintain targeted assistance to boost rural revitalization and common prosperity.

We are striving for excellence and harmony. In 2022, Shanghai Pharmaceuticals will continue to play a leading role as a state-owned enterprise. The Company will focus on the four major aspects, innovation, internationalization, integration of production and financing, and intensified development. The Company will also continue its digitalization. With the aim of serving the national strategy and the health of people, and with innovation and commitment, we will contribute every wisdom and strength to promote the "14th Five-Year Plan" and a Healthy China. SPH is dedicated to providing a health foundation for the realization of the two centenary goals and the Chinese Dream of national rejuvenation. Shanghai Pharmaceuticals will always strive for the well-being of human health!

Appendix I: Environmental Quantitative Performance Index

In 2021, Shanghai Huaying Pharmaceutical Co., Ltd. was shut down and incorporated into Shanghai Leiyunshang Pharmaceutical Co., Ltd. The company no longer discloses information. Five new companies, Shandong SPH Chinese Herbal Pieces Co., Ltd., SPH (Liaoning) TCM Resources Co., Ltd., Zhejiang Jiuxu Pharmaceutical Co., Ltd., Chiatai Qingchunbao (Deqing) Pharmaceutical Co., Ltd. and Guangzhou Baotian Biotechnology Co., Ltd. initiated information disclosure. The following SPH companies disclosed relevant information:

No.	Name of enterprises directly under the Group	Subsidiary No.	Name of subsidiaries of drug manufacturers directly under the Group
1	Shanghai SPH Sine Pharmaceutical Laboratories Co., Ltd.	1-1	Shanghai SPH Sine Pharmaceutical Laboratories Co., Ltd., General Factory
		1-2	Shanghai Sine No.2 Pharmaceutical Laboratories Co.,Ltd.
		1-3	Shanghai Harvest Pharmaceutical Co., Ltd.
		1-4	Shanghai Fuda Pharmaceutical Co., Ltd.
		1-5	Shanghai Sine Tianping Pharmaceutical Co., Ltd.
		1-6	Shanghai Sine Yanan Pharmaceutical Co., Ltd.
		1-7	Shanghai Sine Wanxiang Pharmaceutical Co., Ltd.
		1-8	Shanghai Sine Jinzhu Pharmaceutical Co., Ltd.
		1-9	Shandong Sine Pharmaceutical Co., Ltd.
		1-10	Tianjin Jinjin Pharmaceutical Co., Ltd.
		1-11	Gansu Sine Tiansen Pharmaceutical Co., Ltd.
2	SPH No. 1 Biochemical & Pharmaceutical Co., Ltd.	2-1	SPH No. 1 Biochemical & Pharmaceutical Co., Ltd.
		2-2	Shanghai Ziyuan Pharmaceutical Co., Ltd.
3	Shanghai SPH New Asia Pharmaceutical Co., Ltd.	3-1	Shanghai SPH New Asia Pharmaceutical Co., Ltd. Pioneer Pharmaceutical Factory
		3-2	Shanghai SPH New Asia Pharmaceutical Co., Ltd. New Asia Pharmaceutical Factory
		3-3	SPH New Asia Pharmaceutical (Minhang) Co., Ltd.
		3-4	Liaoning Meiya Pharmaceutical Co., Ltd.
4	Shanghai Traditional Chinese Medicine Co., Ltd.	4-1	Shanghai Leiyunshang Pharmaceutical Co., Ltd.
		4-2	Shanghai Leiyunshang Fengbang Pharmaceutical Co., Ltd.
		4-3	Shanghai SPH Xingling Sci. & Tech. Pharmaceutical Co., Ltd.
		4-4	Shanghai Dehua Traditional Chinese Medicines Co., Ltd.
		4-5	Shanghai Yutiancheng Chinese Herbal Medicine Company Limited
		4-6	Shanghai Huapu Chinese Herbal Medicine Company Limited
		4-7	Shanghai SPH Shenxiang Health Pharmaceutical Co., Ltd.
		4-8	Chongqing Huiyuan Pharmaceutical Co., Ltd.
		4-9	Sichuan SPH Shendu Traditional Chinese Medicine Co., Ltd.
		4-10	Shandong SPH Chinese Herbal Pieces Co., Ltd.
		4-11	SPH (Liaoning) TCM Resources Co., Ltd.
		4-12	Zhejiang Jiuxu Pharmaceutical Co., Ltd

No.	Name of enterprises directly under the Group	Subsidiary No.	Name of subsidiaries of drug manufacturers directly under the Group
5	Shanghai Zhongxi Sunve Pharmaceutical Co., Ltd.	5-1	Shanghai Zhongxi Sunve Pharmaceutical Co., Ltd.
		5-2	Shanghai SPH Zhongxi Pharmaceutical Co., Ltd.
		5-3	Shanghai Jinhe Bio-Pharmaceutical Co., Ltd.
6	Shanghai Zhonghua Pharmaceutical Co., Ltd.	6-1	Shanghai Zhonghua Pharmaceutical Co., Ltd.
		6-2	Shanghai Zhonghua Nantong Pharmaceutical Co., Ltd.
7	Shanghai Sunway Biotech Co., Ltd.	7-1	Shanghai Sunway Biotech Co., Ltd.
8	SPH Changzhou Pharmaceutical Co., Ltd.	8-1	Changzhou Pharmaceutical Factory Co., Ltd.
		8-2	Nantong Changyou Pharmaceutical Technology Co., Ltd.
		8-3	Chifeng Arker Pharmaceutical Technology Co., Ltd.
		8-4	Chifeng Mysun Pharmaceutical Co., Ltd.
9	SPH Qingdao Growful Pharmaceutical Co., Ltd.	9-1	SPH Qingdao Growful Pharmaceutical Co., Ltd.
10	Xiamen Traditional Chinese Medicine Factory Co., Ltd.	10-1	Xiamen Traditional Chinese Medicine Factory Co., Ltd.
11	Chiatai Qingchunbao Pharmaceutical Co., Ltd.	11-1	Chiatai Qingchunbao Pharmaceutical Co., Ltd.
		11-2	Chiatai Qingchunbao (Deqing) Pharmaceutical Co., Ltd.
12	Hangzhou Huqingyutang Pharmaceutical Co., Ltd.	12-1	Hangzhou Huqingyutang Pharmaceutical Co., Ltd.
13	Liaoning SPH Herbapex Pharmaceutical (Group) Co., Ltd.	13-1	Liaoning SPH Herbapex Pharmaceutical (Group) Co., Ltd.
14	SPH Dongying (Jiangsu) Pharmaceutical Co., Ltd.	14-1	SPH Dongying (Jiangsu) Pharmaceutical Co., Ltd.
		14-2	SPH Changzhou Kony Pharmaceutical Co., Ltd.
15	SPH (Benxi) Northern Pharmaceutical Co., Ltd.	15-1	SPH (Benxi) Northern Pharmaceutical Co., Ltd.
16	Techpool Bio-Pharma Co., Ltd.	16-1	Techpool Bio-Pharma Co., Ltd.
		16-2	Guangzhou Baotian Biotechnology Co., Ltd.

Emissions																					
Subsidiary No.	Year	Wastewater Discharged	Amount of COD in Wastewater Discharged	Amount of N-NH3 in Wastewater Discharged	Total Amount of Non-Methane Hydrocarbon in Exhaust Gas Emitted	Amount of Sulfur Dioxide in Exhaust Gas Emitted	Amount of Nitrogen Oxide in Exhaust Gas Emitted	Amount of Particulate Matter in Exhaust Gas Emitted	Amount of Others in Exhaust Gas Emitted	Greenhouse Gas Emissions		Direct Greenhouse Gas Emissions	Indirect Greenhouse Gas Emissions	Greenhouse Gas Emission Intensity	Amount of General Solid Waste Produced	Amount of General Solid Waste Disposed	Amount of General Solid Waste Utilized	General Solid Waste Discharge Density	Amount of Hazardous Waste Produced	Amount of Hazardous Waste Disposed	Hazardous Waste Discharge Density
	yyyy	10,000 tonnes	tonne	tonne	kg	kg	kg	kg	kg	tonne		tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne/RMB10,000 output value
1-1	2021	19.79	0.12	0.82	313.65	0.56	455.03	20.52	0	34756.59		1390.26	33366.33	0.56	127.77	59.81	67.96	0.0021	87.49	87.49	0.0014
	2020	21.09	8.86	0.65	96.39	0.59	486.02	231.62	0	33475.56		1040.29	32435.27	/	575.49	525.27	50.22	/	59.95	89.95	/
	2019	21.26	13.18	0.25	3.96	0.61	496.61	1045.86	0	33198.1		385.21	32812.89	/	437.06	373.98	63.08	/	112.21	112.21	/
1-2	2021	6.2	2.73	0.19	0	0	297.23	50.02	0	4472.12		1318.87	3153.25	0.13	61	27	34	0.0014	26.5	26.5	0.0007
	2020	6.01	2.64	0.13	0	0.13	721.89	108.97	0	3794.53		1247.83	2546.7	/	51	27	24	/	73.25	73.25	/
	2019	5.23	4.76	0.64	0	92.78	1210.36	173.89	0	3048.96		809.82	2239.13	/	51	27	24	/	23.61	22.61	/
1-3	2021	5.65	4.9	0.22	20.42	15.71	182.9	11.17	14.03	5736.52		120.8	5615.72	0.07	142.13	142.13	0	0.002	51.1	51.1	0.0006
	2020	6.03	1.75	0.01	60.03	31.48	320.17	12.62	149.63	5409.72		12.08	5397.64	/	93.56	77.7	15.86	/	18.22	18.22	/
	2019	7.05	3.24	0.01	85.54	3.25	88.93	15.95	136.5	6800.62		42.67	6257.95	/	131.18	128	3.18	/	5.2	5.2	/
1-4	2021	1.97	0.73	0.03	6.54	0.007	0.15	30.74	0	1698.22		671.45	1026.77	0.34	35	35	9	0.001	10.53	5.07	0.001
	2020	2.19	1.84	0.01	18.11	0	0	45.89	0	1633.78		540.55	1093.23	/	38	38	12.7	/	24	23.74	/
	2019	2.03	1.24	0.02	13.11	0.21	2.2	39.52	0	1729.08		711.54	1017.54	/	40.2	40.2	10.29	/	13.5	9.15	/
1-5	2021	7.67	10.43	0.6	209.92	0.29	117.53	70.33	0	8231.32		166.77	8064.55	0.23	150.78	29.74	121.04	0.004	62.16	59.16	0.0017
	2020	5.06	8	0.19	190.05	0.19	72.89	161.07	0	6592.96		102.02	6490.94	/	68.03	25.37	42.66	/	86.77	78.23	/
	2019	5.95	13.07	0.39	0	0.11	81.24	177.04	0	6936.29		92.85	6743.44	/	69.45	27.78	41.67	/	104.3	88.77	/
1-6	2021	2.57	2.88	0.04	86	0.07	160.06	35.84	0	2174.05		532.36	1641.69	0.17	68.78	60	8.78	0.005	25	23.49	0.002
	2020	2.12	5.85	0.08	390	0.99	160.21	15.84	0	2117.42		516.42	1601	/	80.08	60	20.08	/	22.58	22.08	/
	2019	2.32	5.85	0.08	186	0.96	147.64	45.5	0	2123.22		529.76	1593.46	/	77.1	49	10	/	18.1	18.1	/
1-7	2021	3.5	4.64	0.17	191.72	0.1	244.1	9.67	1.15	1899.29		512.41	1386.88	0.073	69.7	9.1	60.6	0.0037	31.23	31.23	0.0016
	2020	5.05	6.06	1.09	108.49	0.09	627.94	10.9	0	2060.51		511.61	1548.9	/	74.08	8	66.08	/	19.89	19.89	/
	2019	4.56	9.95	0.26	98.65	0.13	446.09	201.27	0	2361.5		656.77	1704.73	/	42.44	8	34.44	/	23.5	23.5	/
1-8	2021	17.64	4.43	0.02	6.25	0.19	216.39	41.01	0	8421.75		476.15	7945.6	0.25	84.92	49.13	35.92	0.0027	47.15	39.45	0.0015
	2020	17.31	4.33	0.02	6.38	0.19	218.07	41.33	0	8442.56		479.74	7962.82	/	62.75	20.2	42.75	/	59.84	56.84	/
	2019	19.75	6.72	0.05	137.69	0.21	230.92	22.85	0	9579.92		425.77	9154.15	/	128.19	73.5	54.69	/	71.25	64.05	/

Emissions																					
Subsidiary No.	Year	Wastewater Discharged	Amount of COD in Wastewater Discharged	Amount of N-NH3 in Wastewater Discharged	Total Amount of Non-Methane Hydrocarbon in Exhaust Gas Emitted	Amount of Sulfur Dioxide in Exhaust Gas Emitted	Amount of Nitrogen Oxide in Exhaust Gas Emitted	Amount of Particulate Matter in Exhaust Gas Emitted	Amount of Others in Exhaust Gas Emitted	Greenhouse Gas Emissions		Direct Greenhouse Gas Emissions	Indirect Greenhouse Gas Emissions	Greenhouse Gas Emission Intensity	Amount of General Solid Waste Produced	Amount of General Solid Waste Disposed	Amount of General Solid Waste Utilized	General Solid Waste Discharge Density	Amount of Hazardous Waste Produced	Amount of Hazardous Waste Disposed	Hazardous Waste Discharge Density
	yyyy	10,000 tonnes	tonne	tonne	kg	kg	kg	kg	kg	tonne		tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne/RMB10,000 output value
1-9	2021	0.71	0.81	0.01	655.76	0.19	100.12	9.59	0	2328.8		52.74	2276.06	0.045	48	48	0	0.0009	86.48	100.34	0.0019
	2020	0.62	0.47	0.02	396.5	0.21	98.97	9.48	0	2053.02		32.02	2021	/	48	48	0	/	55.22	39.62	/
	2019	1.07	0.95	0.03	34.1	0.32	175.4	16.6	0	2033.12		49.61	1983.50	/	48	48	0	/	67.21	78.53	/
1-10	2021	14.41	8.81	0.61	5819.22	40.14	629.13	213.59	1479.6	26379.2		8789.84	17589.36	0.3	101.2	101.2	0	0.0034	65.96	65.96	0.0022
	2020	6.52	20.64	0.01	0	0.14	1284.94	50.83	338.4	23449.05		7501.72	15947.33	/	97.4	97.4	0	/	64.7	32	/
	2019	2.52	8.58	0.000005	393	0.12	4096.34	256.02	0	20342.32		6909.8	13432.52	/	95.6	95.6	0	/	36.41	6	/
1-11	2021	0.5	0.000038	0.000013	0	0.081	63.46	6.14	0	259.15		90.85	168.3	/	32.3	32.3	0	/	4.31	4.31	/
	2020	0.23	0.00002	0.000004	0	0.093	73.77	0	0	200.43		60.99	139.44	/	15.5	15.5	0	/	0	0	/
	2019	0.45	0.000098	0.000015	0	0.17	73.45	0	0	329.38		125.81	203.57	/	22.8	22.8	0	/	0	0	/
2-1	2021	7.0015	3.41	0.32	690	50.14	2779.97	276.75	180	29439.1		9973.7	19465.31	0.12	35	35	0	0.00014	162.08	162.08	0.00067
	2020	17.49	5.81	0.18	2035.69	0.18	2947.69	136.97	99.18	29475.96		9950.27	19525.69	/	490	490	0	/	651.17	651.17	/
	2019	19.16	5.79	0.64	2961.22	0.2	7521.05	436.78	55.32	28330.53		10608.68	17721.85	/	145	145	0	/	991.77	991.77	/
2-2	2021	1.23	0.69	0.12	306.92	0	41.9	1.74	23.55	988.59		154.9	833.69	0.33	0	0	0	0	135.18	129.02	0.06
	2020	0.78	0.91	0.13	710.2	0	67.2	2.43	134	894.77		118.64	776.13	/	0.25	0	0.25	/	237.22	237.82	/
	2019	0.56	2.09	0.07	672	0	49.19	5.37	53.88	611.25		112.08	499.17	/	0.25	0.25	0.25	/	61.3	61.3	/
3-1	2021	34.81	9.4	2.11	804.87	0.16	54.2	5.13	0	16565.21		2427.02	14138.19	0.2	507.62	160.5	347.12	0.01	26.74	26.74	0.0003
	2020	48.24	18.29	0.12	3155.24	0.25	61.95	77.19	0	17593.92		165.67	17428.25	/	653.3	337.66	315.64	/	11.68	11.68	/
	2019	62.99	15.5	0.24	2549.75	0.41	243.39	294.08	0	21240.53		309.64	20930.89	/	823.52	578.94	244.58	/	56.26	56.26	/
3-2	2021	20.08	7.59	0.14	597.02	0.16	710.05	84.14	0	13062.43		5504.92	7557.51	0.32	173.1	54	119.1	0.004	182.5	182.5	0.004
	2020	22.03	7.78	0.6	869.68	28.08	491.54	167.23	14.73	64070.14		57897.58	6172.56	/	92.27	0	92.27	/	72.43	72.43	/
	2019	23.64	4.5	0.08	205.88	67.96	896.24	35.16	0	71300.14		60301.5	8268.64	/	365	190	175	/	137.15	137.15	/
3-3	2021	5.14	1.41	0.04	17.51	0.11	21.54	25.86	9.02	6495.58		655.51	5840.07	0.21	52	0	50	0.0016	30.4	27.94	0.0009
	2020	4.28	6.12	0.15	39.2	40.05	436.82	45.64	146.48	4941.25		828.59	4112.66	/	69.34	0	69.34	/	37.72	33.76	/
	2019	4.23	5.55	0.08	305.47	36.77	485.59	103.55	24.37	5228.82		1317.6	3911.21	/	74.13	0	74.13	/	72.98	68.28	/

Emissions																					
Subsidiary No.	Year	Wastewater Discharged	Amount of COD in Wastewater Discharged	Amount of N-NH3 in Wastewater Discharged	Total Amount of Non-Methane Hydrocarbon in Exhaust Gas Emitted	Amount of Sulfur Dioxide in Exhaust Gas Emitted	Amount of Nitrogen Oxide in Exhaust Gas Emitted	Amount of Particulate Matter in Exhaust Gas Emitted	Amount of Others in Exhaust Gas Emitted	Greenhouse Gas Emissions		Direct Greenhouse Gas Emissions	Indirect Greenhouse Gas Emissions	Greenhouse Gas Emission Intensity	Amount of General Solid Waste Produced	Amount of General Solid Waste Disposed	Amount of General Solid Waste Utilized	General Solid Waste Discharge Density	Amount of Hazardous Waste Produced	Amount of Hazardous Waste Disposed	Hazardous Waste Discharge Density
	yyyy	10,000 tonnes	tonne	tonne	kg	kg	kg	kg	kg	tonne		tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne/RMB10,000 output value
3-4	2021	7.3	14.65	0.4	46.59	0.1	8.19	1.16	0	47222.84		37645.66	9577.18	4.42	500	500	0	0.047	400.63	380.63	0.036
	2020	14.78	2.73	0.12	3.85	70	379	32	8.38	7496.65		311.71	7184.94	/	300	300	0	/	230.64	105.84	/
	2019	11	2	0.07	7.23	375.52	2026.91	170.47	0	5727.73		1376.24	4351.49	/	500	500	0	/	83.08	80	/
4-1	2021	14.28	8.34	0.3	40.82	148.69	1705.79	475.1	0	15623.89		5221.86	10402.03	0.29	1498	1498	0	0.027	47.75	47.74	0.00087
	2020	15.23	7.59	0.66	24.12	29.43	1380.47	158.99	0	12871.78		4052.79	8818.99	/	1276	1276	0	/	34.56	34.56	/
	2019	13.36	9.35	0.48	33.6	1	1262.4	1030.6	0	12638.9		4085.58	8553.32	/	1330	1330	0	/	40.54	40.54	/
4-2	2021	0.54	0.016	0.0005	0	0.006	0.14	0.0026	0	146.45		0.31	146.14	0.015	6	6	0	0.00063	1.08	1.08	0.0001
	2020	0.77	0.29	0.0014	0	0	1400	904	0	2085.02		961.71	1123.31	/	30	30	0	/	10.82	6.7	/
	2019	0.54	0.39	0.01	0	0.01	1530.66	906.5	0	860.49		172.92	687.57	/	32	0	0	/	0.23	0.23	/
4-3	2021	8.35	8.7	0.15	94.52	0.76	135.62	2132.69	0	5671.68		3165.52	2506.16	0.21	785.4	785.4	0	0.03	8.42	8.42	0.00032
	2020	6.67	8.4	0.11	91.26	0.82	565.82	2526.47	0	5518.77		3085.06	2433.71	0	643.5	643.5	0	/	5.2	5.2	0
	2019	7.64	4.7	0.011	95.46	929.7	3017.8	2757	29.53	5270.19		2844.59	2425.6	0	663.6	663.6	0	/	14	14	0
4-4	2021	0.99	2.55	0.2	8.88	0.38	483.69	89.02	16.01	1259.93		71.81	1188.12	0.084	85	85	0	0.0057	1.8	1.8	0.00012
	2020	0.99	2.55	0.2	0	0.19	145.3	30.1	0	1059.39		77.5	981.89	/	62	62	0	/	1.5	1.5	/
	2019	1.155	2.75	0.19	0	0.17	41.51	27.5	0	1108.62		113.49	995.13	/	55	55	0	/	1.38	0.38	/
4-5	2021	0.59	0.42	0.008	0	0.18	99.91	428.61	187.47	969.76		291.72	678.04	0.061	16.96	16.96	0	0.0011	1.7	1.7	0.00011
	2020	0.48	0.34	0.006	0	0.18	233.68	136.09	0	863.32		272.09	591.22	/	20	20	0	/	1.22	1.22	/
	2019	0.46	0.33	0.006	0	0.17	264.82	34.61	0	802.5		266.4	536.1	/	20	20	0	/	2.2	2.2	/
4-6	2021	0.8	0.82	0.06	42.4	0.76	322.32	39.85	45.78	572.18		215.27	356.91	0.076	45	45	0	0.0059	1.79	1.49	0.00024
	2020	0.8	1.23	0.12	19.7	0.22	112.86	11.72	0	595.26		208.95	386.31	/	46	46	0	/	1.41	0.91	/
	2019	1.08	0.18	0.02	0	0.21	122.08	19.63	0	557.36		245.16	312.2	/	50	50	0	/	0.67	0.67	/
4-7	2021	0.25	0.19	0.02	0.12	0	0	0.03	0	429.27		0.18	429.1	0.013	5	5	0	1.55	0	0	/
	2020	0.23	1.31	0.08	0	0	0	0	0	461.57		0.18	461.39	/	8	8	0	/	0.36	0.36	/
	2019	0.26	0.2	0.01805	0	0	0	0	0	429.58		0.51	429.07	/	5	5	0	/	0.34	0.34	/

Emissions																					
Subsidiary No.	Year	Wastewater Discharged	Amount of COD in Wastewater Discharged	Amount of N-NH3 in Wastewater Discharged	Total Amount of Non-Methane Hydrocarbon in Exhaust Gas Emitted	Amount of Sulfur Dioxide in Exhaust Gas Emitted	Amount of Nitrogen Oxide in Exhaust Gas Emitted	Amount of Particulate Matter in Exhaust Gas Emitted	Amount of Others in Exhaust Gas Emitted	Greenhouse Gas Emissions		Direct Greenhouse Gas Emissions	Indirect Greenhouse Gas Emissions	Greenhouse Gas Emission Intensity	Amount of General Solid Waste Produced	Amount of General Solid Waste Disposed	Amount of General Solid Waste Utilized	General Solid Waste Discharge Density	Amount of Hazardous Waste Produced	Amount of Hazardous Waste Disposed	Hazardous Waste Discharge Density
	yyyy	10,000 tonnes	tonne	tonne	kg	kg	kg	kg	kg	tonne		tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne/RMB10,000 output value
4-8	2021	0.69	0.069	0.0014	0	41.96	258.8	28.33	0	858.32		265.73	592.59	0.0105	11	7.9	3.1	0.00013	2.2	2.2	0.00003
	2020	0.78	0.26	0.002	0	60.01	904.56	91.3	0	911.83		315.13	596.7	/	12	8.5	3.5	/	1.4	1	/
	2019	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/
4-9	2021	0.47	200	15	0	0	0	115	0	0		0	0	/	0.55	0.55	0	0.000039	0.1	0.1	0.0000071
	2020	0.17	0.085	0.0007	0	0	0	132	0	65.89		0	65.89	/	0.6	0.35	0.25	/	0.22	0	/
	2019	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/
4-10	2021	0.006	297	0	0	0	0	0.21	0	0		0	0	0	4.65	4.65	0	0.001	0	0	0
	2020	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/
	2019	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/
4-11	2021	1.7	2.9	0.41	0	5.76	100	87	0	686.92		395.79	291.13	0.098	9.8	9.8	0	0.0014	0	0	0
	2020	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/
	2019	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/
4-12	2021	0.27	0.13	0.013	0	0.09	2.6	0.19	0	2325.9		139.42	2186.48	0.12	58	53	5	0.003	9.89	11.055	0.0005
	2020	0.2	0.1	0.01	0	0.62	5.47	0.69	0	2240.08		136.36	2103.72	0.15	65	63	2	0.004	12.65	11.57	0.0008
	2019	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/
5-1	2021	4.91	2.08	0.02	1078.38	139.26	1364.5	91.56	7.01	7835.97		744.92	7091.05	0.2	1.34	1.34	0	0.00003	119.52	119.52	0.003
	2020	5.88	2.23	0.43	7684.34	0.15	2259.05	23.59	56.92	8835.22		1489.38	7345.89	/	37.68	37.68	3.84	/	271.71	271.71	/
	2019	6.04	1.55	0.48	3987.38	66.62	992.77	77.22	410.42	8459.38		999.82	7459.56	/	38.49	38.49	2.05	/	271.92	271.92	/
5-2	2021	20.14	20.24	1.31	905.19	59.9	913.26	540.78	0	12126.64		3614.22	8512.42	0.13	532.97	517.97	15	0.0022	1173.81	1173.81	0.012
	2020	9.52	3.49	0.26	240.99	0.12	1125.82	297.38	0	10095.55		3382.65	6712.9	/	118	103	15	/	551.45	551.45	/
	2019	9.3	3.98	0.06	193.83	94.72	1171.12	661.16	0	10079.02		3484.79	6594.24	/	119	109	10	/	19.85	19.85	/
5-3	2021	2.25	5.81	0.09	9072	0.13	364.57	30.63	0.21	7911.09		1732.76	5301.78	0.52	2.5	2.5	0	0.00016	604.77	604.77	0.04
	2020	1.59	1.96	0.14	12384	0	305.6	55.87	10.08	6178.33		991.22	5187.11	/	17.86	17.86	0	/	204.3	204.3	/
	2019	1.8	6.3	0.81	7704	0.18	443.42	97.23	0	6200.39		896.63	5303.76	/	8	8	0	/	170	170	/

Emissions																					
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	yyyy	10,000 tonnes	tonne	tonne	kg	kg	kg	kg	kg	tonne		tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne/RMB10,000 output value
6-1	2021	3.39	1.65	0.014	529.3	0.14	55.44	28.16	0	4305.94		72.84	4233.1	0.18	34.26	26.83	7.43	0.0011	71.41	69.91	0.0028
	2020	5.34	2.59	0.02	310.18	0.12	50.79	118.82	0	4418.9		64.71	4354.19	/	62.52	54.38	8.14	/	53.2	53.2	/
	2019	6.57	3.94	0.05	257.29	0.15	167.12	154.54	0	7308.32		99.02	7209.3	/	95.14	87.5	7.64	/	11.2	10.8	/
6-2	2021	0.55	1.32	0.01	0	0.16	4.73	38.75	0	1752.05		32.58	1719.47	0.13	56.4	21.5	34.9	0.0042	18.87	17.32	0.0014
	2020	0.48	0.36	0.07	0	0.08	2.99	0.22	0	3597.94		1227.46	2370.48	/	53	33	20	/	7.52	7.52	/
	2019	0.7	1.26	0.07	0	0.1	5.85	0.43	0	3527.61		1784.52	1743.09	/	75.3	20	55.3	/	21	21	/
7-1	2021	0.42	0.04	0.0031	10.45	0.05	5.69	0.53	0	1299.66		16.83	1282.83	0.59	3	3	0	0.0014	0.24	0.24	0.0001
	2020	0.56	0.06	0.005	14.06	0.23	4.37	0.42	0	1402.16		38.14	1364.02	/	3.4	3.4	0	/	0.099	0.099	/
	2019	0.65	1.7	0.03	0	0.11	35.4	3.39	0	1939.66		44.42	1895.25	/	3.5	3.5	0	/	0.07	0.07	/
8-1	2021	22.07	20.29	0.19	1764.44	0.21	77.76	456.74	2041.73	11354.56		612.8	10741.76	0.092	395.78	344.5	51.28	0.0032	543.43	545.03	0.0044
	2020	15.78	27.94	0.25	136.87	0.2	73.95	419.84	297.22	10886.13		320.34	10565.79	/	238.15	238.25	0	/	295.36	293.3	/
	2019	19.34	38.88	0.44	459.86	0.29	133.69	450.97	1367.52	11037.75		361.6	10676.15	/	339.56	289.96	40	/	277.01	314.61	/
8-2	2021	10.34	12.07	0.46	2530.58	0.88	492.48	159.21	804.78	13039.77		763.96	12275.11	0.32	12.46	12.46	0	0.0003	1124.91	1136.45	0.028
	2020	11.27	22.54	0.34	2245.56	0.86	463.93	140.97	56.44	12904.71		487.66	12417.05	/	150	150	0	/	1313.57	1354.99	/
	2019	6.77	16.98	0.2	5437.08	0.84	477.58	47.04	10.15	12144.08		840.55	11303.53	/	117	117	0	/	771.21	803.64	/
8-3	2021	3.24	2.78	0.1	16291.6	0.092	30.62	1333.19	3477.33	8393.34		41.77	8351.54	1.05	95.54	0	98.74	0.01	11.64	19.64	0.002
	2020	3.46	3.16	0.24	18949	0.16	4.57	0.34	0	7700.78		111.49	7589.29	/	107.42	0	104.22	/	12.21	10.05	/
	2019	11.5	14.92	0.8	36420	0.072	4.19	0.31	0	8129.1		98.45	8030.65	/	80.34	80.34	0	/	4.47	0	/
8-4	2021	4.16	9.48	0.33	0	2.64	822.62	369.77	0	2675.77		434.37	2241.4	0.16	2	0	2	0.0001	0	0	0
	2020	4	11.39	0.37	0	2.5	16.45	583.68	0	3538.71		424.95	3113.77	/	1.6	1.6	0	/	0	0	/
	2019	5.2	1.59	0.05	0	1.72	5721.95	3940.33	0	2816.78		417.46	2399.32	/	2	2	0	/	0	0	/
9-1	2021	10.16	10.15	0.24	0	2.15	432.07	1719.91	0	18528.34		495.54	18032.8	0.21	1512	88	1424	0.018	5.78	5.78	0.00007
	2020	8.76	9.98	0.19	0	2.16	374.22	1995.42	0	19680.98		1321.94	18359.04	/	689	87	602	/	8.85	8.3	/
	2019	9.95	16.82	0.41	0	2.06	310.35	2781.35	0	20595.13		453.76	20141.37	/	1150	82	1068	/	10.6	6.5	/

Emissions																					
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	yyyy	10,000 tonnes	tonne	tonne	kg	kg	kg	kg	kg	tonne		tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne/RMB10,000 output value
10-1	2021	7.21	2.85	0.6	0	0.68	70.08	6.8	0	10098.53		301.35	9797.18	0.18	490.22	118.93	371.29	0.01	5.19	5.06	0.000095
	2020	8.06	2.58	0.03	0	0.65	67.67	5.66	0	9680.7		94.98	9585.72	/	849.1	823.5	25.6	/	4.61	4.61	/
	2019	9.09	2.36	0.48	0	0.67	121.76	98.73	0	11428.55		305.96	11122.59	/	1047.9	1027	20.9	/	2.2	2.946	/
11-1	2021	20.51	16.25	0.07	0	100.4	3983	684.04	0	14457.68		6326.08	8131.16	0.1	2275.04	608	1667.04	0.02	55.83	55.83	0.0004
	2020	20.28	7.1	0.04	0	98.17	3700.41	679.75	0	14446.45		6036.84	8409.61	/	3787	587	3200	/	70.57	70.57	/
	2019	27.63	22.93	0.88	0	171.2	8441.19	1199.43	0	21712.89		10254.31	11458.58	/	5300	600	4700	/	84.18	84.18	/
11-2	2021	28.77	34.52	0.86	1113.17	0	0	2550.05	0	32417.36		251.11	32166.25	/	4385	4365	20	/	299.55	299.05	/
	2020	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/
	2019	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/
12-1	2021	16.84	3.37	0.26	0	0.73	633.3	394.99	0	12707.74		128.9	12578.84	0.1625	5487.5	145	5342.5	0.07	2.08	1.88	0.000024
	2020	15.32	4.14	0.47	0	0.74	1456.73	486.42	0	12826.24		128.48	12697.76	/	4542.1	121	4421.1	/	6.55	6.4	/
	2019	18.68	4.15	0.12	0	0.1	1299.15	429.26	0	12895.41		31.59	12863.82	/	4769.2	112	4657.2	/	1.78	1.5	/
13-1	2021	8.41	9.55	0.125	0	2276.2	12654.4	1025.95	0	32690.4		25659.42	7030.98	0.373	6155.46	0	6155.456	0.07	0.049	0.049	0.0000006
	2020	9.4	10.72	0.069	0	969.7	6679.01	2279.14	0	29553.65		20209.76	9343.89	/	5387	0	5387	/	0.06	0.06	/
	2019	7.63	6.03	0.0026	49.75	118948.17	25045.54	12096.61	0	29559.82		18066.92	11492.9	/	4522	0	4522	/	0.038	0.16	/
14-1	2021	0.34	0.06	0.01	0	0.36	350.1	18.68	0	1399.61		426.73	972.88	0.08	6.3	6.3	2.3	0.00037	6.83	6.33	0.00037
	2020	0.43	0.06	0.007	0	0.36	235.59	20.25	0	1696.47		347.16	1349.3	/	7.8	5.8	2	/	1.48	1.48	/
	2019	0.43	0.13	0.015	0	0.63	404.2	28.58	0	2369.26		742.94	1626.32	/	9.8	6.6	3.2	/	1.89	3.42	/
14-2	2021	5.6	2.02	0.01	274.42	0.13	765.26	20.19	67.24	6801.4		1877.98	4923.42	0.32	112.6	110.9	1.7	0.005	324.14	324.14	0.02
	2020	4.99	2.05	0.021	173.7	0.2	411.02	30.35	69.47	6401.34		2036.07	4365.27	/	117.1	115	2.1	/	298.45	298.45	/
	2019	4.7	4.6	0.027	41.38	0.22	1669.3	94.02	71.66	6600.25		1966.76	4633.5	/	134	132.2	1.8	/	293.93	300.2	/
15-1	2021	4.89	2.59	0.25	236.54	0.57	5768.1	454.05	5.89	14790.94		5675.87	9115.07	2.3	83.2	77	6.2	0.01	92.08	86.87	0.01
	2020	3.48	1.65	0.31	407.45	478.78	3485.83	250.37	2.33	9488.72		3765.44	5723.28	/	42.65	40	2.65	/	70.24	69.04	/
	2019	3.65	0.67	0.01	255.66	274.2	3373.9	300.23	0	10311.55		3988.83	6322.72	/	65.78	60	5.78	/	50.06	41.86	/

Emissions																				
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	yyyy	10,000 tonnes	tonne	tonne	kg	kg	kg	kg	kg	tonne	tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne	tonne/RMB10,000 output value	tonne	tonne	tonne/RMB10,000 output value
16-1	2021	6.23	1.29	0.03	72.17	8.98	512	6.87	908.19	8616.59	3093.21	5523.38	0.057	912.99	877.16	35.83	0.0067	667.54	667.54	0.0049
	2020	4.45	0.67	0.06	16.68	8.59	540.93	11.94	881.68	7476.93	2547.74	4929.19	/	842.57	808.18	34.39	/	555.28	554.05	/
	2019	4.91	1.06	0.17	12.41	9.56	595.57	10.64	128.2	8639.25	2835.73	5803.52	/	1126.64	1083.46	43.18	/	1037.55	1019.15	/
16-2	2021	3.51	1.37	0.14	0	0.26	206.12	20.43	67.15	229.79	0	229.79	0.11	47.97	38.82	0	0.02	28.93	61.69	0.03
	2020	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	2019	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

Energy Use													
Subsidiary No.	Year	Water Consumption	Water Consumption Rate	Comprehensive Energy Consumption	Energy Intensity	Electricity Consumption		Natural Gas Consumption	Purchased Thermal Power Consumption	Coal Consumption	Liqueed Petroleum Gas Consumption	Gasoline Consumption	Diesel Fuel Consumption
	yyyy	10,000 tonnes	tonne/RMB10,000 output value	tonne of standard coal	tonne of standard coal/RMB10,000 output value	10,000 kWh		10,000 cubic meter	MkJ	tonne	tonne	tonne	tonne
1-1	2021	21.99	0.00035	12086.69	0.19	2761.16		2.64	127530.51	0	0	12.84	46.8
	2020	23.43	/	11695.68	/	2706		1.18	113114.5	0	0	0	31.02
	2019	23.63	/	11761.18	/	2627		1.51	121678.2	0	0	0	31.7
1-2	2021	7.75	0.00022	1810.62	0.052	345.88		59.47	0	0	5	3.2	0
	2020	6.68	/	1508.58	/	259.66		55.65	0	0	5	3.2	3.58
	2019	5.82	/	1123.57	/	215.94		35.45	0	0	5	3.3	4
1-3	2021	7.07	0.0001	1333.95	0.016	445.11		0.42	22585.2	0	0	5.14	2.56
	2020	6.7	/	1971.4	/	435.67		0.42	20514.3	0	0	5.34	2.62
	2019	7.83	/	2416.24	/	433.37		0.55	33615.82	0	0	7.04	2.97
1-4	2021	2.18	0.0004	567.46	0.11	145.55		29.4	0	0	3.6	0	0.2
	2020	2.44	/	500.39	/	154.88		23.45	0	0	2.8	0	0.31
	2019	2.25	/	604.7	/	144.17		32.43	0	0	3.35	0	0.25
1-5	2021	8.53	0.00023	2980.83	0.083	738.63		1	25973.98	0	0	0	10.1
	2020	5.63	/	2434.52	/	573.7		0.8	22203.25	0	0	0	10.11
	2019	6.61	/	2539.52	/	632.56		0.84	20753.52	0	0	0	6.9
1-6	2021	2.86	0.0002	941.27	0.07	230.29		21.39	0	0	0	0	3.4
	2020	2.33	/	921.67	/	226.73		20.67	0	0	0	0	0
	2019	2.58	/	973.07	/	218.93		23.78	0	0	0	0	0
1-7	2021	3.94	0.00021	762.24	0.04	195.6		15.64	0	0	0	0.27	8.04
	2020	5.61	/	818.32	/	218.71		13.54	0	0	0	0	8.55
	2019	5.07	/	965.14	/	240.9		17.93	0	0	0	9.5	16.7
1-8	2021	19.6	0.00062	3079.84	0.097	636.6		0	35616	0	9.95	2.6	9.5
	2020	19.23	/	2894	/	560		0	35702	0	8.7	2.5	9.4
	2019	21.95	/	3447.01	/	621.78		0.0019	43365.38	0	8.41	2.33	8.54

Energy Use													
Subsidiary No.	Year	Water Consumption	Water Consumption Rate	Comprehensive Energy Consumption	Energy Intensity	Electricity Consumption		Natural Gas Consumption	Purchased Thermal Power Consumption	Coal Consumption	Liqueed Petroleum Gas Consumption	Gasoline Consumption	Diesel Fuel Consumption
	yyyy	10,000 tonnes	tonne/RMB10,000 output value	tonne of standard coal	tonne of standard coal/RMB10,000 output value	10,000 kWh		10,000 cubic meter	MkJ	tonne	tonne	tonne	tonne
1-9	2021	1.17	0.00002	551.82	0.01	171		0	9606	0	0	7.14	2.53
	2020	1.13	/	739	/	146.2		0	8878	0	0	6.65	3.74
	2019	1.34	/	729.8	/	139.75		0	8955	0	0	11.3	4.8
1-10	2021	16.04	0.00054	7812.13	0.26	2496		354.37	0	0	0	9.13	7.25
	2020	7.25	/	6386.35	/	2265		244.19	0	0	0	8.76	5.84
	2019	2.8	/	5965.08	/	1908		219.7	0	0	0	8.23	6.25
1-11	2021	0.63	/	80.32	/	23.76		3.7	0	0	0	1.61	2.62
	2020	0.26	/	73.6	/	19.5		2.13	0	0	0	1.68	3.11
	2019	0.6	/	102.23	/	28.44		4.5	0	0	0	3.84	4.79
2-1	2021	49.8	0.00021	12841.92	0.053	2763.61		375.16	0	0	0	4.58	0
	2020	50.84	/	13108.98	/	2772.51		393.24	0	0	0	8.38	0.59
	2019	60.08	/	12748.96	/	2516.16		403.73	0	0	0	8.98	0.31
2-2	2021	1.37	0.00045	402.92	0.13	118.3		0	0	0	0	5.32	44
	2020	0.87	/	363.77	/	110.11		0	0	0	0	5.81	32
	2019	0.7	/	244.56	/	70.75		0	0	0	0	7.79	28
3-1	2021	36.87	0.0004	5257.43	0.06	1234.16		0	49543.69	0	12	9.4	0
	2020	50.88	/	6331.59	/	1310.67		0	74575.22	0	6	9.4	3.28
	2019	69.99	/	7527.79	/	1495.66		0	94421.28	0	3.6	15.64	5
3-2	2021	25.11	0.0006	5200.47	0.13	1073.53		157.66	0	0	4.5	8.01	0
	2020	24.48	/	4216.4	/	876.52		129.44	0	0	3.75	6.36	0.71
	2019	26.27	/	5584.46	/	1174.47		179.48	0	0	4.8	5.5	10.2
3-3	2021	5.71	0.0002	2173.13	0.07	565.61		0.46	16918.38	0	0	5.23	0
	2020	4.76	/	1112.27	/	516.43		24.61	4125.15	0	0	11.94	0.65
	2019	4.7	/	1199.6	/	554.21		38.66	0	0	0	10.89	0

Energy Use													
Subsidiary No.	Year	Water Consumption	Water Consumption Rate	Comprehensive Energy Consumption	Energy Intensity	Electricity Consumption		Natural Gas Consumption	Purchased Thermal Power Consumption	Coal Consumption	Liqueed Petroleum Gas Consumption	Gasoline Consumption	Diesel Fuel Consumption
	yyyy	10,000 tonnes	tonne/RMB10,000 output value	tonne of standard coal	tonne of standard coal/RMB10,000 output value	10,000 kWh		10,000 cubic meter	MkJ	tonne	tonne	tonne	tonne
3-4	2021	10.87	0.0008	2517.32	0.19	466.85		4.43	54840.61	0	4.45	5.17	4.81
	2020	7.55	/	2739	/	461.92		11.14	64974.28	0	5.27	14.63	3.15
	2019	14	/	1366.09	/	617.8		59.6	0	0	5.27	17.78	5.7
4-1	2021	25.88	0.00047	7256.54	0.13	1478.27		236.98	0	0	0	8.91	16.15
	2020	20.95	/	6077.69	/	1253.11		182.7	0	0	0	9.71	16.83
	2019	17.67	/	5981	/	1215.21		180.75	0	0	0	21.41	30.93
4-2	2021	0.77	0.81	735.69	0.08	206.37		0	0	0	0	0	97
	2020	1.1	/	608.43	/	159.06		0	0	0	0	0	90
	2019	0.77	/	372.33	/	97.48		0	0	0	0	0.65	54.17
4-3	2021	9.28	0.00035	2521.6	0.09	365.59		121	0	0	2.21	38.6	18.7
	2020	7.4	0	2562.08	0	345.92		132.53	0	0	2.45	31.4	16.4
	2019	8.49	0	2002.96	0	344.77		121.48	0	0	2.55	30.6	16.1
4-4	2021	1.1	0.000073	447.5	0.03	67		0	6472.43	0	0	9.13	14
	2020	1.1	/	791.48	/	55.81		0	5313.4	0	2.8	9.43	12.89
	2019	1.65	/	826.44	/	55.44		0	5483.5	0	2.45	5.4	26.62
4-5	2021	0.66	0.000042	403.6	0.026	95.7		0	0	0	0	9	84
	2020	0.53	/	229.47	/	83.7		0	0	0	0	8.8	78
	2019	0.51	/	216.97	/	76		0	0	0	0	2.34	82.44
4-6	2021	1.01	0.00013	227.92	0.03	49.3		0	0	0	0	28.37	41
	2020	0.89	/	165.91	/	53.48		0	0	0	0	38.38	30
	2019	1.2	/	192.26	/	43.9		0	0	0	0	34.06	45
4-7	2021	0.31	0.0000097	183.72	0.01	63.79		0	0	0	0	0	0.15
	2020	0.25	/	187.76	/	65.19		0	0	0	0	0	0.14
	2019	0.29	/	175.17	/	60.82		0	0	0	0	0	0.15

Energy Use													
Subsidiary No.	Year	Water Consumption	Water Consumption Rate	Comprehensive Energy Consumption	Energy Intensity	Electricity Consumption		Natural Gas Consumption	Purchased Thermal Power Consumption	Coal Consumption	Liqueed Petroleum Gas Consumption	Gasoline Consumption	Diesel Fuel Consumption
	yyyy	10,000 tonnes	tonne/RMB10,000 output value	tonne of standard coal	tonne of standard coal/RMB10,000 output value	10,000 kWh		10,000 cubic meter	MkJ	tonne	tonne	tonne	tonne
4-8	2021	0.86	0.00001	374.78	0.0046	83.62		8.2	0	0	0	4.97	18.01
	2020	0.98	/	158.33	/	88.6		9.7	0	0	0	2.6	12
	2019	/	/	/	/	/		/	/	/	/	/	/
4-9	2021	0.47	0.000033	28	0.002	14.84		0	0	0	0	0	0
	2020	0.21	/	35.63	/	8.82		0	0	0	0	0	0
	2019	/	/	/	/	/		/	/	/	/	/	/
4-10	2021	0.02	0.000004	0.002	0	25.6		0	0	0	0	4.1	3.6
	2020	/	/	/	/	/		/	/	/	/	/	/
	2019	/	/	/	/	/		/	/	/	/	/	/
4-11	2021	1.88	0.0002	212.8	0.03	41		17	0	0	0	11	0
	2020	/	/	/	/	/		/	0	0	0	/	/
	2019	/	/	/	/	/		/	0	0	0	/	/
4-12	2021	2.27	0.00012	790.12	0.04	146.36		0.86	10429.69	0	0	4.78	0
	2020	2.11	0.00014	515.94	0.03	140.21		0	10071.02	0	3.6	4.74	0.14
	2019	/	/	/	/	/		/	/	/	/	/	/
5-1	2021	5.45	0.00014	1490.61	0.04	712.51		0	18784.58	0	5.53	7.08	16.94
	2020	6.54	/	1569.93	/	685.69		0	22816.55	0	5.53	7.08	69.7
	2019	6.71	/	1640.83	/	708.31		0	22421.57	0	5.53	13.14	18.82
5-2	2021	23.28	0.00024	3438.23	0.036	1209.81		145.22	0	0	0	4.37	0
	2020	11.74	/	3244.07	/	949.82		154.74	0	0	0	5.87	0
	2019	12.15	/	3013.95	/	937.21		151.33	0	0	0	9.59	0
5-3	2021	4.03	0.00026	1884.32	0.12	753.06		76.87	0	0	0	1.61	5.18
	2020	3.18	/	2933.01	/	736.68		40.89	0	0	0	14.99	3.85
	2019	2.57	/	1392.15	/	753.33		37.36	0	0	0	8.07	0.99

Energy Use													
Subsidiary No.	Year	Water Consumption	Water Consumption Rate	Comprehensive Energy Consumption	Energy Intensity	Electricity Consumption		Natural Gas Consumption	Purchased Thermal Power Consumption	Coal Consumption	Liqueed Petroleum Gas Consumption	Gasoline Consumption	Diesel Fuel Consumption
	yyyy	10,000 tonnes	tonne/RMB10,000 output value	tonne of standard coal	tonne of standard coal/RMB10,000 output value	10,000 kWh		10,000 cubic meter	MkJ	tonne	tonne	tonne	tonne
6-1	2021	4.21	0.00017	1357.47	0.083	484.7		1.3	7427.3	0	0	4.9	2.3
	2020	5.93	/	1733.61	/	496.3		1	7779.4	0	0	3.66	2.69
	2019	7.3	/	2372.18	/	626.4		1.14	25412.5	0	0	4.28	3.09
6-2	2021	2.67	0.0002	451.73	0.034	156.85		0	0	0	0.08	4.24	6.1
	2020	2.7	/	195.95	/	149.27		0	0	0	0.06	4.06	4.41
	2019	2.2	/	285.5	/	102		0	0	0	0.15	7.04	4.35
7-1	2021	0.47	0.00022	324.7	0.15	120.44		0	3944.15	0	0	0.9	1.54
	2020	0.63	/	580.04	/	130.98		0	4006	0	0	1.45	10.74
	2019	0.72	/	505.3	/	150.53		0	7583.34	0	0	0.65	6.5
8-1	2021	18.12	0.00015	2748.2	0.022	1045.99		0.85	30742.79	0	0.68	7.74	2.69
	2020	13.97	/	2743.71	/	996.57		1.08	31908.73	0	0.46	7.51	2.69
	2019	16.67	/	2931.1	/	922.31		0.28	38048	0	0.48	12.43	2.84
8-2	2021	9.35	0.0002	4717.35	0.12	1056.39		9.34	43687.54	0	1.64	10.25	35.47
	2020	10.93	/	5427.22	/	1012.99		10.97	47791.5	0	0	10.24	35.36
	2019	8.25	/	3820.75	/	978		19.56	39413.75	0	0	8.76	34.61
8-3	2021	4.63	0.0006	7596.67	0.95	352.37		0	53369.28	0	0	3.6	1
	2020	4.16	/	6583.16	/	364.44		0	45666.72	0	0	6.7	1.03
	2019	13.8	/	6910.86	/	389.13		0	48119.4	0	0	6.14	0.48
8-4	2021	5.2	0.0003	1435.42	0.08	202.37		0	7367.76	0	0	30.68	105.39
	2020	5	/	1958.51	/	301.53		0	8988.89	0	0	31.45	103.42
	2019	6.5	/	1336.58	/	242.77		0	6285.6	0	0	30.93	102.81
9-1	2021	11.8	0.00014	4419.88	0.052	947		1.12	95488	0	0	43.28	66.61
	2020	11.68	/	4460.05	/	958		1.16	96266	0	0	40.75	69.83
	2019	13.27	/	4279.14	/	953.69		0.91	114142	0	0	37.6	67.8

Energy Use													
Subsidiary No.	Year	Water Consumption	Water Consumption Rate	Comprehensive Energy Consumption	Energy Intensity	Electricity Consumption		Natural Gas Consumption	Purchased Thermal Power Consumption	Coal Consumption	Liqueed Petroleum Gas Consumption	Gasoline Consumption	Diesel Fuel Consumption
	yyyy	10,000 tonnes	tonne/RMB10,000 output value	tonne of standard coal	tonne of standard coal/RMB10,000 output value	10,000 kWh		10,000 cubic meter	MkJ	tonne	tonne	tonne	tonne
10-1	2021	10.15	0.00019	2072.97	0.04	586.25		0	39135.6	0	0	28.57	5.46
	2020	11.57	/	1987.45	/	586.35		0	36486.8	0	0	25.57	4.96
	2019	9.2	/	2325.4	/	635.91		0	44486.4	0	0	26.46	7.11
11-1	2021	27.78	0.0002	4537.55	0.031	1068.48		251.5	0	0	0	73.94	35.69
	2020	27.57	/	4393.85	/	1113.52		235.38	0	0	0	71.98	37.58
	2019	37.52	/	7199.07	/	1523.04		423.05	0	0	0	77.62	47.7
11-2	2021	36.69	/	7547.41	/	1961.97		0	150318	0	0	0	0
	2020	/	/	/	/	/		/	/	/	/	/	/
	2019	/	/	/	/	/		/	/	/	/	/	/
12-1	2021	17.7	0.00023	3248.89	0.042	767.02		0	65184.29	0	5.6	39.63	17.05
	2020	15.3	/	3252.48	/	801.24		0	64093.23	0	5.2	37.54	18.31
	2019	15.55	/	3202.64	/	827.46		0	63863.55	0	5.9	3.52	1.69
13-1	2021	12.45	0.00014	6589.74	0.075	994.98		0	0	12346	4.32	39.99	14.59
	2020	11.71	/	6219.96	/	817.73		0	29225.92	9720	4	23.86	14.39
	2019	16.6	/	11232.51	/	530.56		0	70309.22	8700	7.5	28.42	13.21
14-1	2021	1.47	0.000086	471	0.03	120.76		0.5	1082	0	0	4.65	13.83
	2020	1.84	/	299.27	/	124.66		0.53	4237.09	0	0	4.96	13.44
	2019	3.05	/	360.34	/	150.28		0.45	5074.35	0	0	18.75	22.39
14-2	2021	5.78	0.0003	2928.23	0.14	692		71	0	0	0	0	8.14
	2020	5.07	/	1627.84	/	619		76.06	0	0	0	2.12	10.32
	2019	5.18	/	1589.04	/	657		68.56	0	0	0	2.43	11.67
15-1	2021	9.87	0.002	5060.86	0.79	1291		258	0	0	0	7.48	21.89
	2020	6.39	/	3262.13	/	809.6		166.66	0	0	0	21.18	9.86
	2019	6.59	/	3329.92	/	896.52		182.89	0	0	0	2.36	2.6

Energy Use													
Subsidiary No.	Year	Water Consumption	Water Consumption Rate	Comprehensive Energy Consumption	Energy Intensity	Electricity Consumption		Natural Gas Consumption	Purchased Thermal Power Consumption	Coal Consumption	Liqueed Petroleum Gas Consumption	Gasoline Consumption	Diesel Fuel Consumption
	yyyy	10,000 tonnes	tonne/RMB10,000 output value	tonne of standard coal	tonne of standard coal/RMB10,000 output value	10,000 kWh		10,000 cubic meter	MkJ	tonne	tonne	tonne	tonne
16-1	2021	10.29	0.000076	2727.9	0.02	747.79		44.18	0	0	0	8.21	1.72
	2020	6.79	/	1374.86	/	695.72		39.08	0	0	0	0	0
	2019	9.16	/	1630	/	819.75		46.79	0	0	0	0	0
16-2	2021	4.57	0.0023	40.14	0.02	32.66		0	0	0	0	0	0
	2020	/	/	/	/	/		/	/	/	/	/	/
	2019	/	/	/	/	/		/	/	/	/	/	/

Note:

1) Greenhouse gas emissions were calculated with reference to the Guidelines for Reporting of Performance Indicators of Environmental Key Data and Guidelines for Calculation Methods and Reporting of Greenhouse Gas Emissions from Industrial and Other Industrial Enterprises;

2) Partial data of subsidiaries in 2019 and 2020 were slightly changed from previous reports as different statistical units were unified in 2021;

3) The five companies newly included in the 2021 disclosure list have no data for 2019-2020.

Appendix II: SEHK's ESG Reporting Guide Index

A. Environmental

Subject Areas, Aspects, General Disclosures and KPIs		Chapter
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 Management
KPI A1.1	The types of emissions and respective emissions data.	Environmental Quantitative Performance Index
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental Quantitative Performance Index
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental Quantitative Performance Index
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental Quantitative Performance Index
KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	Pollution Control
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Pollution Control
Aspect A2: Use of Resources		
General Disclosure	General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials. Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.	Energy Management
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Environmental Quantitative Performance Index
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Environmental Quantitative Performance Index
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them	Environmental Quantitative Performance Index
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Energy Management
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Green Operation
Aspect A3: The Environment and Natural Resources		
General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources.	Environmental Management
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Environmental Management
Aspect A4: Climate Change		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact the issuer.	Response to Climate Change
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Response to Climate Change

B. Social

Subject Areas, Aspects, General Disclosures and KPIs		Chapter
Aspect B1: Employment		
General Disclosure	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.	People-Oriented & Mutual Development
KPI B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	Compliant Employment Management
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Compliant Employment Management
Aspect B2: Health and Safety		
General Disclosure	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.	Occupational Health Protection
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Occupational Health Protection
KPI B2.2	Lost days due to work injury.	Occupational Health Protection
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Occupational Health Protection
Aspect B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Promising Career Development
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Promising Career Development
KPI B3.2	The average training hours completed per employee by gender and employee category.	Promising Career Development

Subject Areas, Aspects, General Disclosures and KPIs		Chapter
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.	Compliant Employment Management
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	Compliant Employment Management
KPI B4.1	Description of steps taken to eliminate such practices when discovered.	Compliant Employment Management
Aspect B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Supply Chain Management
KPI B5.1	Number of suppliers by geographical region.	Supply Chain Management
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Supply Chain Management
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Supply Chain Management
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Supply Chain 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.	Quality First to Safeguard Health
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Quality Management System

Subject Areas, Aspects, General Disclosures and KPIs		Chapter
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Quality Management System
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Driven and Empowered by Innovation
KPI B6.4	Description of quality assurance process and recall procedures.	Quality Management System
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	Exceptional Service Experience
Aspect B7: Anti-corruption		
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.	Clean governance
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Clean governance
KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	Clean governance
KPI B7.3	Description of anti-corruption training provided to directors and staff.	Clean governance
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.	Committed to Public Welfare and Devoted to the Society
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Committed to Public Welfare and Devoted to the Society
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Committed to Public Welfare and Devoted to the Society

Reader Feedback Form

Thank you for taking your time to read the 2021 Sustainable Development & Environmental, Social and Governance Report. In order to promote our work regarding environmental, social and governance matters and improve the quality of our ESG report, we welcome your feedback.

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1.What is your relationship to SPH?

☐ Consumer ☐ Employee ☐ Partner ☐ Government ☐ Media ☐ Others (please specify)

2.Are you satisfied with this report?

☐ Yes ☐ No ☐ N/A

3.What do you think of the structure and presentation of this report?

☐ Logical ☐ Reasonable ☐ Fair ☐ Unsatisfactory

4.What do you think of the quality of the information disclosed in this report?

☐ Great ☐ Good ☐ Fair ☐ Unsatisfactory

5.In your opinion, is this report readable in such arrangement and layout?

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6.Do you have any additional comments or suggestions on our ESG work and this report?

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