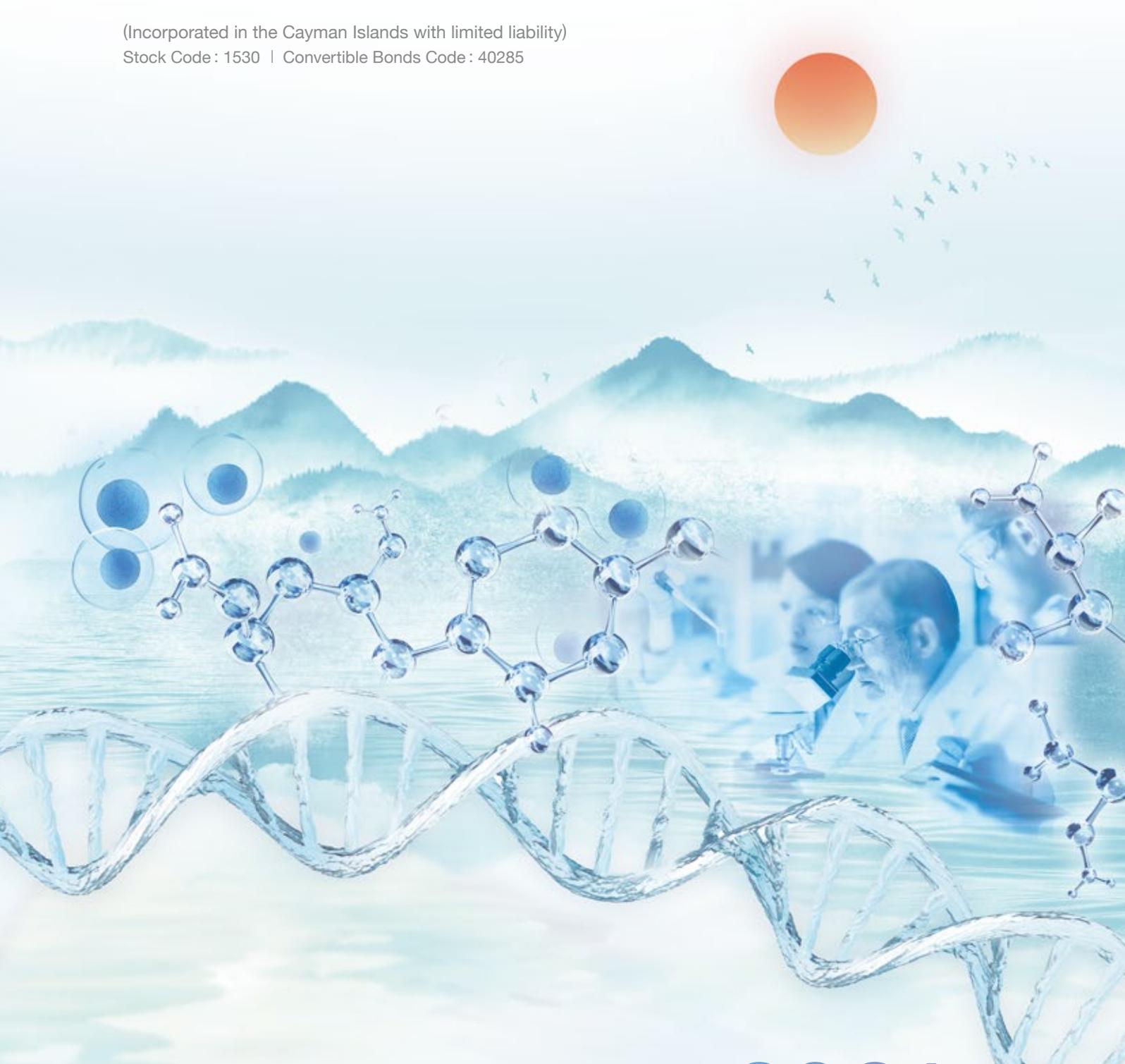




(Incorporated in the Cayman Islands with limited liability)
Stock Code : 1530 | Convertible Bonds Code : 40285



2021

Environmental, Social and Governance Report

2021 Environmental, Social and Governance Report

CONTENTS

3SBIO INC. – 2021 ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT	1
OUR 2021: ACTIVE EXECUTION AND SOLID ADVANCES	2
ESG RATING SCORES	2
ESG WORK HIGHLIGHTS	2
ESG KEY PERFORMANCE IN 2021	3
1 ESG GOVERNANCE SYSTEM	4
1.1 SUSTAINABLE DEVELOPMENT CONCEPT	4
1.2 ESG MANAGEMENT FRAMEWORK	4
1.3 IDENTIFYING MATERIAL ISSUES	6
2 COMPLIANCE	9
2.1 COMPLIANCE & ETHICS	9
2.2 IPR MANAGEMENT AND PROTECTION	14
3 PRODUCT AND CLIENT SERVICE RESPONSIBILITY	15
3.1 PROVIDING HIGH-STANDARD QUALITY PRODUCTS	15
3.2 PROVIDING QUALITY SERVICES TO CLIENTS	22
3.3 RESPONSIBLE MARKETING	23
4 EMPLOYEE DEVELOPMENT RESPONSIBILITY	25
4.1 EMPLOYEE'S RIGHTS, INTERESTS AND WELFARE	25
4.2 OCCUPATIONAL HEALTH AND SAFETY	28
4.3 TALENTS DEVELOPMENT AND RETENTION	30
5 ENVIRONMENTAL PROTECTION RESPONSIBILITY	33
5.1 ENVIRONMENTAL MANAGEMENT SYSTEM	33
5.2 REDUCTION OF POLLUTANT EMISSIONS	34
5.3 ADDRESSING CLIMATE CHANGE	38
5.4 EFFICIENT USE OF RESOURCES	42
6 SUPPLY CHAIN RESPONSIBILITY	43
6.1 SUPPLIER QUALITY MANAGEMENT	43
6.2 SOCIAL AND ENVIRONMENTAL MANAGEMENT REGARDING SUPPLIERS	44
7 SOCIAL CONTRIBUTION RESPONSIBILITY	46
7.1 SUPPORTING HEALTHCARE DEVELOPMENT	46
7.2 ENHANCING ACCESSIBILITY TO MEDICINES AND MEDICAL SERVICES	47
8 PERFORMANCE DATA	50
9 INDEX TO THE ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORTING	
GUIDE OF THE HONG KONG STOCK EXCHANGE	57
10 ABOUT THIS REPORT	59

2021 Environmental, Social and Governance Report

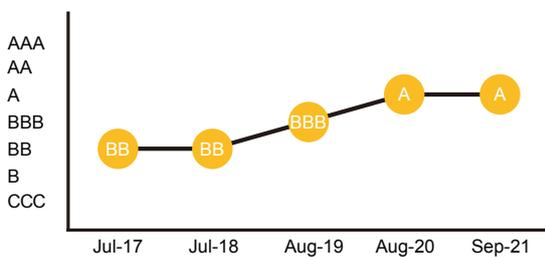
Our 2021: Active Execution and Solid Advances

ESG Rating Scores

As a responsible corporate citizen, 3SBIO Inc. (the “Company” or “3SBio”, with its subsidiaries collectively referred to as the “Group”) makes environmental, social and governance (“ESG”) management a priority of its management efforts and has continued to refine ESG management.

The Group’s ESG achievements have been recognized by society and the capital market. In 2021, the Group’s ESG performance maintained its “A” rating by MSCI, higher than 78 percent of the rated global peers. The Group’s CDP Climate Change Questionnaire 2021 score maintained its “B” rating (management level), outperforming 74 percent of the scored companies worldwide, both of which maintain levels at the head of the industry.

ESG Rating History



ESG Rating history shows five most recent rating actions

ESG Rating Score by MSCI

Response	Year	Status	Score
Climate Change 2021	2021	Submitted	B
Climate Change 2020	2020	Submitted	B
Climate Change 2019	2019	Submitted	B-

Scores in CDP Climate Change Questionnaire

ESG Work Highlights

Governance Improve Internal and External Compliance and Business Ethics Audit Mechanisms

The Group has established a long-term and normalized audit and supervision mechanism, comprehensively advanced the complete integration of internal audit and internal control, and conducted external audits on a regular basis. In 2021, the Group’s Audit Department completed internal audits of a total of 19 processes at four manufacturing bases, including development strategy, sales and receivables, expenses, social responsibility, construction in progress, and research and development, and invited a third party to conduct an independent external audit of the Group.

Social Diversity Management and Evaluation of Suppliers

To enhance the stability of supply and promote the long-term development of suppliers, the Group carries out supplier diversity management and conducts regular evaluations and assessments. In 2021, the Group established a new Material Management Committee to support supplier localization and second supply source development, avoided procurement risks through supplier diversity management; assessed and scored suppliers on product quality and safety, environmental protection and social responsibility, with 80 percent of its suppliers assessed in environmental, labor and ethical aspects.

2021 Environmental, Social and Governance Report

Environment Promote the Effective Implementation of Environmental Objectives

By the end of 2021, the Group has set four quantitative ESG targets at the environmental level covering four areas: water resource utilization, energy utilization, hazardous waste emissions and greenhouse gas emissions. For example, the Group plans to achieve a 30 percent reduction in hazardous waste per revenue unit by 2025 compared to 2018. In 2021, each manufacturing base handed over hazardous waste to qualified institutions for regular treatment and managed through weekly declarations and ledger registration, etc.

ESG Key Performance in 2021

Environmental Performance

Total circulating water amounted to **24,376.00** cubic meters

Greenhouse gas emissions per revenue unit were **8.8** t CO₂/RMB million

Social performance

The coverage of employees training reached 100% **80%** of suppliers accepted evaluation in environment, labor and ethics

Training hours per employee averaged 14.37 hours Charitable donations totaled RMB**40.82** million

1 ESG Governance System

1.1 Sustainable Development Concept

Driven by the mission of “Making innovative biopharmaceuticals within the reach”, the Group has been devoted to seeking pharmaceutical solutions for patient clinical needs. Overcoming challenges without stop, it strives to improve patients’ quality of life with high-quality medicine and contribute to human health benefits.

The Group regards compliance operation as the foundation of its Corporate Social Responsibility (CSR), honoring its commitments to stakeholders, including shareholders, clients and consumers, employees, the public and the community, and the government and regulators. The Group takes active measures to fulfill its CSRs, provides doctors with reliable treatment tools and patients with trustworthy medicines, assists the government in the reform of the health care system, extends care and support to its employees, and brings hope to the patients and their families in poor economic conditions.

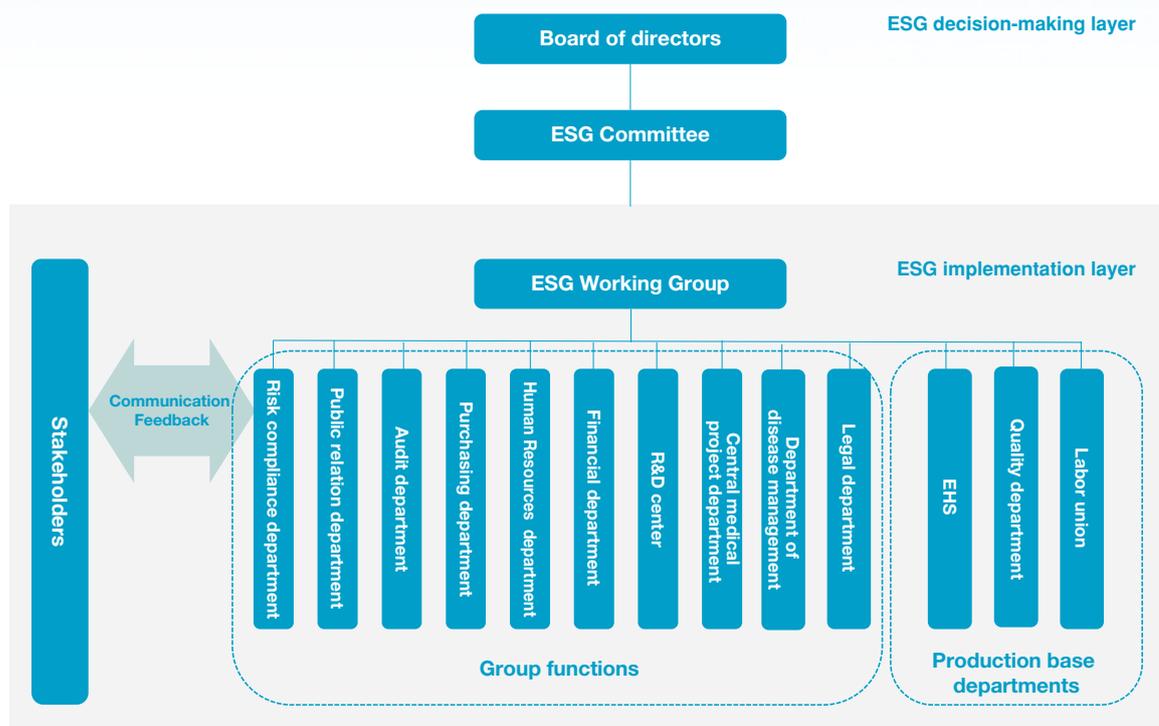


1.2 ESG Management Framework

The Group set up a top-down ESG management framework to ensure efficient implementation of its ESG efforts. The ESG Committee, with the participation of members of the Board of Directors, is responsible for the overall ESG agenda and makes decisions regarding ESG and oversees ESG matters. The ESG Working Group implements decisions and measures under the guidance of the ESG Committee.

2021 Environmental, Social and Governance Report

The goal of the Committee is to establish a sustainable enterprise, promote continuous improvement in the Group's ESG management and performance, enhance the capital market's recognition of the Group's ESG efforts, and become an ESG leader in the biopharmaceutical industry. Powers and duties of the ESG Committee are specified in the *Terms of Reference of Environmental, Social and Governance (ESG) Committee* on the Company's official website.



The Committee is responsible for guiding and reviewing the management of the Group's key ESG issues, including health care accessibility, product quality and safety, human capital development, hazardous waste and emissions, and climate change and carbon emissions. The Committee regularly reviews the Group's performance on key ESG issues, reviews the progress in achieving the goals through quarterly reports, interim reports, annual reports and special reports, provides recommendations on actions to be taken to achieve the goals, and reports regularly to the Board of Directors on the progress of management to promote continuous improvement of the Group's ESG management performance. The Board of Directors has management and oversight responsibility for the above ESG issues and provides advice and necessary support on actions to be taken to achieve the goals.

The Group has set goals for 2025 in respect of the discharge of hazardous wastes, reduction of greenhouse gas emissions, and improvement of energy utilization efficiency. The Group's Board of Directors exercises oversight responsibility for the Group's ESG performance and the performance-related pay of Directors is linked to key ESG indicators of concern to the Group.

2021 Environmental, Social and Governance Report

1.3 Identifying Material Issues

Communication with Stakeholders

The Group believes that understanding stakeholders' concerns and focuses is of great significance to improving CSR management. Therefore, it has been implementing the principle of stakeholder participation throughout its management of social responsibilities.

Stakeholders' Key Concerns and Responses

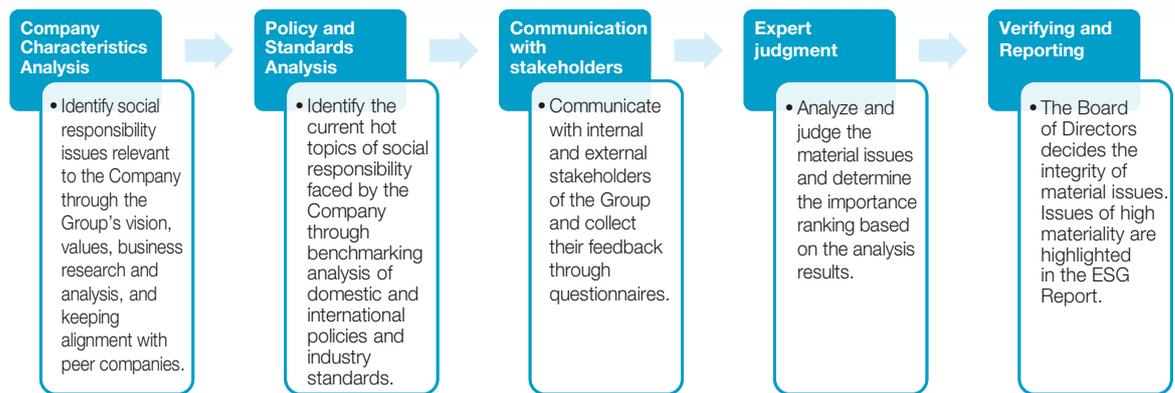
Key stakeholders	Issues of concern	Communication and responses
Investors	Compliance operation Business ethics Product safety and quality Product innovation, R&D and health care accessibility	Information disclosure as a listed company Shareholders' meetings Investors' meetings
Employees	Employee's safety and quality Employee's rights, interests and welfare Human capital development	Labor Union and Congress of Employees Environment, Health and Safety (EHS) management system Regular training, performance assessment and promotion
Clients and consumers	Product safety and quality Product pricing and availability Compliance operation Responsible marketing	Quality management system Standardized medication training Client service system Sales Force Effectiveness (SFE) management system
Government and regulators	Compliance operation Business ethics Product safety and quality Community and public welfare	Establishment and management of compliance system Participation in and giving suggestions on policy making Scientific and technological innovation Intellectual property rights (IPRs) protection
Suppliers	Product safety and quality Product innovation, R&D and health care accessibility Intellectual property rights (IPRs) protection Client information and privacy protection Emissions management	Standardized supplier management system Transparent and fair procurement Coordinated development
Public and community	Community and public welfare Climate change mitigation and adaptation	Various programs for public welfare Environmental impact analysis, plan and control

2021 Environmental, Social and Governance Report

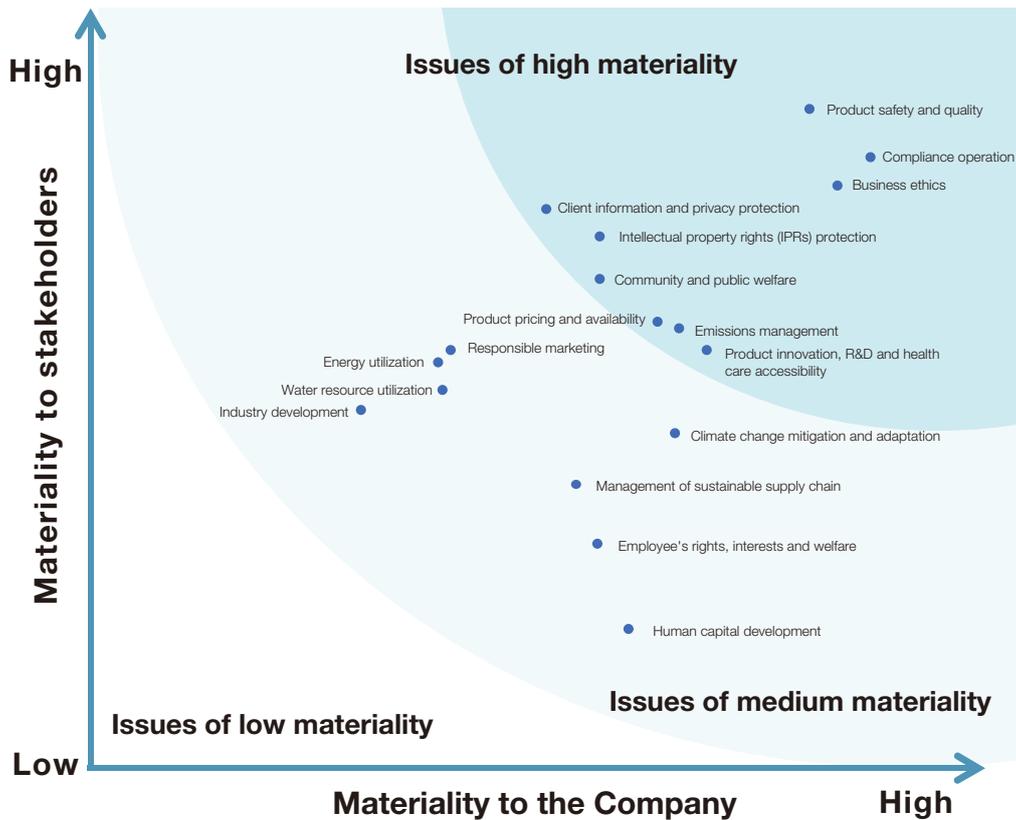
Analysis of Material Issues

In 2021, based on the Group's vision, values and industry characteristics, the Group considered domestic and international industry policies and standards, kept alignment with peer reports, and screened material issues and their importance through communication with stakeholders and expert judgment.

Procedure for the Analysis of Material Issues



Matrix of Material Issues



2021 Environmental, Social and Governance Report

The changes in the Group's Material Issues in 2021 are specified as follows:

Description on Changes of Material Issues

Material Issues in 2019	Material Issues in 2021	Descriptions
Product quality and safety Client satisfaction and communication	Product quality and safety	At the Group, "Client satisfaction and communication" is more an issue related to pharmaceutical quality and safety, and therefore can be combined with "Product quality and safety"
Product innovation and R&D	Product innovation, R&D and health care accessibility	Rewording to show that product innovation and R&D aims to improve health care accessibility
—	Intellectual property rights (IPRs) protection	A material issue for the industry
Eco-friendly products	—	Issues about eco-friendly products are of low materiality in the pharmaceutical industry
Employee rights and interest protection	Employee's rights, interests and welfare	The original three issues refer to employee's rights, interests and welfare and safety, and are all compliance-oriented and directed at the same stakeholders
Employee communication and employee benefits		
Employee health and safety		

2 Compliance

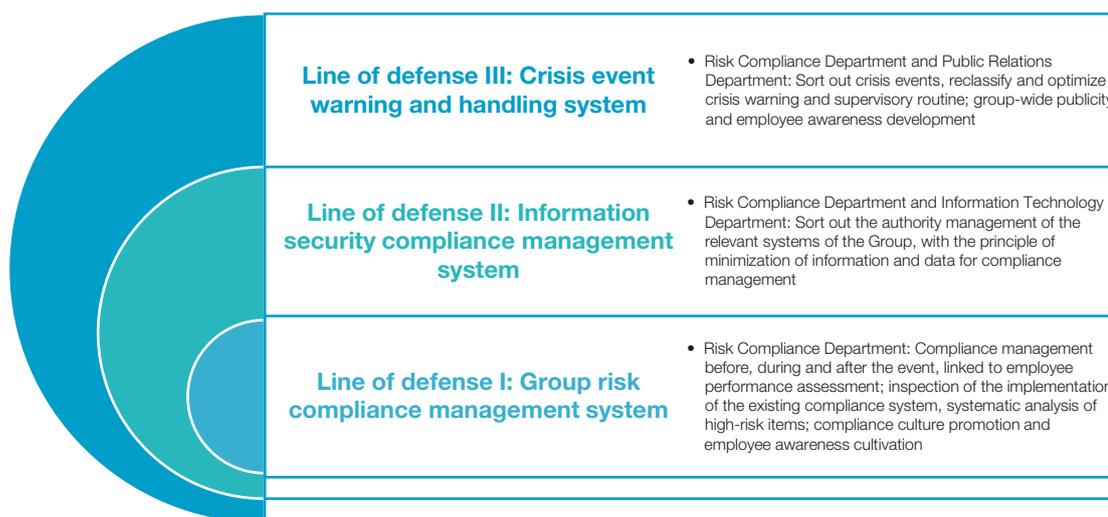
2.1 Compliance & Ethics

The Group has put in place and constantly improved a well-established system for risk identification and compliance management. It introduced the *3SBio Compliance Management Regulations*, setting out compliance requirements for each section of business operation. The *Anti-Corruption and Anti-Bribery Policies* in the *3SBio ESG Code of Conduct* require compliance by all employees, Directors and third-party representatives. A facilitation payment is explicitly prohibited.

In 2021, the Group updated the *3SBIO Procurement Regulations for Marketing Meeting* to clarify the management specifications for meeting procurement of the marketing team and added internal periodic audit requirements and penalty provisions. The Group has newly established the *3SBIO Personal Information Protection Policy* and the *Guidelines for 3SBIO OTC (Over-the-Counter) Promotion Practices and Financial Reimbursement* to set internal management requirements and compliance requirements for personal information protection and OTC drug promotion, respectively.

Under the safeguard of internal systems, the Group has established three lines of defense against compliance risks, including the overall risk management of the Group, information security compliance management and early warning and handling of crisis events, and enhanced compliance risk response capability through internal and external audits, compliance and anti-corruption training, the establishment of supervision and reporting mechanism and supplier anti-corruption management.

3SBIO Compliance Risk Defense Lines



2021 Environmental, Social and Governance Report

Audit Mechanism

The Group is committed to establishing a long-term and regular audit and supervision mechanism and has formulated the *3SBio Group Internal Audit System*, *3SBio Group Work Flow for Internal Audit* and other systems to complete a full internal audit procedure once every three years to improve internal control system and business management and forestall business risks.

In 2021, based on the *Three-Year Full In-House Audit Plan for 2021–2023*, the Group's Audit Department completed audits of a total of 19 processes at all manufacturing bases, including development strategy, anti-corruption and ethics, responsible marketing, social responsibility, construction in progress, and research and development. A total of 71 problems were identified, 13 management recommendations were made, and three employees who failed to perform their duties were handled. The problems were all fully implemented and rectified, and the Group's compliance operation capability was effectively improved.

Meanwhile, the Group's Audit Department has fully implemented the establishment of a mechanism for the full integration of internal audit and control and conducted audit analysis, special audits, audit supervision and audit evaluation based on audit findings.

The Operation Process of the Mechanism Integrating Internal Audit and Internal Control



2021 Environmental, Social and Governance Report

In respect of external audits, the Group engaged third-party representatives for or on behalf of the Group to provide services in the normal course of business. In 2021, a third party conducted an independent external audit of the Group in accordance with the provisions of relevant laws and regulations and regulatory requirements and issued a report in accordance with the regulatory timeline.

Compliance and Anti-Corruption Training

The Group has set up management systems, including the *3SBIO Group Anti-Corruption and Anti-Bribery Policy*, which sets out clear anti-corruption, anti-bribery and anti-money laundering requirements and regulates employee hospitality and charity practices. Under the system's guidance, the Group has established and strictly observed the compliance training system. The Risk Compliance Department makes yearly plans for compliance training targeting the entire workforce.

All employees should take part in regular compliance training and take tests after they are recruited. Directors, full-time and part-time employees and contractor employees should take regular anti-corruption and business ethics training. The Group has launched extra training programs for major departments, including the procurement, finance and manufacturing bases and the frequency of such training was raised to once a month. In 2021, the Group conducted group-wide compliance culture promotion through activities such as Compliance Culture Week, Spring Shoot Project and Compliance Micro Class.

In addition, the Group enhanced employees' compliance awareness through Risk-Based Integrated Promotion Conduct Appraisal (IPCA) and Integrity Ambassador Initiative, among other measures. Employee's participation in compliance training is recorded in the IPCA for performance assessment every two months.

2021 Environmental, Social and Governance Report

3SBIO Compliance Training Activities in 2021 (Partial)

Activity	Contents	Effectiveness
Compliance Culture Week	Promote the spirit of compliance among employees through compliance quizzes, compliance terminology explanations, and online compliance knowledge contests.	<ul style="list-style-type: none"> • 330 attendances participated in the offline activities • 299 attendances participated in the online interaction
Spring Shoot Project	Conduct case training such as Policy Interpretation, Legal Report, and Exchange Life to convey compliance requirements and prompt compliance ambassadors to provide in-depth training for employees.	<ul style="list-style-type: none"> • 10 online and offline training sessions • In total 215 attendances were trained
Speech Contest	Encourage business team members to present compliance problems and solutions through presentations based on their actual experiences.	<ul style="list-style-type: none"> • 55 employees participated in the preliminary round • 9 employees participated in the final round
Compliance Micro Class	Use the enterprise OA compliance column to publish articles, for exciting interpretations and case sharing of new industry policies and regulatory developments.	<ul style="list-style-type: none"> • 8 articles were posted
Compliance Story	Encourage employees to share their compliance stories in the Compliance Story column and select the best articles for posting.	<ul style="list-style-type: none"> • 141 articles were received • 11 articles were posted

2021 Environmental, Social and Governance Report

Supervision and Reporting System

The Group has put in place a supervision and reporting system. The Group's Risk Compliance Department has put through multiple reporting channels via e-mails and telephones, inviting real-name or anonymous tip-offs about existing or suspected irregularities from employees, third-party representatives and business partners.

The Risk Compliance Department will report the tip-offs to the Compliance Committee. A case will be filed and investigated in accordance with the *3SBio Group Regulations for the Group's Internal Compliance Investigation*. A detailed reply and confirmed investigation report will be offered to the informer (including anonymous informers) within one month, who will be protected with the following measures:

- The informer's personal information and the tip-offs will be kept completely confidential. The Group will mete out harsh punishment to those breaking confidentiality rules and hold them accountable in accordance with the law; and
- Those retaliating against informers or related witnesses will face the consequences based on the severity of their behaviors, including but not limited to removal from a post, termination of labor contracts and transfer to judicial organs for handling.

Anti-Corruption Management of Suppliers

Through the *3SBio Group Supplier Management System* and supplier management system, the Group conducts anti-corruption management on suppliers from three aspects, namely: management requirements, assessment and supervision, and training and motivation.

 Clarify management requirements - Conduct risk assessment of suppliers when they are admitted and require them to sign the <i>Anti-Corruption and Anti-Bribery Commitment</i> in the <i>Supplier Compliance Statement</i> - <i>Supplier Compliance Statement</i> provides hotlines and e-mails for tip-offs, encouraging suppliers to report any corruption acts that they spot. If a supplier fails to comply with any term in the statement, the Group may terminate the cooperation with the supplier.	 Assessment and supervision - In the day-to-day management process, based on the compliance risk assessment at the time of admission and the implementation of the service content of the supplier to carry out graded management - Conduct regular annual spot-check audits of high-value, high-risk suppliers	 Training and motivation - Conduct training at the anti-corruption level to raise awareness of compliance and ethics among suppliers
--	---	---

2021 Environmental, Social and Governance Report

In 2021, the Risk Compliance Department launched compliance training for 15 marketing suppliers on two major topics according to the Group’s plan for compliance training for suppliers: anti-corruption and anti-bribery and prohibition of “conflict of interest” behavior. The training explained 3SBio’s guiding principles and requirements for compliance management, emphasized major matters of attention in procurement, expounded on the concept of conflict of interests and corresponding legal consequences, and introduced channels for reporting irregular acts and wrongdoings.

2.2 IPR Management and Protection

Upholding the principle of “Innovation-driven research and development, future-oriented management” in IPR management, the Group has put in place the *Guidelines for IPR Management*, the *Guidelines for Commercial Secrets Management* and the *Manual for Business IPR Management*. While effectively managing and protecting IPRs, including patents, trademarks and commercial secrets, the regulations have protected the Group’s competitive advantages and brand reputation and prevented infringement on others’ IPRs. On the basis of implementing the Group’s regulations, Sunshine Guojian and NERC introduced the *Guidelines for Patent Management*, the *Guidelines for Trademarks Management* to manage their own IPRs better.

The Group carries out due diligence on IPRs when reviewing projects. It checks the patent application and legal status of products or key technologies involved in a new project before the project is launched. It then issues a patent investigation report and alerts as to risks. After a project is launched, it will keep tracking the patent conditions of products or key technologies involved in order to protect the Group’s IPRs. As of the end of 2021, the Group’s patent and trademark applications and licenses are shown in the table below, with patents including domestic, foreign and PCT (Patent Cooperation Treaty) international application data and trademarks including domestic and foreign data.

Field	Progress in 2021
Patents	<ul style="list-style-type: none">• 91 patent applications filed• 27 patents granted
Trademark	<ul style="list-style-type: none">• 21 trademark applications filed• 5 trademarks registered

3. Product and Client Service Responsibility

3.1 Providing High-Standard Quality Products

The Group's main marketed products and their efficacy are shown in the table below. The product candidates in the pipeline cover areas including nephrology (e.g., SSS06 NuPIAO), oncology (e.g., 304R anti-CD20 antibody), autoimmune and others (e.g., 301S TNFR-FC fusion protein), ophthalmology (e.g., 601A anti-VEGF antibody) and skin diseases (e.g., MN709).

The products are mainly sold to hospitals and other medical institutions as clients. As of 31 December, 2021, the Group supplied products and services to over 2,500 Grade III hospitals and over 6,000 Grade II or lower hospitals and medical institutions across all provinces, autonomous regions and special municipalities in Mainland China.

Product	Indications
TPIAO	Treating chemotherapy-induced thrombopenia in patients with solid tumors and immune thrombocytopenia
EPIAO	Treating anemia caused by chronic kidney disease, anemia caused by chemotherapy and the reduction of allogeneic blood transfusion in surgery patients
YISAIPU	Treating rheumatoid arthritis, ankylosing spondylitis and psoriasis
SEPO	Treating anemia caused by chronic kidney disease and chemotherapy
Cipterbin	Treating HER2-positive metastatic breast cancer in combination with chemotherapy
Mandi	Treating male pattern alopecia and alopecia areata
Xenopax	Preventing acute rejection after renal transplant
Byetta	Improving the glycemic control in patients with type 2 diabetes
Qiming Keli	Treating type 2 diabetic retinopathy
Aiyishu	Treating iron-deficiency anemia
Sparin	For prophylaxis and treatment of deep vein thrombosis and prevention of clotting during hemodialysis

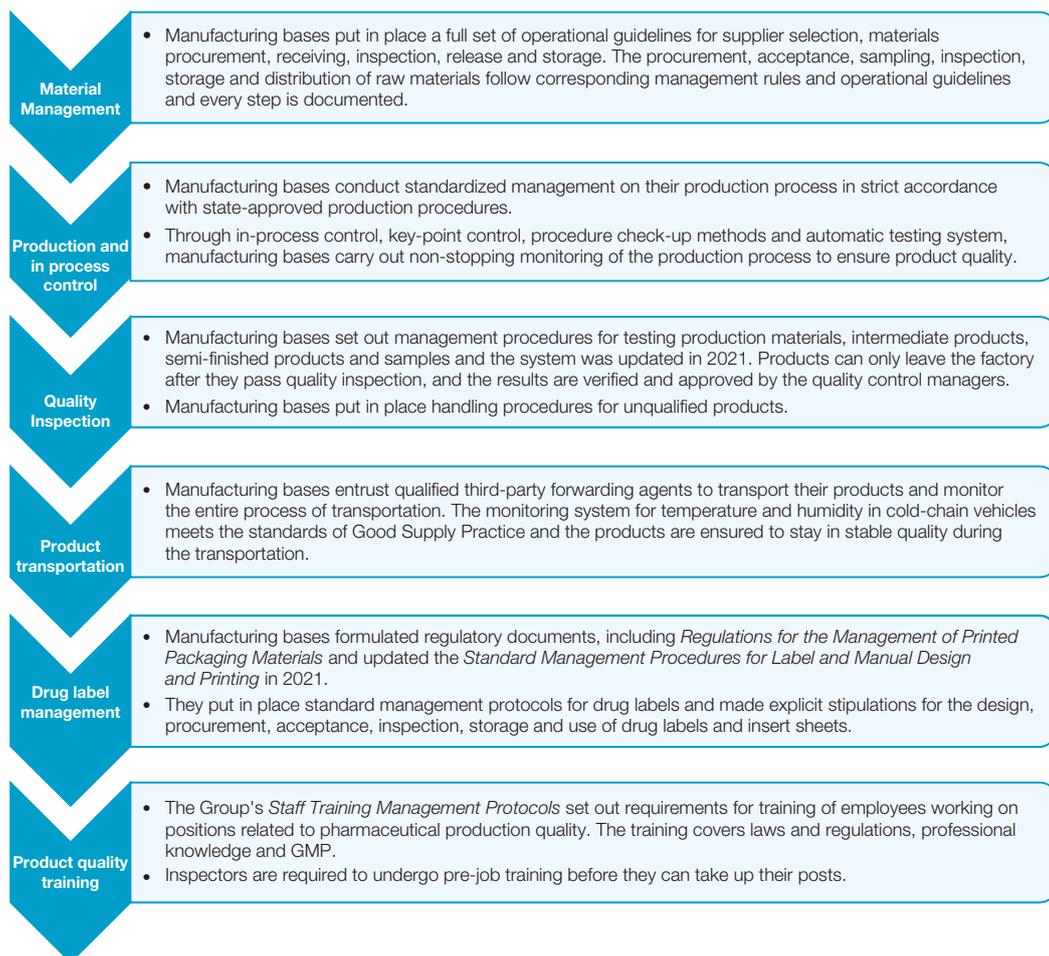
2021 Environmental, Social and Governance Report

Quality Control System

The Group implements a set of unified quality management standards and has put in place a quality control system covering the entire product life cycle from raw materials to product R&D, manufacturing, testing, product release, circulation and recall. In 2021, China enacted the *Regulations for the Administration of Post-Marketing Drug Changes (Trial)*, *Technical Guidelines for Pharmacological Change Studies of Marketed Chemical Drugs (Trial)*, *Technical Guidelines for Clinical Changes of Marketed Chemical Drugs and Biological Products* and *Good Pharmacovigilance Practice*. Against such a backdrop, the Group looked at its deficiencies and improved its internal management procedure to ensure conformity with the prevailing quality standard system.

The Group's quality control system has been certified at home and abroad. All our pharmaceutical subsidiaries have acquired the *People's Republic of China Good Manufacturing Practice (GMP) 2010* certification. Further, Shenyang Sunshine and Sunshine Guojian have received PIC/S (Pharmaceutical Inspection Co-operation Scheme) certification by countries including Turkey.

Product Quality Control System



2021 Environmental, Social and Governance Report

In 2021, the Group passed the on-site verification for registration of some products and of change in the manufacturing site and GMP compliance inspection. In addition, the Group has accepted flight inspections, adverse drug reaction reporting and monitoring inspections, and special inspections of injectables. The Group has continuously improved its quality management capabilities through external audits.

Apart from official GMP reviews annually conducted by authorities at home and abroad, the Group's manufacturing bases have been carrying out internal reviews, including quarterly quality management review, annual self-inspection and random internal quality audits to ensure effective operation and continuous improvement.

In 2021, the Group carried out product quality training for all employees except sales staff, with an average of 18 times per month and 219 sessions covering 1,865 participants. The training contents include law and regulation training, quality management documents before effective training, laboratory safety training and testing instrument practical training, etc. The training has achieved the desired effect, and the quality management consciousness of employees has been effectively improved.

Quality Inspection

The manufacturing bases of the Group have put in place the *Procedures for Quality Inspection Management* and the *General Guidelines for Inspection*. In 2021, the Group updated a number of procedural documents, including the *Standard Management Procedures for Inspection Data and Audit Trail* and *Standard Management Procedures for Reporting Inspection Results*, which govern internal inspections of production materials, intermediate products, semi-products and samples. According to the *Material Release Standard Management Regulations*, *Product Release Standard Management Regulations* and other documents, products can only leave the factory after they pass internal quality inspection, and the results are verified and approved by the quality control managers. In 2021, the Group completed the internal inspection of 7,937 batches of raw and auxiliary materials and verification of 203 devices and processes.

2021 Environmental, Social and Governance Report

The Group has comprehensive internal inspection capabilities and can carry out testing at all stages from material incoming to finished products leaving the factory, including raw and auxiliary material inspection, packaging material inspection, product testing, stability investigation, sample retention observation and methodological verification. Our quality control department has sections such as the material room, product room, microbiology room, and new product room. The laboratory is set up with an instrument room, physical and chemical laboratory, stability investigation room, and microbiology laboratory that meet GMP requirements.

- | | |
|--------------------------|---|
| Sunshine Guojian | <ul style="list-style-type: none">• Possess the measurement certification of the inspection and testing agency recognized by the China National Institute for Food and Drug Control and have the ability to develop and test the whole process analytical methods for antibodies• Possess the ability to test various samples, method development and validation for product inspection. Inspection items include physical and chemical examination, identification, content, purity, activity, process-related impurities, microorganisms and other quality attributes; raw and auxiliary materials, packaging materials, process water, environmental monitoring and other related testing |
| Shenyang Sunshine | <ul style="list-style-type: none">• Possess the ability to analyze and test recombinant protein biological products, including biological activity determination, protein purity test, protein content determination, identification of protein drug physicochemical properties, residual impurity test, glycosyl analysis, safety test, etc. |
| Sciprogen | <ul style="list-style-type: none">• Possess the ability to test the whole process of intermediate products and finished products, including human erythropoietin injection, nadroparin calcium injection, low-molecular-weight heparin calcium injection, etc. |

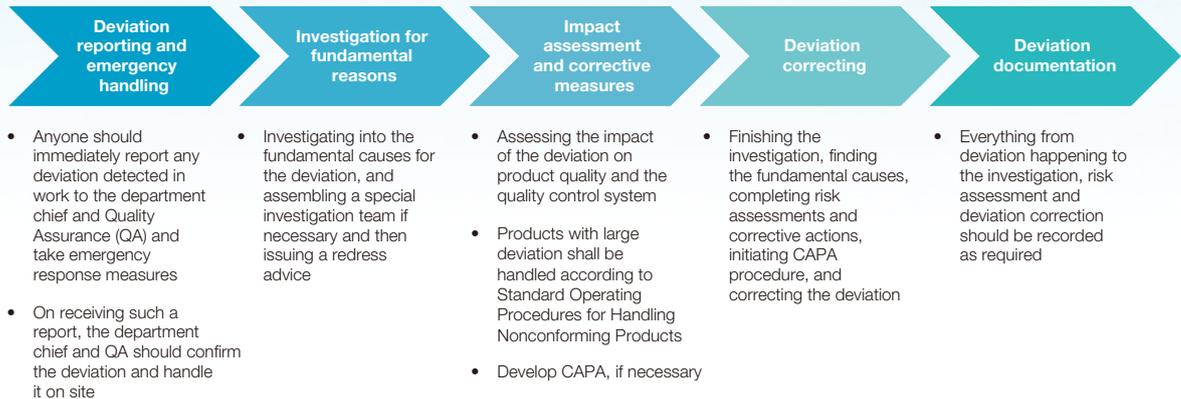
Corrective and Preventive Measures

In 2021, manufacturing bases updated its systems such as the *Standard Handling Procedure for Quality Deviation* and the *Standard Corrective and Preventive Action (CAPA) Procedure* to carry out CAPA and preventive inspection in case there are deviations, self-inspections and external audits in the production process.

The *Standard Handling Procedure for Quality Deviation* regulates the management of deviations in the production process, ensuring that any deviation should be reported, recorded, evaluated, investigated and disposed of according to the prescribed procedures. All deviations found should have clear explanations or descriptions and should be thoroughly investigated and properly handled. Only after meeting release standards as verified by the assessment can products leave the factory. Otherwise, they will be handled according to *Standard Operating Procedures for Handling Nonconforming Products*, and if necessary, corrective and preventive measures will be taken to prevent the recurrence of such deviations.

2021 Environmental, Social and Governance Report

Deviation Handling Procedure



The Group has formulated the *Standard Management Procedures for Nonconforming and Waste Products*, *Standard Procedure for Do-Over Operations* and *Standard Procedure for Changes and Returns*. Nonconforming products in the deviation processing shall be reproduced, scrapped, changed or returned through the *Standard Operating Procedures for Handling Nonconforming Products*. The personnel of the quality department of each base shall monitor the whole process of processing nonconforming products.

Pharmacovigilance System

Pharmacovigilance (PV) and risk management represent an important section of the life-cycle risk management of products. To fulfill our promise to safeguard patients' safety, the Group has formulated *Pharmacovigilance Management Procedure* and *Pharmacovigilance Management System* applicable to all employees of the Group and all manufacturing bases to build and improve its PV system in line with regulations and guidelines, including *Regulations on Adverse Drug Reaction Reporting and Surveillance* and *Notice on Direct Reporting of Adverse Reaction by Marketing Authorization Holder*.

2021 Environmental, Social and Governance Report

In 2021, the Group established the 3SBIO Pharmacovigilance Management Committee and the Pharmacovigilance Department to build three major pharmacovigilance systems covering pharmacovigilance operations, pharmacovigilance training and drug safety monitoring and to establish and improve the Group's pharmacovigilance system from new drug development to the entire life cycle of a drug after its launch. Each manufacturing base established its own Pharmacovigilance Department and Pharmacovigilance Committee and reported to the Group's Pharmacovigilance Management Committee and Pharmacovigilance Department.

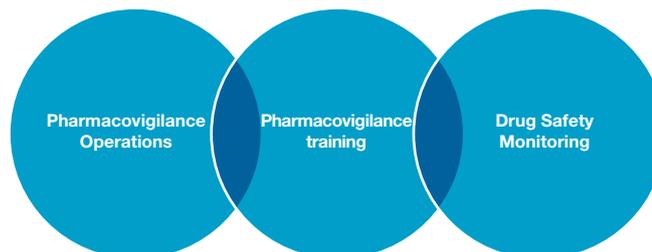
Drug Safety Management Committee

Responsibilities: Responsible for the study and judgment of major drug risks, the handling of major or emergency drug incidents, risk control decisions and other major matters related to pharmacovigilance.

Pharmacovigilance Department

Responsibilities: Responsible for the effective operation and maintenance of the pharmacovigilance system, ensuring compliance of pharmacovigilance activities throughout the life cycle of the drug.

Three Main Pharmacovigilance Systems



In terms of pharmacovigilance operations, the Group has established effective mechanisms in new drug development and post-marketing phases to fully ensure compliance and high quality of pharmacovigilance work.

- In the new drug development phase, the Pharmacovigilance Department has formulated a strict risk control plan for each clinical trial and strictly controlled the potential risks of safety work during clinical trials through timely collection and reporting of safety reports and timely revision of clinical trial protocols in response to safety issues.
- In the post-marketing phase, the Group has established a comprehensive adverse reaction collection channel for physicians, pharmacists and patients to collect information on adverse reactions in clinical use, post-marketing research projects or academic literature through a 24-hour pharmacovigilance hotline and public mailboxes and to report them in a compliant manner. The Group requires the Pharmacovigilance Department to report immediately events involving death or suspected death and adverse drug events in groups; and within one working day for other events.
- During the whole safety monitoring process, the Group focuses on analyzing and assessing each monitoring report to improve the overall safety level of drug use.

2021 Environmental, Social and Governance Report

Procedures for Handling Drug Adverse Reaction Incidents



In terms of pharmacovigilance training, the Group has established a pharmacovigilance training system to ensure that employees involved in pharmacovigilance activities receive training on pharmacovigilance basics and regulations, job knowledge and skills, and evaluated the training results in the form of evaluation or assessment. In 2021, the Pharmacovigilance Department, together with the Human Resources Training Department and the Information Technology Department, organized the training on the *Good Pharmacovigilance Practices (GVP)*, with a total of 5,208 participants and increased awareness of adverse event reporting among employees.

In addition, the Group conducted regular drug safety training for marketing line staff and signed pharmacovigilance agreements with distributors to ensure that they strictly complied with the requirements of the Group for adverse reaction/event monitoring and collection.

In terms of drug safety monitoring, the Group has configured an advanced electronic pharmacovigilance system to monitor and manage the safety data of product candidates in the pipeline and post-marketing drugs throughout the process to ensure safe drug use by patients.

Product Recall Mechanism

Each manufacturing base has introduced *Procedure for Products Recall* and *Standard Management Regulations for Recall Management*, specifying levels of product recall and corresponding workflows, in line with laws and regulations, including *Regulations on Drug Recall* and *Guidelines for Drug Production Quality Management (2010)* and *Guide to Good Manufacturing Practice for Medical Products by European Union*.

2021 Environmental, Social and Governance Report

The Group conducts drill product recalls at least once every two years. In 2021, the Group and each manufacturing base carried out a drill recall, including the initiation of recall, transportation arrangement, receipts, isolation, investigation, transfer or destruction. The results such as the recall time limit and the number of recalled products met expectations, fully demonstrating the effectiveness of the recall system.

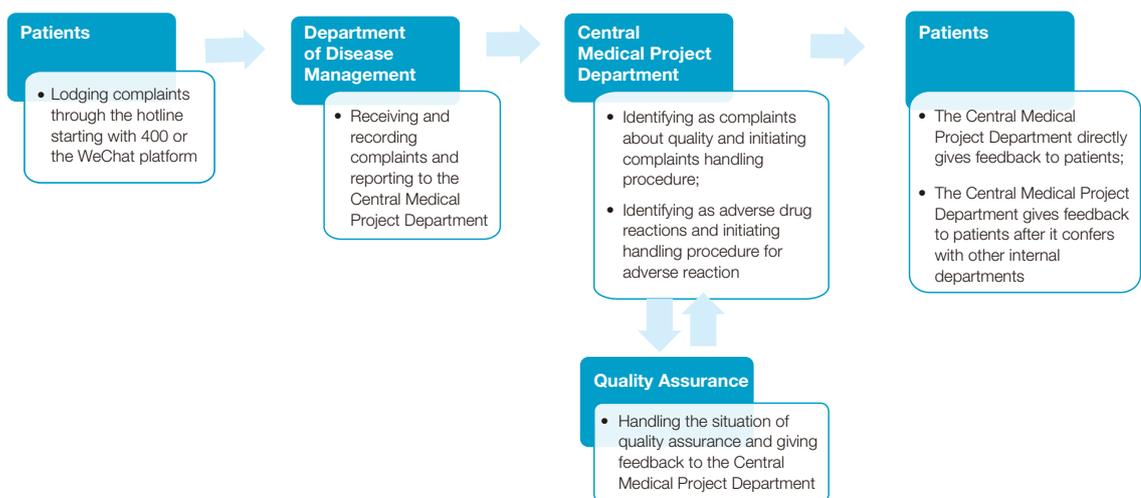
3.2 Providing Quality Services to Clients

Client Service System

The Group values services for clients and patients. With a well-established client service system made up by year-round 24-hour service provided by a hotline starting with 400, the WeChat platform and a third-party calling center as well as regular patient visits after medication, the Group offers timely and efficient solutions.

Each manufacturing base updated the *Standard Management Procedures for Handling User Complaints*, *Standard Management Procedures for Complaint Management*, *Complaint Management Procedures* to standardize the investigation, handling and analysis procedures of customer complaints. Immediately upon receiving client complaints, the Group starts in-house communication and works to offer a satisfactory reply and solution to clients.

Procedure for Handling Client Complaints



2021 Environmental, Social and Governance Report

Customer Privacy Protection

To protect the privacy of clients and consumers, the Group has put in place the *Code of Conduct and Ethics for Employees*, the *Regulations for Personal Information and Data Safety Management* and the *Guidelines for Commercial Secrets Management*, and issued the *Group Information System and Network Security System* and *Clinical Information System Management System* in 2021, requiring every employee to comply with the confidentiality principle when it comes to non-public information about clients, employees and agents.

Necessary client information is collected and managed through the Sales Force Effectiveness (SFE) system, whose access is strictly restricted. Users of different hierarchical levels only have limited access to the data in different visual forms. Any information regarding businesses, hospitals or other clients can only be viewed and used in the system. Downloads of the information in any form are strictly prohibited. In 2021, the Group further upgraded its system and network virus protection system and conducted periodic information security inspections to ensure client information security. All employees of the Group are required to sign and strictly abide by the confidentiality agreements.

During the year ended 31 December 2021 (the “**Reporting Period**”), no confirmed client information leakage, theft or loss happened in the Group.

3.3 Responsible Marketing

Upholding the business philosophy of integrity, standardization, transparency and fairness, the Group promotes drugs and medicine in an ethical, scientifically based and objective manner. It has been faithfully observing national laws and regulations in product tags and advertisement and ensured that regulators, medical professionals, and patients have access to authentic and rigorous products and academic information. The Group formulated the *Procedure for Approving Promotional and Educational Materials*, requiring that all information for marketing or statements should be accurate, clear and transparent.

Three Main Principles of Marketing

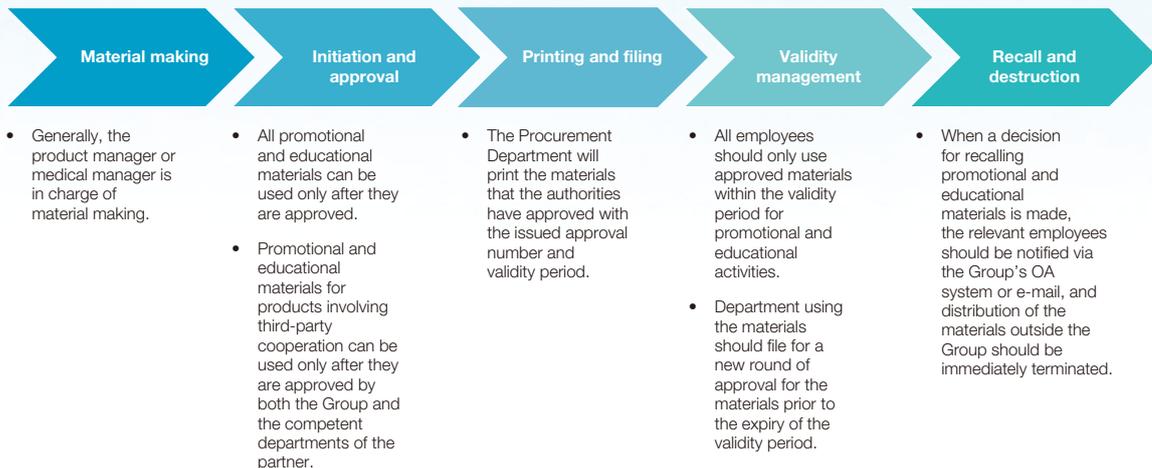
Accuracy: Promotional information or statements should be in line with the tags approved by the government, and no advertising or promotional materials may be used without proper authorization;

Cleanness: All product information for public communication should be complete and clear and contain no misleading narrative;

Transparency: Full description of product safety should be offered; there should be no exaggeration of a product or technology or hiding of potential risk to prevent misunderstanding in any form.

2021 Environmental, Social and Governance Report

Procedure for Approving Promotional and Educational Materials



In 2021, the Group updated the regulations on responsible marketing management in the *3SBio ESG Code of Conduct* to clarify the coverage and frequency of responsible marketing training, including: for all new employees, at least three training sessions on responsible marketing topics such as product promotion specifications within 90 days after joining the Group; for new regional managers and area managers, at least two to three training sessions per year; for all employees in the marketing line, at least one training session per year. In 2021, the Group's Risk Compliance Department conducted responsible marketing training through offline or online meetings with a total of 12,159 participants. In addition, Compliance Ambassadors conducted nearly 600 regional training sessions with a total of 9,412 attendees.

The Group's Audit Department conducted internal supervision and audits on "responsible marketing," which covers the development of marketing strategies, implementation of marketing efforts, and training of marketing personnel. The Group conducted audits on all employees of the Group's Marketing Department to check whether there were any irregularities in marketing activities, such as the use of improper advertising terms and excessive marketing resulting in the transfer of marketing expenses to patients. The frequency of audits is twice a year, and the results of all audits in 2021 were that no irregularities occurred.

4 Employee Development Responsibility

4.1 Employee's Rights, Interests and Welfare

Employee Recruitment and Basic Rights and Interests

The Group abides by laws and regulations in recruiting the workforce and has signed labor contracts with all employees in accordance with laws and regulations. It regulates recruitment, working hours, employee promotion, remuneration, welfare and diversity, among others, through corporate mechanisms including the *Employees Manual*, the *Guidelines for Employee Dismissal*, and the *Guidelines for Employee Attendance and Leave*. It has faithfully followed the principle of employment equality and ensured that no employee is discriminated against due to their race, religion or gender. The Group also emphasizes respecting and protecting employees' personal privacy. It verifies job candidates' age and makes sure no child labor or forced labor is used. If any non-compliance incident occurs, we will take legal action to deal with it.

Overview of Employee Recruitment and Their Basic Rights and Interests

Recruitment, dismissal and promotion	Working hours and leaves	Remuneration and welfare
<ul style="list-style-type: none"> • Recruitment: The Group follows the principle of employment equality and prohibits the use of child labor and forced labor. • Dismissal: The Group introduced the <i>Guidelines for Employee Dismissal</i> to regulate and improve management on employee dismissal. • Promotion: Employees will receive their year-end bonus or get promoted or demoted based on the result of their performance evaluation; the Group offers a clear career growth path to employees in terms of professional development and management development based on their personal willingness. 	<ul style="list-style-type: none"> • Working hours: Employees of standard working hours work 40 hours a week; employees of comprehensive working hours work and rest according to the actual situation of their departments. • Overtime: Employees can apply for compensatory leave accordingly if they have overtime work. • Leave: The Group provides paid annual leave, marriage leave, bereavement leave, maternity leave, sick leave, etc., in accordance with national regulations. 	<ul style="list-style-type: none"> • Remuneration: The payments are in line with laws and regulations; implementing a payment system combining employees' position, performance and competence; researching remuneration and welfare provided by peer pharmaceutical companies and those in other industries to provide a reference for employees' payment adjustment; offering personalized remuneration adjustment to outstanding employees. • Commercial insurance: The Group provides all employees aged 18 to 60 with commercial policies, including accident insurance, critical illness insurance and insurance for out-patient and hospitalized services. • Enterprise annuity: Sunshine Guojian has established an enterprise annuity system.

In addition, the Group provides commercial insurance for regular employees, retired-and-rehired employees and dispatched employees, including employee accidental death and disablement, death by disease, accidental medical treatment, critical illness insurance, outpatient and inpatient medical service insurance and maternity benefit insurance coverage for women. The Group also provides accidental health insurance for part-time employees.

2021 Environmental, Social and Governance Report

With the release of the *Personal Information Protection Law* in 2021, the Group appointed the Human Resources Department to participate in the special training on *Management of Employees' Personal Information under the Personal Information Protection Law*, including the key points of compliance in the process of corporate employment and the protection of employees' personal information. After the training, the Human Resources Department further improved the systems and processes to ensure the legal compliance of the Group's information processing in the employment process and protect employees' personal rights and interests.

In 2021, in response to the national policy of helping the disabled, the Group cooperated with the China Disabled Persons' Federation and third-party suppliers to build a legal employment system for the disabled and assume more corporate social responsibility.

3SBIO Employment Project for the Disabled (Phase I)

Project duration: June 2020–May 2023

Employee: People with disability certificate

Employment: Since 2020, the Group has placed approximately 97 disabled persons in employment and has provided comprehensive protection for each disabled person in terms of wages and social security in the course of employment in strict accordance with labor laws.

Employee Communication and Care

The Group has built diverse platforms for democratic communication for employees. It has established Employees' Congress and online communication platforms and employee grievances channels to ensure employees' rights to know, participate, express and supervise. All manufacturing bases have formed labor unions. The Group has negotiated and signed collective contracts, payment collective negotiation agreements and the *Special Agreements for Protecting Female Employees* with labor unions.

The Group has established a comprehensive employee grievance mechanism, with each department establishing and standardizing the relevant grievance process. In addition, the Group will let the employees know the grievance mechanism and channels during new employee training. In case of compliance problems, they may report the problem to their superiors, labor unions, human resources and compliance department; In case of incidents that may be suspected of disciplinary violations, they may report the problem to the audit department via OA, email, phone or to the audit department.

2021 Environmental, Social and Governance Report

The Group will actively conduct investigations based on the incidents reported or appealed by employees to ensure the objectivity and impartiality of the investigations, instead of evading the conflicts and focuses involved, face up to the problems and resolve them in a timely manner, and strive to solve problems from the source. Meanwhile, the Group will promptly communicate with the employees regarding the results of handling and caring for their legal labor rights from a practical point of view. The Group is committed to promoting the protection of employees' vital interests and constantly establishing and strengthening harmonious and benign employment relations.

Each functional department conducts a random survey on employees' satisfaction to understand the employees' satisfaction with the Group's business operation. The Group conducted an employee satisfaction survey during the Reporting Period in which over 2,000 people participated. The survey results showed that more than 70 percent of respondents strongly agreed that the team had an excellent working atmosphere, more than 75 percent of respondents approve of the management style, personal charisma of leaders and career growth prospects and opportunities within the Group, and more than 85 percent of respondents said they would recommend their friends to work for the Group.

In addition, the Group takes concrete measures to care for its employees, particularly female employees and those facing difficulties. It has set up nursing rooms and offers breastfeeding leave to address the actual difficulties of breastfeeding employees. Sciprogen distributed books on breast health knowledge to female employees to enhance their breast health knowledge. Meanwhile, the Group has set up a special fund to support employees with serious illnesses. Zhejiang Wansheng has put in place the *2021 Care Plan for Employees In Need*, which checks the living conditions of employees yearly, puts those living in difficulties on a record, and provides them with special financial assistance.

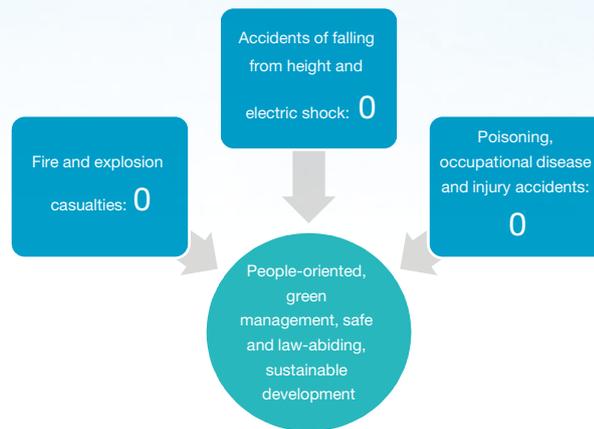
Work-life Balance

The Group encourages employees' work-life balance and strives to create a happy, wholesome and harmonious workplace to increase employees' sense of belonging and happiness. To make employees' lives more colorful, the Group encourages all employees to take part in club activities and festivals actively and provides financial support for them, such as the Tug of War and the Long-distance Running activities conducted by Shenyang Sunshine.

In September 2021, the Group launched a Group-wide Brisk Walk activity to enhance employees' physical fitness. The activity engaged all employees and aimed to encourage all employees to participate in physical exercise and develop a healthy lifestyle. About 3,109 people participated in the activity, and the outstanding performers received prizes and shared their exercise experiences. At the end of 2021, the Group held an Employee Family Day, inviting 60 groups of employee families to visit the Group and join parties, helping employee family members to understand their work and the Group's cultural atmosphere.

2021 Environmental, Social and Governance Report

4.2 Occupational Health and Safety



Safe Production

The Group adheres to the occupational health and safety and environmental (EHS) policy of “people-oriented, green management, safe and law-abiding, and sustainable development” and sets occupational health and safety objectives. By the end of 2021, Shenyang Sunshine, Sunshine Guojian and Sciprogen were recognized as level-3 companies with national work safety standardization certificates.

The Group has set up a Production Safety Management Commission responsible for establishing EHS work policies and objectives, supervising the establishment of EHS rules and regulations, studying and reviewing the production safety responsibility system, supervising EHS publicity and education, etc. In addition, the Group has formulated the safety management mechanism, including the *Production Safety Management Regulations*, the *Safety Inspection Management Regulations*, the *Safety Hazards Detecting and Correcting Regulations*, and the *Emergency Rescue Regulations*, which were updated in 2021, to guide its work on production safety management.

Under the guidance of the Production Safety Management Commission, each manufacturing base regularly carried out the evaluation of the current status of safety production, identified and managed safety hazards in the workplace, and made every effort to ensure workplace safety through measures such as potential safety hazard investigation and rectification, hazard source identification and classification control, and regular safety training and emergency drills.

2021 Environmental, Social and Governance Report

3SBIO 2021 Production Safety Work in Each Base (Partial)

Potential Safety Hazard Investigation and Management	Shenyang Sunshine: Conducted a total of 10 inspections like safety inspections, special inspections and holiday inspections, and received a total of 16 inspections by public security, emergency response, environmental protection and firefighting departments.
Hazard Source Identification and Classification Control	Sciprogen: Carried out 2 rounds of hazard source identification for all departments, updated 1,153 items in the list of hazard sources, and formulated and continuously implemented special hierarchical control plans for all hazard sources.
Safety Training	Sunshine Guojian: Conducted three-level education and training for new employees, totaling 24 class hours; safety education and training for all employees, 2 hours per month; training on laws and regulations, safety emergency plans and system documents for all employees.
Emergency Drills	Zhejiang Wansheng: Completed the preparation and filing of the emergency plan for production safety in the plant and carried out 11 on-site disposal plan drills, 1 desktop drill, 2 firefighting training and drills

In addition, manufacturing bases have put in place the *Regulations for Hazardous Chemicals Management* and *Regulations for Highly Toxic Products* to manage hazardous chemicals such as ethanol and hydrochloric acid involved in production and business operation. The regulations specify the procedures for depot management and the responsibilities of those purchasing, using and managing hazardous chemicals to ensure safety in using hazardous chemicals.

No safety accidents such as fire and explosion, chemical poisoning and occupational disease injuries occurred during the Reporting Period.

Occupational Health

The Group has been committed to creating a healthy and safe working and living environment for its employees. In strict accordance with the state and local laws and regulations, the Group has formulated the *Manual for Environmental and Occupational Health and Safety Management* and the *Regulations on Occupational Health Management* and established an occupational health management department to improve the management of employees' occupational health continuously. By the end of 2021, all of the Group's manufacturing bases in China (Shenyang Sunshine, Sunshine Guojian, Zhejiang Wansheng and Sciprogen) have been certified and revalidated for ISO 45001:2018 occupational health and safety management system.

2021 Environmental, Social and Governance Report

Dust, noises and acid and alkali corrosion in manufacturing bases pose occupational health risks to employees. The Group has strengthened warning notices at worksites and daily inspection patrols and continually regulates staff employees' work operations in accordance with the proper norm. The Group also offers employees full sets of protective measures and gear. Manufacturing bases detect hazardous elements that would harm employees' health in the workplace and release corresponding results on a regular basis. The Group offers adequate protective gear to employees working in high-risk positions and arranges annual physical checkups to ensure their occupational health. In 2021, the Group provided health checkups for employees in positions involving occupational disease risks and no occupational disease hazards occurred.

Three work-related accidents happened during the Reporting Period, which occurred in commuting time. The Group provided sympathetic care to employees, promptly reported the application to the PICC and followed up on the processing progress. In the meantime, the Group strengthened employee's safety awareness through training and education to reduce the occurrence of such incidents.

4.3 Talents Development and Retention

Talents Introduction and Retention

The Group is gradually expanding its talent pool through internal training and external talent recruitment. Within the Group, we give full consideration to employees' individual career growth demands and wishes, provide them with counseling and personal development platforms and give priority to the possibility of promotion or rotation of internal employees when there are suitable job vacancies. In the meantime, the Group actively develops its talent pool by cooperating with colleges and universities to conduct recruitment campaigns and recruit new students every year. In 2021, the Group attracted more than 30 fresh graduates to join us through online and offline seminars.

The Group has introduced a series of incentives, including setting up the "Talent Scout Award", "Talent Retention Award", equity incentive and in-depth analysis of departing employees so as to attract and keep top talents and sustain its business development with talents.

2021 Environmental, Social and Governance Report

- Talent Scout Award**
- The Group's Research & Development Center sets up the "Talent Scout Award" to encourage employees to recommend outstanding professionals. All employees from the R&D Center can recommend candidates based on job descriptions. After the candidates are recruited and pass the probationary period, the one recommending the new recruitment will be eligible for the "Talent Scout Award".
 - In 2021, a total of 26 employees won the "Talent Scout Award".
- Talent Retention Award**
- To retain core employees, the Group has introduced a talent retention program. Over a three-year period, employees in the program will receive 30%, 30% and 40% of the bonus amount upon one more year of service.
 - In 2021, there were 38 employees working on R&D and manufacturing positions under the program.
- Equity Incentive**
- The Group has established an equity incentive system targeting executives, middle-level management and pillar employees working on key positions. The system covered 13 percent of the total workforce in 2021.
- In-depth Analysis of Departing Employees**
- In 2021, a sample of R&D segment leavers was taken for analysis. Interviews were conducted to understand the in-depth reasons for their departure, and innovative approaches were carried out based on the reasons to retain the existing outstanding talents.

Employee Selection and Promotion

The Group adopts an integrated performance management system to standardize talents selection management, and the performance evaluation and employee promotion are carried out fairly and transparently. The performance evaluation results are taken as the basis for bonus distribution and job promotion. In 2021, the Group launched a continuous performance improvement plan to guide employees to objectively evaluate the actual gaps and objectives against the requirements of performance review objectives. The Group selected 60 quarterly stars, covering the Group's R&D, production, marketing and functional departments. Meanwhile, according to employees' annual performance, 76 outstanding employees were selected as pacesetters with excellent performance to promote the team's learning willingness and atmosphere construction.

The Group makes clear career growth plans for employees who are free to choose to pursue a career in a professional area or in management. Manufacturing bases formulate the *Measures for Job Promotion*, making clear promotion principles and career growth paths so as to provide a strong guarantee for employees' career growth and development.

2021 Environmental, Social and Governance Report

The Group has developed a succession plan to identify potential candidates for key positions through job and talent evaluations. We carry out “post evaluation” by dividing organizational levels, identifying post value contributions, judging post-problem-solving processes and other processes, and carry out “person evaluation” from the perspectives of strategic thinking, compatibility of values with corporate culture, performance evaluation, leadership and other perspectives to select and promote talents suitable for the Group’s strategy and culture.

Talent Training and Support

The Group attaches great importance to talents training and regards employees’ development as an essential driving force for business growth and an essential part of its social responsibility. It has established a 3S (Standard, Specific, Self-management) training system covering all employees, including those from contractors. Under the system, standard, specific and self-management personalized training programs are offered to employees through online and offline channels.

Employee Training System

Training for New Employees	Training for Employee Growth	Management Training
<ul style="list-style-type: none"> • Germination Initiative: Public courses, position basic knowledge (including EHS and quality management) training • Outreach training for new graduates • Welcome Day 	<ul style="list-style-type: none"> • Daily Courses for Personal Growth: Improving employees’ management and leadership capacities • Office professionals • Training tailor-made by departments 	<ul style="list-style-type: none"> • Project Management Training • MBA program by China Europe International Business School • Dawn Leadership Training • King’s Wings Boot Camp • Marketing Strategy Boot Camp

In 2021, the Group provided outward bound for more than 30 fresh graduates in campus recruitment to help them integrate into the company culture better and faster. From March to November 2021, to help front-line managers better complete their role changes and improve their management capabilities, the Group conducted Dawn Leadership Training for 285 front-line managers of R&D and production systems, with an overall training satisfaction of 4.96 points (out of 5 points).

In the meantime, the Group offers career growth suggestions and training support to employees based on expertise and skills required for different career growth paths in the annual new employee training and annual performance review sessions. In addition, the Group encourages and supports its employees to pursue further learning and improve their professional skills. It offers financial support to all employees studying for a higher diploma or professional accreditation.

5 Environmental Protection Responsibility

5.1 Environmental Management System

The Group mainly consumes electricity, natural gas and steam directly or indirectly in its production and business operation. It uses water from the municipal water supply system and there are no risks in seeking appropriate water sources. Main discharges and emissions by the Group include effluents, waste gases, solid waste and greenhouse gas. The Group works strictly in accordance with the requirements of the emission permit, and pollutants such as effluents, waste gas and noise at the factory boundary are discharged in accordance with the requirements of the emission permit.

It sets up a leading group for environmental protection and follows the GMP requirements to establish and continuously improve the environmental management system, which manages and implements the environmental protection agenda. The leading group directs the environmental management of each manufacturing base under the guidance of the *Environmental Management Regulations*.

The Group's manufacturing bases, responsible for implementing environmental protection measures, set up EHS departments, put in place guidelines for environmental management of manufacturing bases, and formulate regulations, including the *EHS Management Manual* and the *Regulations on Hazardous Waste Management* and the *Contingency Plan for Emergency Response*. In 2021, Zhejiang Wansheng completed the preparation and filing of environmental emergencies in the plant and carried out emergency drills two times.

In addition, manufacturing bases have been carrying out internal audits on environmental impacts on a regular basis and other audits based on management demands of different projects. In 2021, each manufacturing base conducted its own annual environmental monitoring, and pollutant emissions were in line with national environmental protection requirements. By the end of 2021, all of the Group's manufacturing bases in China (Shenyang Sunshine, Sunshine Guojian, Zhejiang Wansheng and Sciprogen) have passed the ISO14001:2015 environmental management system certification and re-audit.

In 2021, the Group completed the development of four quantitative ESG targets at the environmental level, with targets covering four areas: water resource utilization, energy utilization, hazardous waste emissions and greenhouse gas emissions.

2021 Environmental, Social and Governance Report

2025 ESG Management Goals	Units	Progress in 2021
30 percent reduction in water consumption per revenue unit by 2025 compared to the level in 2017	cubic meters/million RMB of operating income	155.26
40 percent reduction in energy consumption per revenue unit by 2025 compared to the level in 2017	MWh/million RMB of operating income	23.41
30 percent reduction in discharge of hazardous wastes per revenue unit by 2025 compared to the level in 2018	kg/million RMB of operating income	159.71
20 percent reduction in greenhouse gas emissions per revenue unit by 2025 compared to the level in 2017	ton of CO ₂ equivalent/million RMB of operating income	8.81

5.2 Reduction of Pollutant Emissions

Wastewater Management

Wastewater generated by the Group mainly includes domestic sewage, industrial effluents and production wastewater. Among them, production wastewater is small in amount and is not toxic. After treatment with alkali, it can be discharged by manufacturing bases in accordance with the requirements. Domestic sewage and industrial effluents can be discharged into the municipal pipeline system after they are treated in the wastewater treatment center of the factory or industrial park and reach discharge standards.

In line with emission standards, all manufacturing bases issue internal pollutants discharge and emission control standards. They control pollutants both at the workshop and in the effluent treatment center to reduce the discharge of effluents and pollutants. On the basis of meeting national and regional discharge standards, all manufacturing bases work to reach even higher standards they set for themselves on major discharge indicators of waste water.

2021 Environmental, Social and Governance Report

In 2021, Sciprogen completed the wastewater renovation project, which further reduced the pollutant emission per unit of output value on the basis of up-to-standard discharge and reduced the major pollutant emission of wastewater by about 66 percent. All wastewater can be used as a water source for reuse. The cleaning process of the equipment in the stock solution workshop has been improved from manual cleaning to automatic cleaning, which can reduce 20 tons of wastewater discharge per month. Shenyang Sunshine recycles part of the treated production wastewater from the sewage station for greening the park.

Standards for Effluent Discharge and Major Control Indicators

Discharge Standards	Major Control Indicators
<i>Discharge Standards for Biopharmaceutical Industrial Wastewater (GB21907-2008)</i>	Five-day biochemical oxygen demand (BOD ₅), Chemical oxygen demand (COD), suspended solids, ammonia nitrogen, nitrogen, phosphorus, animal and vegetable oil, etc.
<i>Comprehensive Discharge Standards for Wastewater (GB8978-1996)</i>	
<i>Shanghai Municipal Discharge Standards for Biopharmaceutical Industrial Pollutant (DB31/373-2010)</i>	
<i>Liaoning Provincial Comprehensive Discharge Standards for Wastewater (DB21/1627-2008)</i>	
<i>Guangdong Provincial Capping on Polluted Effluents Discharge (DB44/26-2001)</i>	
<i>Water Standards for Waste Water Discharged into Municipal Pipeline Network (GB/T31962-2015)</i>	
<i>Limit of Indirect Discharge for Emission of Nitrogen and Phosphorus for Industrial Waste Water (DB33/887-2013)</i>	

Waste Gas Management

The main business of the Group is biopharmaceutical. The chemical drugs and Chinese patent medicine produced by Zhejiang Wansheng are a small part of its business. Waste gases from the biopharmaceutical business line come from the small amount of odor generated from nutrient solution discharge and replacement in biopharmaceutical production through fermentation. The waste gases, mainly comprising ammonia and steroid substances, contain an extremely low number of pollutants after infiltration and purifying, thus generating little adverse impact on the external environment. Waste gases from the chemical drugs production line are mainly non-methane hydrocarbon and effluvium, and the Group has entrusted a third-party agency with testing the two indicators, ensuring they are discharged up to standards. In addition, the Group uses boilers that generate waste gases, including nitric oxide and sulfur dioxide.

2021 Environmental, Social and Governance Report

In 2021, Zhejiang Wansheng added condensation measures to the primary water extraction process in some workshops to reduce emissions of waste gas pollutants. Sciprogen updated the waste gas treatment device of the standby generator, added a VOC (volatile organic compound) treatment device, and reasonably arranged the operation time of the steam generator to make the waste gas meet the local emission standards and reduce the corresponding emissions. Shenyang Sunshine collected part of the unorganized waste gases for centralized treatment and discharged them through technical transformation to reduce the emission of exhaust pollutants.

Standards for Waste Gas Emissions and Major Control Indicators

Emission Standards	Major Control Indicators
<i>Emission Standards for Biopharmaceutical Industrial Air Pollutants (GB37823-2019)</i>	Non-methane hydrocarbons, odor, particulate matter, hydrogen sulfide,
<i>Comprehensive Emission Standards for Air Pollutants (GB16297-1996)</i>	etc.
<i>Emission Standards for Malodorous Pollutants (GB14554-1993)</i>	
<i>Air Quality — Determination of Odor — Triangle Odor Bag Method (GB/T14675-93)</i>	
<i>Shanghai Municipal Emission Standards for Boiler Pollutants (DB31/387-2018)</i>	
<i>Guangdong Provincial Emission Standards for Boiler Pollutants (DB44/765-2010)</i>	
<i>Hangzhou Municipal Emission Standards for Major Industrial Enterprises' Volatile Organic Compounds (DB3301T 0277-2018)</i>	
<i>Emission Standards for Biopharmaceutical Pollutant (DB31/373-2010)</i>	

Solid Waste Management

Non-hazardous solid wastes generated by the Group include domestic wastes, wasted packaging generated in production process, wasted rubber plugs, wasted aluminum caps, and a small amount of wasted active carbon produced in water-making and treatment centers. The hazardous wastes include wasted organic solutions, dregs of the decoction, wasted penicillin bottles, harmful sludge generated in water treatment centers, raw and auxiliary materials passing expiration date and wasted phenol.

The Group has set a target for solid waste treatment — reducing the disposal of harmful solid wastes per revenue unit by 30 percent from the level of 2018 by 2025.

2021 Environmental, Social and Governance Report

In terms of hazardous solid waste reduction, in 2021, all manufacturing bases conducted weekly declaration and ledger registration of hazardous solid wastes stored in their warehouses and handed them over to qualified facilities for regular treatment. Rejected products found in finished products testing and drugs passing the expiration date in storage were destroyed under the supervision of quality departments.

In terms of non-hazardous solid waste reduction, in 2021, Zhejiang Wansheng carried out the solid waste classification and collection, splitting 3,161 kg of waste plastics, 2,717 kg of waste plastic bottles, 7,410 kg of waste paper boxes and 3,810 kg of waste cardboard. Since 16 July 2021, Sunshine Guojian has been collecting general industrial solid wastes in accordance with environmental protection regulations and handing them over to qualified facilities for treatment, totaling 1.22 tons of waste plastic, 2.70 tons of waste wood, 1.23 tons of waste glass, 1.53 tons of waste adsorbent and 58.04 tons of other inorganic wastes.

In addition, Zhejiang Wansheng has replaced the outer carton of products from white board paper to yellow board box material, which is more resistant to pressure and breakage, and changed offset printing to water-based ink, which can be decomposed by water, effectively recycling the cartons and reducing waste discharge.

Major Measures for Solid Waste Treatment

Non-hazardous solid waste

- Domestic waste: handed over to the sanitation department
- Other solid wastes generated in production process (e.g. wasted silica sand, wasted aluminum foil, wasted paperboard and uncontaminated packaging) are collected and handed over to qualified facilities for unified treatment according to the requirements of environmental protection regulations

Hazardous solid waste

- Hazardous solid wastes (e.g. waste drugs produced in production and inspection processes, medicines passing the expiration date, toxic wasted packaging) are handed over to qualified facilities for unified treatments
-

2021 Environmental, Social and Governance Report

5.3 Addressing Climate Change

Climate Change Governance

The Group keeps close watch on the global climate change situation and has included the climate change mitigation and adaptation into its corporate social responsibility. In 2021, the Group identified risks and opportunities related to climate change in line with suggestions made by the Task Force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board (FSB). Accordingly, it improved its management and reduced greenhouse gas emissions in its business operation so as to mitigate its impact on climate change. The Group found that it mainly generates indirect greenhouse gas emissions out of outsourced power supply.

Management System for Climate Change

Governance

- Including climate change in the Group's ESG agenda
- All functional departments and the EHS department make climate change management a priority of their routine work

Strategy

- Based on major risks and opportunities identified, the Group evaluates potential impacts on business operation and finance
- Launching management initiatives to improve the energy utilization efficiency

Risk management

- Drawing reference from the TCFD risk analysis framework, the Group identifies the potential risks and opportunities in business operation and plans to integrate climate change-related risks and opportunities into its overall operational risk management system

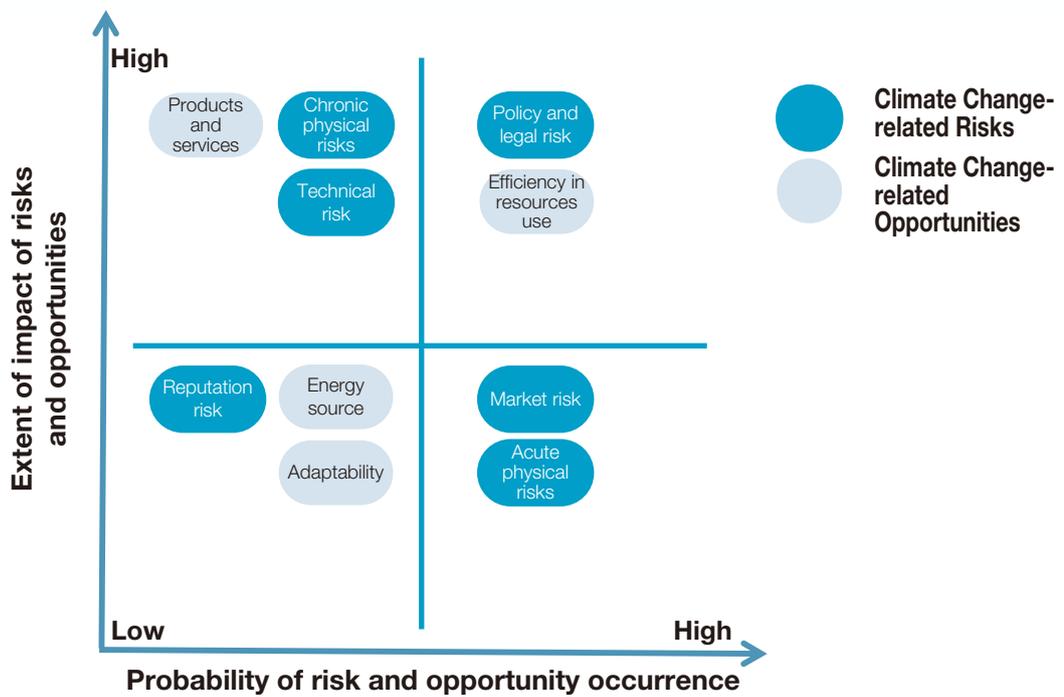
Indicators and Targets

- Setting the greenhouse gas emission target
 - Disclosing the amount and intensity of greenhouse gas emissions in its annual ESG report, so as to evaluate the Company's performance on climate change mitigation and make plans for improvement
-

Risks and Opportunities in Climate Change

To better deal with potential risks and opportunities related to climate change, the Group identified the related risks and opportunities in its business operation through policy studying, alignment with peer businesses and consulting experts. It also evaluated the impacts of these risks and opportunities on its financial conditions.

A Matrix of Climate Change Risks and Opportunities Identified



2021 Environmental, Social and Governance Report

Financial Impacts of Climate Change Risks and Opportunities Identified by the Group

Climate Change-related Risks and Opportunities Identified	Potential Financial Risks	Measures in response
<p>Policy and Legal Risk</p> <p>The Group’s manufacturing bases located in the two carbon trading pilot cities, namely Shanghai and Shenzhen, may be the first to be required to participate in the carbon emissions trading market.</p>	Increasing operational costs	<ul style="list-style-type: none"> Annual tracking of relevant regulations and policies, and annual statistics on greenhouse gas emissions to enable timely response when requested, including Shenyang Sunshine’s completion of carbon verification in Shenyang in 2021
<p>Technology Risk</p> <p>If laws and regulations demand the deployment or use of clean energy, writing off existing assets or scrapping them in advance and using/designing new operation procedures might increase operational costs.</p>	Increasing operational costs	<ul style="list-style-type: none"> Climate change mitigation and adaptation is made one of the top priorities for related functional departments and the EHS department
<p>Market Risks</p> <p>The Group’s product candidates in the pipeline cover five major areas: nephrology, oncology, autoimmune and other diseases, ophthalmology and dermatology. These diseases may be affected by climate change, which may affect the market demand for our products.</p>	Increasing operational costs	<ul style="list-style-type: none"> Identifying and managing climate change risks and opportunities in line with the TCFD framework
<p>Reputation Risk</p> <p>As a company listed on The Stock Exchange of Hong Kong Limited (the “Hong Kong Stock Exchange”), the Group is required by the Hong Kong Stock Exchange to disclose greenhouse gas emission data and emission reduction measures. Therefore, this information is public to customers and investors, and when it is lower than the expectations of customers and investors, it will be detrimental to the corporate reputation.</p>	Adverse impact on workforce management and planning (like employee recruitment and retention)	<ul style="list-style-type: none"> Making climate change an important topic and communicating with stakeholders about it through ESG reporting and otherwise

2021 Environmental, Social and Governance Report

Climate Change-related Risks and Opportunities Identified	Potential Financial Risks	Measures in response
<p>Acute Physical Risks</p> <p>The Group's manufacturing bases in Shanghai and Shenzhen are more susceptible to extreme weather conditions such as typhoons, which may cause power outages, waterlogging, and resulting in safety incidents or forced production suspensions.</p>	<p>Increasing operational costs</p> <p>Decreasing the value of fixed assets</p>	<ul style="list-style-type: none"> Establishing emergency plans and conducting annual emergency drills to deal with the impact of emergencies
<p>Chronic Physical Risks</p> <p>Persistent scorching weather due to climate change may lead to an abnormal power supply. Climate change affects human health and may lead to more uncertainty, more adverse reactions, or require faster iterations of drugs produced by the Group.</p>	<p>Increasing operational costs</p> <p>Decreasing business revenue</p>	<ul style="list-style-type: none"> Improving efficiency in energy and water resource utilization through renovating equipment and upgrading technologies or adopting energy-saving lights
<p>Resource Efficiency Opportunities</p> <p>Increased efficiency in energy and water resource utilization will lower the operational cost.</p>	<p>Lowering operational cost</p>	<ul style="list-style-type: none"> Setting a carbon emission reduction target: reducing greenhouse gas emissions per revenue unit by 20 percent by 2025 compared with the level in 2017
<p>Energy Source Opportunities</p> <p>More low-emission or clean energy utilization will lower the risk of a future energy price increase.</p>	<p>Lowering operational cost</p>	
<p>Product and Service Opportunities</p> <p>Climate change is likely to enhance the incidence rate of some diseases; if the Group solves the diseases through R&D innovation, it would be able to improve its competitive edge and increase earnings.</p>	<p>Increasing in operating income</p>	
<p>Adaptability Opportunities</p> <p>By adopting measures for improving energy utilization efficiency and selecting eco-friendly suppliers, the Group will be more adaptable to climate change.</p>	<p>Lowering operational cost</p>	

2021 Environmental, Social and Governance Report

5.4 Efficient Use of Resources

Adhering to the principle of green development, the Group has been optimizing resource use, improving efficiency through renovating equipment and upgrading technologies to reduce consumption of water, power and natural gas in production and business operation.

Major Measures for Saving Energy and Water

Energy Savings

- Zhejiang Wansheng: Adopting of the frequency control method for a waste gas tower fan, innovation of variable frequency system for the warehouse air conditioning system, use of LED energy-saving lamps
- Shenyang Sunshine: Use of energy-saving and consumption-reducing equipment such as variable frequency motors, automatic air-conditioners, and variable frequency pumps
- Sciprogen: Rationalizing the steam generator operation time
- Sunshine Guojian: Old fluorescent tubes were replaced with LED energy-saving lamps, and shuttle buses shifted from diesel vehicles to electric vehicles

Water Savings

- Zhejiang Wansheng: Some workshops were newly equipped with the Cleaning In Place (CIP) system, which can save about 60 percent of water
 - Sciprogen: Improved water reuse system, new automatic spraying and cooling system of the dangerous chemical warehouse, up to 1,500 cubic meters of water reused per month, reduced the consumption of tap water for landscaping, dust removal, and cleaning
-

6 Supply Chain Responsibility

6.1 Supplier Quality Management

The Group classifies its suppliers into strategic suppliers, preferred suppliers, relationship maintenance suppliers and general suppliers according to their business impact and replacement difficulty. Manufacturing bases formulated the *Standard Management Procedures for Supplier Management* and the *Management Procedures for Supplier Audit* and *Standard Operating Procedures for On-Site Quality Inspection* to manage the quality of products provided by suppliers. Suppliers' promise to the Group in quality can stand the test of authoritative certification and professionals from the Group, therefore ensuring the safety of medicine products.

In addition, manufacturing bases launch training sessions for suppliers from time to time and offer training sessions on quality control in transportation to suppliers of cold-chain transportation.

In 2021, the Group conducted online quality training for key GMP suppliers. Sciprogen conducted training for three pharmaceutical cold chain logistics suppliers on quality-related regulatory knowledge and on-site operational points. Sunshine Guojian newly established Materials and Fixed Assets Management Committee to carry out standardized management and process optimization to ensure procurement efficiency and quality.

Measures for Supplier Quality Management

- For new suppliers: their business qualifications and quality standards for raw materials are reviewed in a strict manner to ensure conformity with the standards for quality and technology in production. In 2021, 20 supplier qualifications were reviewed.
- For existing suppliers: regular and random quality inspection operations are conducted, including written and on-site inspections. The inspection focuses both on suppliers' production management and quality control and on their procurement standards, their audit mechanisms for their secondary suppliers and the list of their qualified suppliers, among others. A total of 124 written inspections and 32 on-site inspections were completed in 2021, and the results all met the requirements.
- For strategic suppliers: Quality guarantee agreements are signed. In the meantime, annual quality evaluations on suppliers in terms of the percentage of pass and deviation rate are conducted. Those failing the evaluation will be removed from the Group's suppliers list.

2021 Environmental, Social and Governance Report

6.2 Social and Environmental Management Regarding Suppliers

The Group has formulated the *Manual for Procurement Management*, the *Standards for Production Material Suppliers Management* and the *Standard Procedure for On-Site Audit on Suppliers* to regulate the suppliers' social and environmental risk management. Since 2018, the Group has required all suppliers to sign and deliver the *Supplier Compliance Statement*, which imposes responsibility requirements on suppliers in terms of environmental protection. The EHS department of each manufacturing base has a veto right on suppliers based on audit checks in terms of environmental protection.

We comprehensively manage our suppliers' social and environmental risks through diversity management, daily monitoring and communication, training, green procurement, and assessment and auditing.

Diversity Management

- The Group values long-term technological cooperation with suppliers. There are explicit stipulations on long-term cooperation with key suppliers in documents like the *Manual for Procurement Management*, the *Quality Guarantee Agreement* of the GMP system to ensure stable production of the Group.
- Sunshine Guojian: One of the management priorities of the Material Management Committee is the localization and second supply source development, avoiding procurement risks through supplier diversity management, supporting small-scale and local suppliers, and improving the community economy; developing second suppliers to reduce the risk of out-of-stock and improve supply stability to protect customers' rights and interests.

Supplier Coaching and Training

- The Group has established a two-way communication mechanism with its suppliers. The Procurement Department explains to all collaborating suppliers the significance of law compliance and labor and environment requirements in the Compliance Statement via telephone or e-mail on a regular basis.
- Suppliers give feedback to designated contact from the Procurement Department and get knowledge of laws, labor and the environment from the contact, thus facilitating the Group's guidance on its suppliers.
- Manufacturing bases conducted safety training for a number of logistics and transportation suppliers and conducted training for three construction suppliers on safety techniques, construction safety norms and construction safety responsibility letters.

2021 Environmental, Social and Governance Report

Green Procurement

- While meeting GMP standards, the Group pays attention to environmental protection and conveys the principle to suppliers, encouraging suppliers to adopt an eco-friendlier approach to production, packaging and transportation.
- In 2021, the Group launched the 3SBio procurement platform to improve the overall operational efficiency of the supply chain through six management modules and reduce the use of paper and waste generation through electronic procurement.
- In 2021, the Group selected new energy suppliers to provide procurement shuttles and green transportation through new energy vehicles on the Didi or AutoNavi platforms to reduce carbon emissions and achieve paperless reimbursement simultaneously.

Evaluation and Audit

- Every year, the Group grades suppliers in terms of product quality and safety, environmental protection and social responsibility fulfillment on a regular basis so as to meet standards in supply chain compliance, quality and safety, environmental protection and sustainable development. In 2021, the Group evaluated the performance of 80 percent of its suppliers in environmental protection, labor use and ethics.
- The Group conducted on-site audits of seven key suppliers of raw and auxiliary materials, focusing on their environmental management aspects, such as waste treatment.
- In addition, the Group entrusted Dun & Bradstreet to conduct due diligence on its suppliers. It also used the system provided by Risk Raider to conduct due diligence investigations and monitor risks on its suppliers.

7 Social Contribution Responsibility

7.1 Supporting Healthcare Development

R&D Innovation

R&D has been rooted in the foundation of the Group since the beginning. The Group boasts a professional R&D team of nearly 600 experienced scientists and the only national engineering research center of antibody medicine approved by the National Development and Reform Commission. With four R&D bases in Shenyang, Shanghai, Shenzhen, and Hangzhou, the Group has established a dual biological and chemical drug platform. Its subsidiaries Shenyang Sunshine, Zhejiang Wansheng, Sunshine Guojian, NERC and Sciprogen have been recognized as “National High-Tech Enterprises”.

As of 31 December, 2021, the Group had 33 product candidates in the pipeline, of which 26 were developed as innovative drugs in mainland China covering areas of oncology, hematology, autoimmune and inflammatory diseases, renal diseases, ophthalmology and dermatology.

Helping Biopharmaceutical Industry to Develop

The Group also takes an active part in revising industry standards and various studies to boost the development and progress of the biopharmaceutical industry. In 2021, Shenyang Sunshine participated in the preparation and stability study of national standards for the applicability of EPO charge heterogeneity system and the assessment of the applicability of human erythropoietin prodrug N sugar determination method and participated in the preparation and drafting of the group standard *Requirements for Quality Risk Management System of Pharmaceutical Manufacturing Enterprises*.

To encourage more young Chinese physicians to contribute to basic research and clinical application in the area of THROMBOCYTOPENIA (TCP), 3SBio launched Sunshine *TCP R&D Fund for Young Physicians* jointly with Shenyang Pharmaceutical University in 2015 to encourage more basic research and clinical applications. In 2021, 3SBio conducted innovative explorations in research directions and application fields. As of March 2021, the fund had seen the submission of 346 research projects, and 45 were under research, and 14 high-quality papers had been published. The research provided significant evidence and scientific support for clinical practices like treating pregnant ITP patients, mobilizing stem cells before transplantation, and implanting platelet after transplant.

In the meantime, 3SBio actively participates in academic medical exchanges and actively holds and participates in various academic conferences and forums to boost the development of the biopharmaceutical industry.

2021 Environmental, Social and Governance Report

Academic Exchanges in 2021

Conference Name	Achievements
The 27th Annual Meeting of National Dermatology and Venereal Diseases Conference of the Chinese Medical Association in 2021	A total of 2 satellite conferences and 1 academic conference, attended by 12 hospitals and 260 experts
2021 National Academic Conference on Hematopoietic Stem Cell Transplantation	A total of 1 special conference, attended by 80 hospitals and 190 oncologists
2021 Annual Meeting of Chinese Society of Clinical Oncology (CSCO)	A total of 1 special online conference on tumor-related hematopoietic factors and 1 online satellite conference, online lectures by 12 experts and attended by 2,100 oncologists
2021 Annual Meeting of Cancer Rehabilitation and Palliative Care Professional Committee of China Anti-Cancer Association	A total of 1 special conference, attended by 90 hospitals and 170 oncologists

In addition, the Group organized and participated in academic conferences such as the 2021 Blood Purification Forum of Chinese Medical Association Nephrology Branch, the 2021 Annual Meeting of the American Society of Clinical Oncology, and the 2021 Annual Meeting of European Society of Medical Oncology to share and exchange industry experience.

7.2 Enhancing Accessibility to Medicines and Medical Services

Public donation of products benefits more patients

To deliver safe, effective and high-quality products to more patients, the Group donates products and medical services to patients in need through cooperation with Bethune Charitable Foundation.

In 2021, several products (TPIAO®, EPIAO®, Cipterbin®, YISAIPU®) of the Group were included in the 2021 National Reimbursement Drug List, and the prices of some products were significantly reduced. Medicare-insured products were more accessible to patients. Therefore, the Group adjusted the donation program for some of the public donation products accordingly. For example, starting from 2021, the TPIAO® Charity Donation Program has given entirely free donations to eligible patients in need.

2021 Environmental, Social and Governance Report

Public Welfare Medicine Donation Project

Project Name	Commencement period	Progress in 2021
“Watching for Happiness” Bethune TPIAO Donation Program	2013	<ul style="list-style-type: none"> • Coverage: Nationwide • Targeted patients: patients suffering from immune thrombocytopenia (ITP) in need of recombinant human thrombopoietin injection • Number of patients benefited: 320 cases, 1,371 injections
“Benefit + Hope” Bethune YISAIPU Donation Program	2015	<ul style="list-style-type: none"> • Coverage: Nationwide • Targeted patients: patients suffering from rheumatoid arthritis, ankylosing spondylitis (AS) and psoriasis • Number of patients benefited: 20,733 cases, 65,724 injections
“For Life” Bethune Cipterbin Donation Program	2020	<ul style="list-style-type: none"> • Coverage: Nationwide • Targeted patients: patients suffering from HER2-positive metastatic breast cancer • Number of patients benefited: 1,405 cases, 10,821 injections

2021 Environmental, Social and Governance Report

Supporting Development of Primary Care

With emerging to be a globally leading Chinese biopharmaceutical maker as the goal, the Group has been committed to improving medical services in China. In 2022, the Group launched training programs on patient management and disease knowledge for hospitals and medical workers nationwide through both online and offline channels, helping them improve medical services and contributing to the development of medical service and medical R&D. In addition, the Group contributed to national efforts in poverty reduction through supporting patients suffering from ankylosing spondylitis.

In 2021, the Group donated RMB2.78 million specifically for the Ankylosing Spondylitis Healthy Village Project and cooperated with and assisted the China Poverty-Alleviation Promotion of Volunteer Service (CPPVS) and the China Foundation for Disabled Persons to promote the implementation of the project actively. As of 31 December, 2021, the Ankylosing Spondylitis Healthy Village Project had carried out around 409 doctor training sessions and charity clinics, covering 7,509 primary care doctors. A total of 10,784 people had been screened and 5,505 patients had been treated.

8 Performance Data

Compliance

The Group takes compliance as the cornerstone of its sustainable growth. In 2021, it reported no confirmed irregularities or wrongdoings in respect of product quality and client services, employment, occupational health and safety, child and forced labor, anti-corruption and ethics, IPR protection and responsible marketing.

Field	Key Laws & Regulations
Anti-corruption and Ethics	<i>The Anti-Unfair Competition Law of the People's Republic of China, the Anti-Monopoly Law of the People's Republic of China, Interim Provisions on Banning Commercial Bribery, the Welfare Donations Law of the People's Republic of China, and Regulations on Recording Commercial Bribery in Pharmaceutical Purchases and Sales</i>
IPR Protection	<i>The Patent Law of the People's Republic of China, Rules for the Implementation of the Patent Law of the People's Republic of China, and Trademark Law of the People's Republic of China</i>
Product Quality	<i>The Law of the People's Republic of China on the Administration of Drugs, Chinese Pharmacopoeia (2020 revision), Good Manufacturing Practice for Pharmaceutical Products, Measures for the Supervision over and Administration of Pharmaceutical Production (enacted in 2020), Provisions for Drug Registration (enacted in 2020), Regulations for Drug Recording and Data Management (trial) (enacted in 2020), Regulations for the Administration of Post-Marketing Drug Changes (trial) (enacted in 2021), Drug Good Laboratory Practices, Good Clinical Practice of Pharmaceutical Products, Provisions for Drug Insert Sheets and Labels, ICH-Q10 Pharmaceutical Quality System, Quality Systems Approach to Pharmaceutical Current Good Manufacturing Practice Regulations by the U.S. Food and Drug Administration, and EU Guidelines for Good Manufacturing Practice for Medicinal Products for Human and Veterinary Use</i>
Responsible Marketing	<i>The Advertisement Law of the People's Republic of China, Anti-Unfair Competition Law of the People's Republic of China, Anti-Monopoly Law of the People's Republic of China, Provisions for Drug Advertisement Examination, Drug Administration Law of the People's Republic of China, Standards for the Examination and Publication of Drug Advertisements</i>

2021 Environmental, Social and Governance Report

Field	Key Laws & Regulations
Employee's Rights, Interests and Welfare	The Labor Law of the People's Republic of China, Law of the People's Republic of China on Employment Contracts, Special Provisions on Labor Protection of Female Workers, Provisions on Social Endowment Insurance, and Social Insurance Law of the People's Republic of China
Employee Health and Safety	The Law of the People's Republic of China on Work Safety, Law of the People's Republic of China on the Prevention and Control of Occupational Diseases, Fire Prevention Law of the People's Republic of China, and Regulations on the Safety Administration of Dangerous Chemicals
Supply Chain Responsibility	The Good Manufacturing Practice for Pharmaceutical Products, Contract Law of the People's Republic of China, and Sarbanes-Oxley Act
Environmental protection	The Environmental Protection Law of the People's Republic of China, Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste (2020 revision), Law of the People's Republic of China on the Prevention and Control of Water Pollution, Law of the People's Republic of China on the Prevention and Control of Air Pollution, Law of the People's Republic of China on Promoting Clean Production, and Regulations on the Administration of Construction Project Environmental Protection
Community Investment	Welfare Donations Law of the People's Republic of China and Charity Law of the People's Republic of China

Anti-Corruption

Performance indicators	Unit	2019	2020	2021
Number of concluded legal cases regarding corrupt practices brought against the Group or its employees	Number	0	0	0
Average hours of anti-corruption training completed per employee ¹	Hour	0.2	0.6	0.5

Note:

- The Group conducts compliance training for all employees, and the training covers anti-corruption and commercial bribery. In addition, the Group carries out additional targeted anti-corruption training for employees of the marketing system. The statistical indicator represents the additional training hours per employee of the marketing system. The number of hours of anti-corruption training per employee = Total number of hours of anti-corruption training received by employees/Number of employees participating in anti-corruption-related training × 100%.

2021 Environmental, Social and Governance Report

Products and Client Services

Performance indicators	Unit	2019	2020	2021
Percentage of total products sold subject to recalls for safety and health reasons	%	0	0	0
Number of products and services related complaints received ¹	Number	47	44	59
Complaint handling rate for products and services	%	100	100	100
Total number of irregularities arising from health and safety, labeling, and customer privacy of products and services provided	Number	0	0	0

Note:

- The Sirton's data was added to "number of products and services related complaints received" in 2020 after data traceability to be consistent with data calibers of 2019 and 2021.

Employment

Performance indicators	Unit	2019	2020	2021
Employment¹				
Total employees	Person	5,404	5,584	5,292
Number of male employees	Person	2,720	2,772	2,570
Number of female employees	Person	2,684	2,812	2,722
Number of employees under labor contracts	Person	5,316	5,481	5,216
Number of employees dispatched	Person	47	56	58
Number of employees under labor agreements	Person	27	41	—
Number of part-time employees	Person	14	6	6
Other forms of employment ²	Person	—	—	12
Number of employees under 30	Person	1,952	1,951	2,061
Number of employees aged 30–50	Person	3,317	3,474	3,079
Number of employees above 50	Person	135	159	152
Number of employees from the Mainland China	Person	5,327	5,501	5,199
Number of employees from Hong Kong, Macao, Taiwan and foreign countries	Person	77	83	93
Number of grass-roots employees	Person	—	—	4,243
Number of employees at middle management level	Person	—	—	893

2021 Environmental, Social and Governance Report

Performance indicators	Unit	2019	2020	2021
Number of employees at senior management level	Person	—	—	156
Employee turnover rate ³	%	24	26	27.78
Turnover rate of male employees	%	27	29	30.48
Turnover rate of female employees	%	22	24	25.03
Turnover rate of employees under 30	%	23	27	31.37
Turnover rate of employees aged 30–50	%	25	26	25.97
Turnover rate of employees above 50	%	13	17	8.33
Turnover rate of employees from the Mainland China	%	25	26	28.13
Turnover rate of employees from Hong Kong, Macao, Taiwan and foreign countries	%	3	1	1.06
Employees' Health and Safety				
Number of working days lost due to work injury ⁴	Day	45	24	120
Work-related death toll	Person	0	1	0
Employee Training				
Employee training coverage	%	67	100	100
Training coverage of male employees	%	71	100	100
Training coverage of female employees	%	63	100	100
Training coverage of grass-roots employees	%	60	100	100
Training coverage of middle management employees	%	98	100	100
Training coverage of senior management employees	%	96	100	100
Training time per employee ⁵	Hour	15.3	11.42	14.37
Training time per male employee	Hour	15.4	11.44	13.49
Training time per female employee	Hour	15.2	11.41	15.30
Average hours of training for grassroots employees	Hour	10.8	10.01	10.69
Average hours of training for middle management	Hour	37.5	9.71	18.42
Average hours of training for senior management	Hour	27.4	11.73	13.65

Notes:

1. Employee employment statistics are all consistent with the scope of the current year's consolidated financial statements.
2. Other forms of employment are mainly temporary employees.
3. The turnover rate of employees in a category = number of employees in that category lost during the Reporting Period/(number of employees in the category at the end of the Reporting Period + number of employees lost in the category during the Reporting Period) × 100%.

2021 Environmental, Social and Governance Report

4. In 2021, work-related injuries occurred mainly due to accidents on the way to and from work, and the Group has assisted employees in identifying work-related injuries and completing compensation payments.
5. Training hours per employee in a category = hours of training received by employees in that category/number of employees in that category. In 2020, the training was mostly conducted online due to the COVID-19 pandemic, and the calculation method of the online training software resulted in a high number of training hours (including the hours of employees repeatedly watching training videos). Data has been updated for 2020 after data traceability.

Environmental Responsibility

Performance indicators ¹	Unit	2019	2020	2021
Use of resources				
Power consumption (indirect energy)	MWh	44,722.03	51,489.08	65,584.92
Power consumption intensity	MWh/RMB10,000	0.08	0.09	0.10
Natural gas consumption (direct energy)	m ³	2,414,169.00	2,898,614.00	2,935,875.00
Natural gas consumption intensity	MWh/RMB10,000	0.0448	0.0561	0.0498
Total steam consumption ²	MWh	20,086.25	23,007.91	48,887.14
Steam consumption intensity	MWh/RMB10,000	0.0378	0.0412	0.0802
Gasoline consumption of self-owned vehicles	L	72,514.84	71,415.86	78,700.40
Diesel consumption of self-owned vehicles	L	10,500.00	17,175.30	16,488.30
Diesel consumption of self-owned logistics services	L	—	—	2,193.04
Water consumption	ton	636,932.00	759,613.00	990,861.90
Water consumption density	ton/RMB10,000	1.20	1.36	1.55
Total circulating water	m ³	5,000.00	21,445.20	24,376.00
Proportion of water circulation and recycled water to the total water consumption	%	0.79	2.82	2.46
Total packaging material used for finished products	ton	1,483.00	1,163.90	1,461.63

2021 Environmental, Social and Governance Report

Performance indicators ¹	Unit	2019	2020	2021
Emissions				
Waste gas emissions ³	m ³	58,230,086.00	51,256,120.00	39,753,486.80
Industrial wastewater discharge ⁴	m ³	227,349.70	303,741.60	422,431.30
Chemical oxygen demand (COD) emissions	ton	6.86	3.32	6.56
Ammonia nitrogen (NH ₃ -N) emissions	ton	0.49	0.06	0.16
Total hazardous waste	ton	526.53	742.40	1,019.28
Hazardous waste intensity	kg/RMB10,000	0.99	1.33	1.60
Total non-hazardous waste	ton	118.29	323.97	326.16
Non-hazardous waste intensity	kg/RMB10,000	0.22	0.58	0.51
Greenhouse gas emissions ⁵	ton of CO ₂	48,685.27	47,720.88	56,212.57
	equivalent			
Scope 1 GHG emissions	ton of CO ₂	5,960.68	6,516.09	6,587.77
	equivalent			
Scope 2 GHG emissions	ton of CO ₂	42,724.59	41,204.79	49,624.79
	equivalent			
GHG emission intensity	ton of CO ₂	0.092	0.085	0.088
	equivalent/ RMB10,000			

Notes:

1. Data caliber: Sirton's environmental data were also included in the 2020 and 2021 reporting; density data are calculated per RMB10,000 of operating income.
2. The total steam consumption and water consumption in 2021 increased significantly compared with the previous year, mainly due to the growth of the Group's production.
3. In 2021, the Group's waste gas emissions were adjusted from the coefficient method to the monitoring method calculation, resulting in an increase in data changes.
4. In 2021, the amount of industrial wastewater discharge, chemical oxygen demand (COD) discharge of wastewater pollutants and ammonia nitrogen (NH₃-N) emissions were increased compared with the change in the previous year, mainly due to the inclusion of the data of Shenyang Sunshine wastewater discharge.
5. The GHG emissions were the sum of Scopes 1 and 2. Sirton was included in the calculation of GHG emissions for 2020 and 2021.

In the calculation of Scope 1 GHG emissions, the Group referred to Appendix II: *Environmental KPI Reporting Guide (May 2021)*, the latest version of HKE's *Environmental, Social and Governance Reporting Guide* for the gasoline and diesel emission factors, and the *Accounting Method and Reporting Guidelines of Corporate GHG Emissions Power Generation Facilities (Revised in 2022)* for the natural gas emission factors.

2021 Environmental, Social and Governance Report

In the calculation of Scope 2 GHG emissions, the Group referred to data from the Ministry of Ecology and Environment of the People's Republic of China (2019) and the *General Principles for Calculation of the Comprehensive Energy Consumption (2020)* recommended by HKEx for the steam emission factor, the data in 2012 provided by the National Development and Reform Commission in the *2011 and 2012 China Regional Power Grid Average CO₂ Emission Factors* for the electricity emission factors in 2019 and 2020, and selected 0.5810 kg CO₂ equivalent/KWh (the latest value from the *Accounting Method and Reporting Guidelines of Corporate GHG Emissions Power Generation Facilities (Revised in 2022)* for the electricity emission factors in 2021).

Supply Chain Responsibility

Performance indicators	Unit	2019	2020	2021
Total number of suppliers	Firms	1,003	1,965	2,269
Number of suppliers from the Mainland China	Firms	968	1,534	1,839
Number of suppliers from Hong Kong, Macao, Taiwan and foreign countries	Firms	35	431	430
Number of suppliers accepting evaluation in terms of environment, labor and ethics	Firms	381	1,523	1,816
Number of suppliers passing evaluation in terms of environment, labor and ethics	Firms	365	1,523	1,816

Social Contribution Responsibility

Performance indicators ¹	Unit	2019	2020	2021
Charitable donations ²	RMB10,000	14,325.96	50,512.68	4,081.73
Number of people contributing to volunteer services	Number	800	1,006	400
Total hours of volunteer services	Hour	288,000	282,124	6,100

Notes:

1. Data change of the Group's donation amount and volunteer services in 2021 compared with the previous year is the result of the decrease in product prices. Therefore, the investment in medicine public donation project and the number of medicine public donation project participated by employee volunteers decreased.
2. The amount of charitable donations refers to the *Charity Law*, and the actual amount of donation invoices obtained by the Group is used as the data caliber. There is a difference between the time limit for obtaining donation invoices and the actual donation behavior, and the actual donation behavior in the current year shall prevail. In 2021, the total cost of donation expenditure of the Group is RMB23.79 million, which is consistent with the data caliber of the financial report.

9 Index to the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

Aspects, General Disclosure, Key Performance Indicators (KPIs) Chapters

A. Environmental

A1. Emissions

A1.1

A1.2

A1.3

A1.4

A1.5

A1.6

A2. Use of Resource

A2.1

A2.2

A2.3

A2.4

A2.5

A3. The Environment and Natural Resources

A3.1

A4. Climate Change

A4.1

B. Social

Employment and Labor Practices

B1. Employment

B1.1

B1.2

B2. Health and Safety

B2.1

B2.2

B2.3

5.1 Environmental Management System

5.2 Reduction of Pollutant Emission

8 Performance Data

5.1 Environmental Management System

5.2 Reduction of Pollutant Emissions

5.3 Addressing Climate Change

8 Performance Data

5.1 Environmental Management System

5.2 Reduction of Pollutant Emissions

8 Performance Data

5.1 Environmental Management System

5.4 Efficient Use of Resources

8 Performance Data

8 Performance Data

8 Performance Data

5.1 Environmental Management System

8 Performance Data

5.1 Environmental Management System

8 Performance Data

8 Performance Data

5.1 Environmental management system

5.4 Efficient Use of Resources

8 Performance Data

5.1 Environmental Management System

5.4 Efficient Use of Resources

5.3 Addressing Climate Change

5.3 Addressing Climate Change

4.1 Employee's Rights, Interests and Welfare

4.3 Talents Development and Retention

8 Performance Data

8 Performance Data

8 Performance Data

4.2 Occupational Health and Safety

8 Performance Data

8 Performance Data

8 Performance Data

4.2 Occupational Health and Safety

2021 Environmental, Social and Governance Report

Aspects, General Disclosure, Key Performance Indicators (KPIs)	Chapters
B3. Development and Training	4.3 Talents Development and Retention
B3.1	8 Performance Data
B3.2	8 Performance Data
B4. Labor Standards	4.1 Employee's Rights, Interests and Welfare
	8 Performance Data
B4.1	4.1 Employee's Rights, Interests and Welfare
B4.2	No violations
Operating Practices	
B5. Supply Chain Management	6.2 Social and Environmental Management Regarding Suppliers
	8 Performance Data
B5.1	8 Performance Data
B5.2	6.1 Supplier Quality Management
	6.2 Social and Environmental Management Regarding Suppliers
B5.3	6.2 Social and Environmental Management Regarding Suppliers
B5.4	6.2 Social and Environmental Management Regarding Suppliers
B6. Product Responsibility	3.1 Providing High-Standard Quality Products
	3.2 Provide Quality Services to Clients
	3.3 Responsible Marketing
	8 Performance Data
B6.1	8 Performance Data
B6.2	3.2 Provide Quality Services to Clients
	8 Performance Data
B6.3	2.2 IPR Management And Protection
B6.4	3.1 Providing High-Standard Quality Products
B6.5	3.2 Providing Quality Services to Clients
B7. Anti-corruption	2.1 Compliance & Ethics
	8 Performance Data
B7.1	8 Performance Data
B7.2	2.1 Compliance & Ethics
B7.3	2.1 Compliance & Ethics
Community	
B8. Community Investment	7.1 Supporting Healthcare Development
	7.2 Enhancing Accessibility to Medicines and Medical Services
	8 Performance Data
B8.1	7.1 Supporting Healthcare Development
	7.2 Enhancing Accessibility to Medicines and Medical Services
	8 Performance Data
B8.2	7.1 Supporting Healthcare Development
	7.2 Enhancing Accessibility to Medicines and Medical Services
	8 Performance Data

10 About this Report

This report is the sixth ESG report issued by 3SBio. The purpose of this report is to illustrate the Group's management and performance in ESG, so that stakeholders can better understand the Group's sustainable development strategies and actions.

Basis of Preparation for the Report

This report is prepared in accordance with the Environmental, Social and Governance Reporting Guide set out in Appendix 27 to the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange (the "ESG Reporting Guide").

Scope of the Report

Organizational scope: This report encompasses 3SBio and its subsidiaries, aligned with the consolidated financial statements in the annual report. In this report, environmental performance data are generated from the subsidiaries mainly engaged in manufacturing and R&D, with no reference to the subsidiaries mainly engaged in investment holding and project management.

Time Scope: 1 January 2021 to 31 December 2021

List of Subsidiaries and Parallel Shortened Names in this Report

Major Subsidiaries	Shortened Name
Shenyang Sunshine Pharmaceutical Company Limited	Shenyang Sunshine
Sunshine Guojian Pharmaceutical (Shanghai) Co., Ltd.	Sunshine Guojian
Shanghai National Engineering Research Center of Antibody Medicine Co., Ltd.	NERC
Zhejiang Wansheng Pharmaceutical Co., Ltd.	Zhejiang Wansheng
Shenzhen Sciprogen Bio-pharmaceutical Co., Ltd.	Sciprogen
Sirton Pharmaceuticals S.p.A.	Sirton

Data Description

Data and cases in this report come from the original records of business operation or financial reports of the Group.

Financial data in this report are denominated in RMB. In the event of any discrepancy in financial data between this report and the Group's annual financial statements, the latter shall prevail.

2021 Environmental, Social and Governance Report

Principles of Reporting

This report follows the reporting principles of the ESG Reporting Guide. They include:

- **Materiality Principle**

In line with the principle, this report determines ESG issues that should be responded to in reporting through surveys on stakeholders and analysis of materiality. ESG issues that are sufficiently important to investors and other stakeholders are highlighted in the Report.

- **Quantitative Principle**

In line with the principle, this report discloses KPIs which are accompanied by a narrative, explaining calculation basis and assumptions.

- **Balance Principle**

In line with the principle, this report provides an unbiased picture of the Group's performance, with both positive and negative indicators.

- **Consistency Principle**

In line with the principle, this report explains the KPI numbers as well as the corresponding calculation basis and assumptions. Meanwhile, it manages to use consistent KPIs in different Reporting Periods to reflect the performance trend.

Reporting Responsibility and Assurance

The Board of Directors of the Company has overall responsibility for ESG strategy and reporting of the Company. To the best knowledge of the management, there are no falsified information, nor material misleading statements or material omissions in this report.