金斯瑞生物科技股份有限公司*

GENSCRIPT BIOTECH CORPORATION

(Incorporated in the Cayman Islands with limited liability)

Stock code: 1548

Environmental, Social and Governance Report 2022

Make People and Nature Healthier *through* Biotechnology

GenScript

*For identification purpose only

This environmental, social and governance report is printed on environmental-friendly paper

CONTENTS

About This Report 002

I. Normative Governance, Steady Progress 004

1.1 About Us 004

1.2 Operational Compliance 005

1.3 ESG Management 010

1.4 Accountability 011

II. Innovating R&D, Pursing Excellence 014

2.1 Product Innovation 014

2.2 Value Orientation 021

2.3 Intellectual Property 022

III. Superior Service & Quality Assurance 023

3.1 Quality Assurance 023

3.2 Responsible Purchasing 027

3.3 Customer Service 029

3.4 Animal Welfare 031

IV. Employee Success & Fulfillment 033

4.1 Talent Acquisition 033

4.2 Employee Development 036

4.3 Employee Care 042

4.4 Health and Safety 045

V. Carbon Reduction & Green Operations 049

5.1 Climate Changes 049

5.2 Green Management 054

5.3 Emissions Management 056

VI. Win-win Collaboration 060

6.1 Industry Collaboration 060

6.2 Giving Back to Society 063

Appendix I. List of Awards and Certification for 2022 066

Appendix II: List of Disclosure Policies and Legal Regulations 067

Appendix III. Index of HKEX ESG Reporting Guide 069

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

ABOUT THIS REPORT

Overview

This report is the seventh Environmental, Social, and Governance Report (the "**Report**" or the "**ESG Report**") issued by GenScript Biotech Corporation ("**GenScript,**" "**the Company,**" or "**We**"), together with its subsidiaries (collectively, the "**Group**"). This report is published on a regular basis every year to provide information on the Company's environmental, social, and governance ("**ESG**") policy development and performance and objectively disclose the Company's management and effectiveness in respect of sustainable development, in order to respond to the expectations of our stakeholders and the public.

Reporting Scope and Boundary

The report discloses the management and results of ESG related issues for the period from January 1, 2022, to December 31, 2022 (the "**Reporting Period**" or the "**Year**"), and part of the information dates back to the previous year or covers the first quarter of 2023. For details on the Company's business, please see the 2022 Annual Report.

Basis of Preparation

The Report has been prepared strictly in accordance with the requirements of the Environmental, Social, and Governance Reporting Guide (the "**ESG Reporting Guide**") as set out in Appendix 27 of the Listing Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**HKEX**"), and is based on the following principles:

Materiality: The Report discloses the procedures of identifying material ESG factors, including stakeholder identification and survey, materiality assessment using the materiality matrix, and reporting of ESG-related material factors and issues.

Quantitative: The Report measures key performance indicators, discloses quantitative data as required by the ESG Reporting Guide issued by the HKEX, and specifies the scope of statistics and basis of calculation.

Balance: The Report provides an unbiased and objective picture of our ESG performance.

Consistency: The Report uses consistent methodologies and sets out statistical methodologies and standards.

A detailed index of the ESG Reporting Guide is set out in Appendix III of the Report for easy and quick reference by readers.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Data Sources and Reliability Statement

The information and data disclosed in the Report are derived from the statistical reports and formal documents of the Company and have been reviewed by relevant departments. The Company confirms that there is no misstatement or misleading representation contained in the Report and takes responsibility for the truthfulness, accuracy and completeness of the contents of the Report. Unless otherwise stated, all the money amounts in the Report are denominated in US dollars and the density data are all based on annual report revenue data.

Process of Preparation

The contents of the Report have been determined based on a set of systematic procedures. Such procedures include, among others, forming a working group, identifying key stakeholders, conducting interviews with the stakeholders, identifying and prioritizing material ESG related topics, deciding the scope of the ESG Report, collecting relevant materials and data, determining the framework, report compiling, report designing and review by relevant departments and the senior management.

Acknowledgment and Approval

Subject to the acknowledgement of the Management, the Report has been approved by the Board on March 30, 2023.

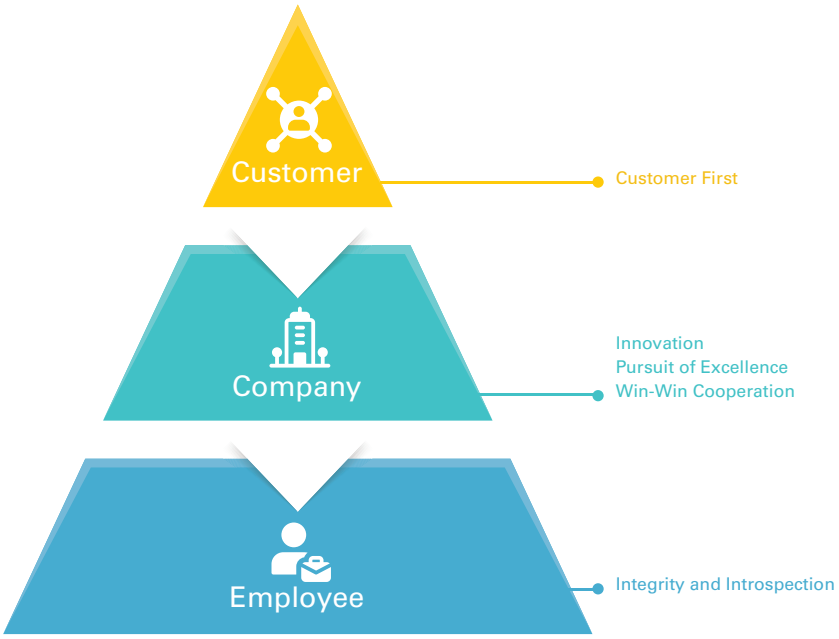
ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

I. NORMATIVE GOVERNANCE, STEADY PROGRESS

1.1 About Us

GenScript Biotech Corporation (stock code: HK01548) is the world's leading service provider of life science R&D and manufacturing. Founded in 2002, GenScript has been dedicated to the life science field for over 20 years. In 2015, GenScript was listed on the Main Board of Hong Kong Stock Exchange. GenScript's business operations span over 100 countries and regions worldwide. Our professional workforce consists of over 6,200 team members, providing convenient, and reliable services and products for over 200,000 customers.

Committed to its mission to "Make People and Nature Healthier through Biotechnology", GenScript has established leading biotechnology platforms for R&D, synthetic biology and healthcare to streamline drug development processes. By developing innovative products, we aim to address the dynamic environmental issues and critical illness and contribute to human well-being. With the vision to "Become the Most Trustworthy Biotech Company in the World" and the corporate spirit of "Courage, Commitment, Endeavor", we provide high-quality products and services for customers, offer development opportunities to our employees, and create long-term value for society.



GenScript has developed four major business segments including :

GenScript Life Science Group	GenScript PROBIO	LEGEND BIOTECH	Bestzyme 百斯杰
Life Science Services and Products	Biologics Development Service (CDMO)	Cell Therapy	Industrial Synthetic Biology Products

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

1.2 Operational Compliance

At GenScript, compliance management is intended to meet regulatory requirements and build an essential foundation for our sustainable development. We have enhanced risk control, improved our compliance management system, developed a compliance culture, and abided by business ethics. This enables us to serve diverse customer base while expanding our business presence.

- ### Business ethics and anti-corruption

GenScript strictly complies with the *Anti-Unfair Competition Law of the People's Republic of China*, the *Anti-Monopoly Law of the People's Republic of China*, the *Company Law of the People's Republic of China*, *Criminal Law of the People's Republic of China*, the *Foreign Corrupt Practices Act*, and other relevant laws and regulations. At GenScript, anti-corruption and compliance are under the oversight of the Anti-Commercial Bribery Committee, which aims to prevent commercial bribery, fulfill commercial responsibility, and shape a compliance management framework featuring involvement of all employees, clear responsibilities, and full supervision. During the reporting period, GenScript revised and issued the *Anti-Corruption Management Measures* and implemented the *Business Conduct Guidelines* and other internal policies to prohibit corruption.

We create a strong ethical culture with joint efforts of all employees. All new employees are required to sign the *Undertaking on Compliance with the Business Conduct Guidelines* upon joining the Company. During the reporting period, we provided comprehensive compliance training and clarified red lines. Our employees undertake to eliminate unfair competition, refuse bribe solicitation, gifts and improper benefits. This raised employees' awareness of integrity, compliance and anti-corruption and fostered a strong ethical culture.

Directors and Senior Management	We invited third-party professional lawyers to provide compliance training on whistleblowing and anti-corruption policies for 11 directors, the Rotating Chief Executive Officer, Chief Operating Officer, Chief Finance Officer and Vice President of Legal Department.
Leaders	At the first leadership conference, we urged leaders to lead by example and practice the requirements of "no lies, no falsification, no bribery, and no intelligence leakage" through case studies, which strengthened the values, sense of responsibility, and sense of mission of the leadership team.
Employees	We organized information disclosure compliance training for all employees to protect information security and prevent insider trading.

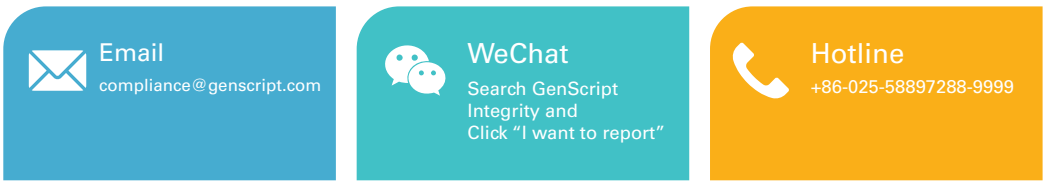
ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Choosing suppliers that abide by business ethics and comply with regulations during business operations with a good history is an integral part of compliance management. During the reporting period, we updated and issued the *Integrity Undertaking* and the *Message to Suppliers* for all suppliers, continuously optimized relevant management policies and processes, and tightened integrity and anti-corruption standards and review mechanisms. This contributed to fair competition and supply chain compliance culture and created a healthy industrial environment.

During the reporting period, no lawsuits against corruption took place at GenScript.

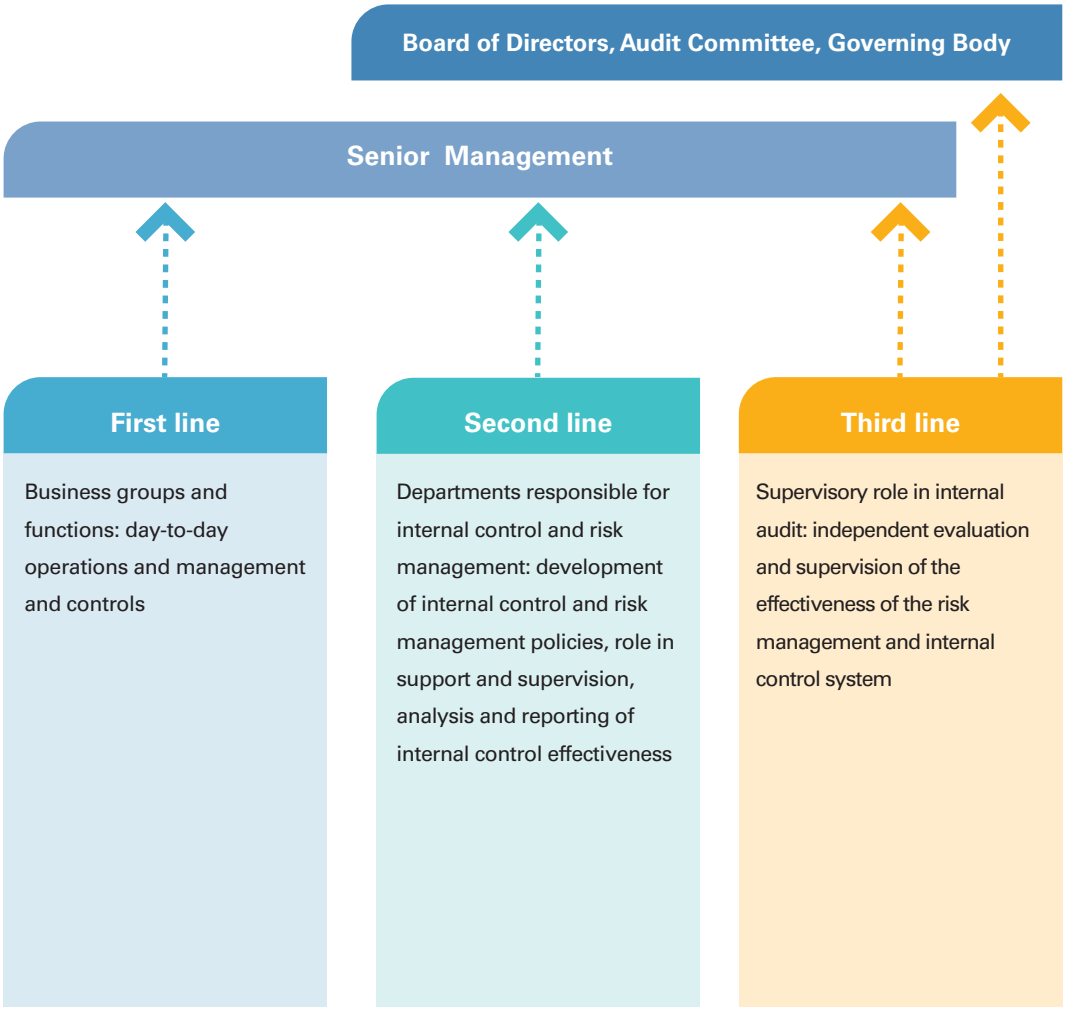
- ## Integrity Development

At GenScript, employees are entitled to supervise business operations by email, WeChat and hotline, which protects employees' supervision right, stimulates employees' enthusiasm for supervision, and ensures integrity, compliance and stable operation of the Company. We address all issues reported, put in place a sound mechanism for whistleblower protection, strictly keep confidential the reported details and whistleblower information, prevent retaliation against whistleblowers, and follow up with whistleblowers.



- ## Risk Management

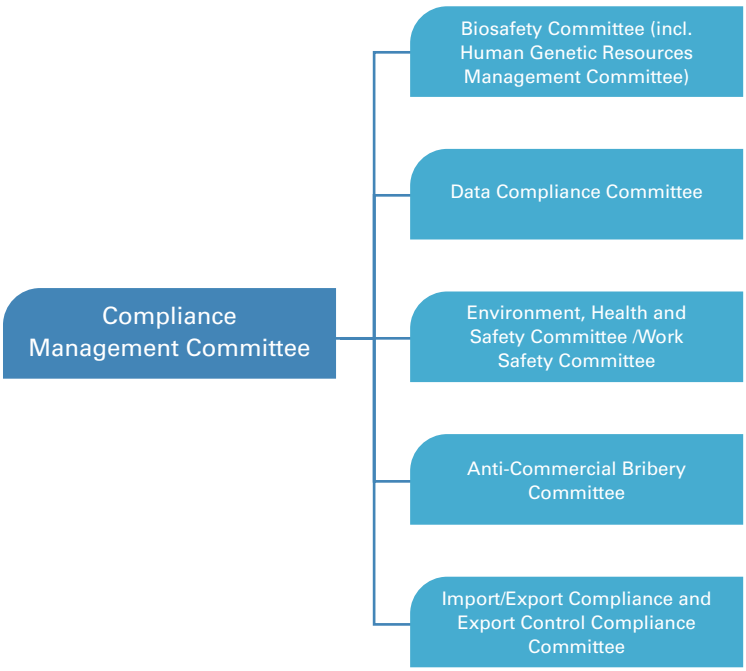
To ensure effective risk management and internal control, GenScript adopted IIA's three lines model for risk control and improved its risk management framework based on the actual situation of the Company under the supervision and guidance of the Board and the Audit Committee. During the reporting period, we appointed four global process owners and 27 process controllers for end-to-end process performance management and process compliance. We performed process performance evaluation and compliance testing for 26 key functions and modules covering business units, developed action plans, and completed corrective actions for issues identified in internal control design or execution. Also, Internal Audit Department supervised system operation and conducted annual evaluation to strengthen risk management and response and achieve a long-term balance between business growth and risk management.



Three Lines of Defense

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

GenScript places a high priority on its legal compliance system and strives to establish a comprehensive compliance management system involving all employees throughout all processes. During the reporting period, the Compliance Management Committee oversaw compliance supervision and operational compliance at GenScript.



Compliance Management Structure

During the reporting period, we corrected compliance risks identified during an inspection of biomaterial licenses, an internal audit of import and export business, and an inspection of biosafety and data compliance, which eliminated major compliance risks.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

GenScript incorporates compliance risk management into its performance indicator control system, and evaluates annual compliance management activities of departments.

GenScript organized over 16 compliance training sessions online or in person for the management and employees, involving approximately 4,600 trainees. Training covered a range of compliance-related topics including general compliance knowledge, biosafety and human genetic resources, import and export compliance, export control, trade secrets, employment management, and advertising laws. Those training sessions strengthened employees' compliance awareness and enhanced compliance management capabilities.

Compliance Training

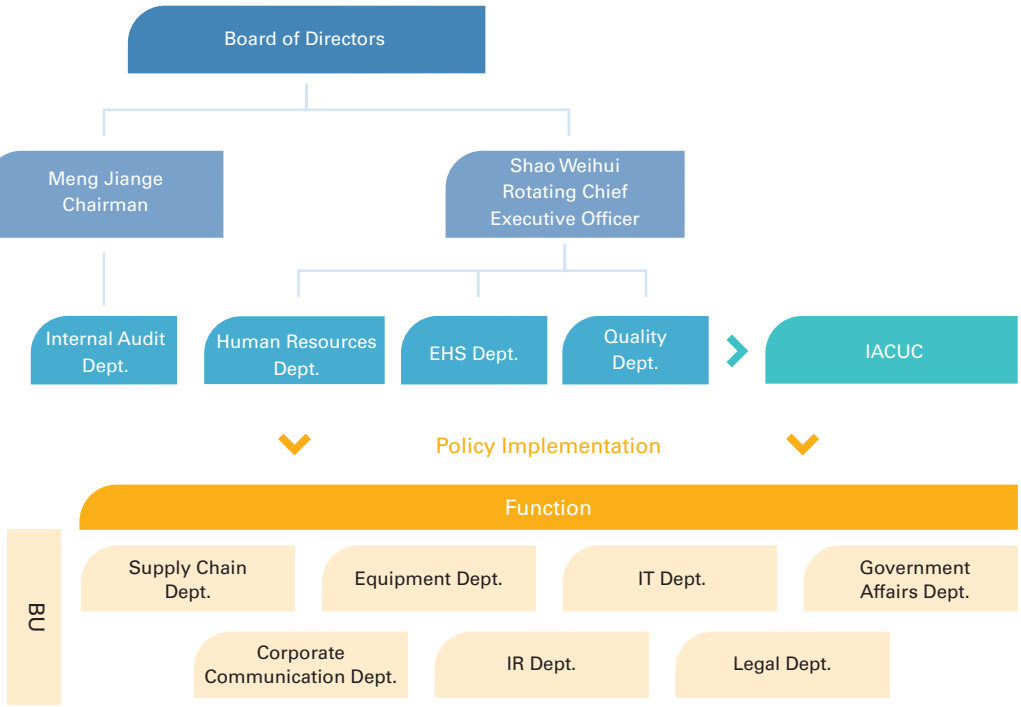
Launch of the "Compliance Online" Platform on WeChat

During the reporting period, we launched the "Compliance Online" platform on WeChat to present an update on legal compliance insights and requirements and prevent compliance risks. We posted articles on outbound data transfer, Authorized Economic Operator (AEO) by customs, and advertising laws, keeping employees informed of the latest compliance management requirements. We also established an internal knowledge space to improve the efficiency of compliance knowledge transfer and strengthen compliance awareness of employees.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

1.3 ESG Management

GenScript has continuously improved its ESG management capabilities by optimizing its internal management system. At GenScript, ESG management system is led by the Board, and the Chairman of the Board and the Rotating Chief Executive Officer jointly push ahead with ESG initiatives to drive sustainable development.



GenScript ESG Management Structure

- ### Board Statement

Committed to propel ESG journey forward, the Board regularly discusses and reviews ESG issues at GenScript and takes accountability.

During the reporting period, the Board evaluated the importance of ESG issues, and discussed and set a number of environmental targets for water consumption, energy conservation and emissions, etc. The Board reviewed the implementation plan for each target and regularly inspected the achievement of environmental targets, accelerating progress toward sustainable development.

The Board will continue to focus on the Company's ESG performance and provide stakeholders with practical and reliable ESG information to jointly shape a brighter future.

1.4 Accountability

Trust and support from our stakeholders drive GenScript forward. We develop positive, long-term stakeholder relationships through regular communication to navigate changing market dynamics and create sustainable value.

- ### Stakeholder Identification and Communication

Our stakeholders primarily include government and regulatory authorities, shareholders, investors, consumers, the public, suppliers, employees, media, and partners. We maintain effective communication with stakeholders by regularly updating announcements and circulars on our website. During the reporting period, we hosted and attended 221 brokerage conferences, conference calls and roadshows, and followed up with and responded to requests of our stakeholders.

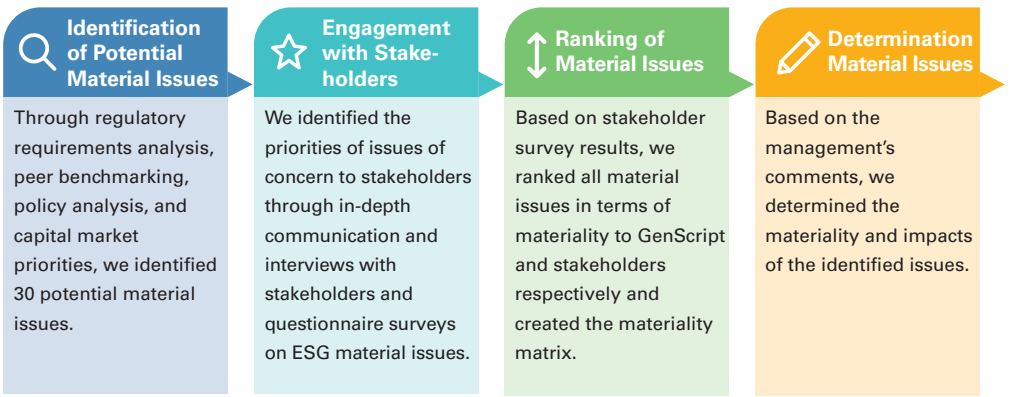
Category	Issue of Concern	Method of Communication
Government and Regulatory Authorities	• Legal compliance • Environmental protection • Business ethics and anti-corruption • Public welfare • Supporting community development	• Regular announcements • Leader's visits and research reception • Correspondence
Shareholders and Investors	• Corporate ESG management • Operational risk management • Technology innovation	• General meeting of shareholders • Business updates/roadshows • Press releases/announcements • Investor relations section of our website
Consumers and the Public	• Customer privacy • Product and service quality • Responsible marketing • Intellectual property protection	• Customer research • Email and phone calls • Customer satisfaction survey
Suppliers	• Business ethics and anti-Corruption • Supply chain ESG management • Customer privacy protection	• Supplier evaluation • Supplier communication and visits
Employees	• Compensation and benefits • Training and development • Health and safety • Protection of rights and interests	• Employee communication platform • Employee activities • Employee training
Media	• Technology innovation • Supporting community development	• Press releases and announcements • Interviews and consulting
Partners	• Accelerating industry development • Legal compliance	• Field research • Industrial forums

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

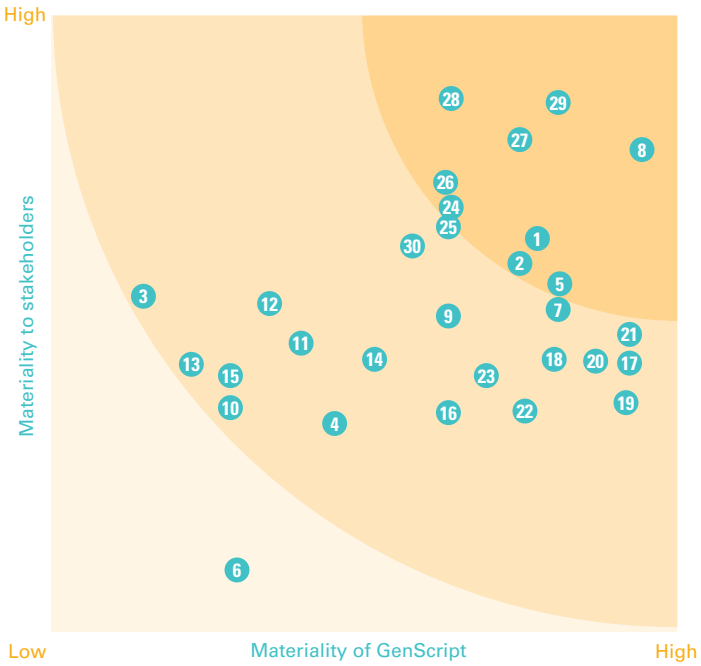
• Identification of Material Issues

GenScript complies with the *HKEX ESG Reporting Guide*, refers to standards of the Sustainability Accounting Standards Board (SASB) and MSCI, and benchmarks against ESG best practices of leading industry peers and capital market ESG priorities. Considering assessment by internal and external stakeholders, we have identified and summarized 30 material issues. The prioritization of these issues has been confirmed through in-depth interviews, surveys, and feedback from various stakeholders.

Process of ESG Material Issues Identification



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



Materiality Matrix of ESG Issues at GenScript

No.	Classification	Environmental, Social and Governance Issues	No.	Classification	Environmental, Social and Governance Issues
1	Governance and community	**Corporate ESG management**	16	Employment	Working hours and holidays
2		**Operational risk management**	17		Compensation & benefits
3		Supply chain ESG management	18		Fair recruitment and non-discrimination
4		Supporting community development	19		Fair promotion and reward mechanism
5		**Business ethics and anticorruption**	20		Employee care and retention
6		Public welfare	21		Health and safety
7		**Accelerating industry development**	22		Training and development
8		**Legal compliance**	23		Respecting human rights and labor practice
9	Environment	Waste management	24	Product liability	**Responsible marketing**
10		Greenhouse gas emission management	25		Customer benefits
11		Energy use and management	26		**Technology innovation**
12		Water resource management	27		**Respecting intellectual property rights**
13		Packaging material management	28		**Product and service quality**
14		Exhaust emissions management	29		**Protecting customer privacy**
15		Climate change risk	30		Safeguarding laboratory animal care

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

II. INNOVATING R&D, PURSING EXCELLENCE

GenScript continuously invests in R&D and capability development to achieve excellence. We are engaged in internal and external collaboration and develop industry standards, accelerating industry development.

2.1 Product Innovation

- R&D Capabilities

GenScript has developed scientific and technological innovation capabilities and synergized innovation resources, which accelerated scientific research and the application of research. During the reporting period, we upgraded our life science services and products, biologics development services (CDMO), cell therapy and industrial synthetic biology products platforms through continuous R&D innovation.

Clinical Progress of Legend Biotech's Cilta-cel

During the reporting period, our subsidiary Legend Biotech had several ongoing clinical studies to evaluate cilta-cel for earlier-line treatment of multiple myeloma.

CARTITUDE-4 was Legend Biotech's first Phase 3 study evaluating lenalidomide-refractory multiple myeloma patients who received one to three prior lines of therapy. The study enrolled over 400 patients and now is in the followed-up. The study met its primary endpoint in January 2023. Results from the study will be used for potential front-line IND filings.

CARTITUDE-5 was Legend Biotech's first Phase 3 study in first-line multiple myeloma, which is a Phase 3 open-label study of cilta-cel and plans to enroll 650 patients. The study is comparing to active control arm, where the patients are being treated with standard of care VRd followed by RD maintenance. This is the first Phase-3 trial for any BCMA-targeting CAR-T in the first-line setting of multiple myeloma.

CARTITUDE-6 was another Phase 3 study in the front-line setting, aiming to compare the efficacy of DVRd followed by cilta-cel versus DVRd followed by autologous stem cell transplant (ASCT) in newly-diagnosed multiple myeloma patients who are transplant eligible. The study plans to enroll roughly 750 patients.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Legend Biotech Moved Forward with Multiple Early-Stage Programs

During the reporting period, Legend Biotech moved forward with several early-stage autologous or allogeneic CAR-T candidate products for various cancers. In June 2022, the US FDA approved the IND application for solid tumor CAR-T, LB1908 targeting relapsed or refractory gastric, esophageal and pancreatic cancers. In November 2022, the US FDA also approved IND application for LB2102, an investigational CAR-T therapy for the treatment of adult patients with extensive stage small cell lung cancer.

Legend is also developing an allogeneic gamma delta CAR-T product candidate and allogeneic CAR-NK product candidates. Based on differentiated construct designs, those candidates have demonstrated positive outcomes in pre-clinical studies and are expected to achieve better clinical efficacy.

DISEASE AREAS	CORE TECHNOLOIGES	PRODUCT PLATFORMS
Hematologic malignancies Solid tumors	CAR–T NK γδ–T	Autologous Allogeneic

GenTitan Oligo Pool

During the reporting period, GenScript launched the world's highest-throughput semiconductor chip and platform for gene synthesis, featuring low costs and high throughput. We rolled out the Gentitan™ 8 million oligo pool in 2022, allowing the synthesis of 8 million oligos on a small chip reaching 2.5M per cm2. This will facilitate downstream genome editing, protein/antibody engineering, molecular diagnostics, and synthetic biology. Leveraging our chip-based oligo pool technology, we have been able to improve the competitiveness of our Gene Fragment service and support diversified gene synthesis needs.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

GMP-Grade Magnetic Beads

During the reporting period, GensScript launched its GMP-grade magnetic beads for cell isolation and T cell activation, including GMP CytoSinct CD3 isolation beads, GMP CytoSinct CD4 isolation beads, and GMP Enceed T activation bead. CytoSinct™ beads feature stable performance, flexible packaging size, short turnaround time, and cost effectiveness, supporting safe and rapid development of the cell therapy industry.

Early-Stage Molecular Discovery & Development Platform

During the reporting period, our subsidiary ProBio improved its early-stage molecular discovery & development platform through process innovation, optimization, and operation upgrade. After technology innovation and semi-automation enhancement, the antibody discovery turnaround time of the hybridoma platform was shortened from 6 months to 4 months, the success rate of analysis discovery increased to over 90%, and the labor and material efficiency increased by 20%. The phage library platform eliminated phage interference in antibody screening, which lowered the false positive and false negative rates. Our single B-cell platform based on microfluidic Beacon technology enabled the success rate of single-cell sequencing to increase from 40% to over 80%.

- High probability of capturing target clones
- Shorter screening time
- Automatic screening process
- Increased diversity, higher affinity

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Improved End-to-end CDMO Capabilities

On CDMO capabilities, GenScript upgraded its technology platform, increased production efficiency, and improved outsourcing services for emerging therapeutics R&D during the reporting period.

On antibody and protein drugs, we constructed a new vector pGenHT1.0-UP with a yield up to 15 g/L, which significantly shortened the turnaround time of CMC and cell line development. We also launched an aseptic fill and finish line.

On plasmids, we completed a GMP-grade plasmid platform with 300 L capacity, which can provide plasmid to mRNA management services and shorten the project cycle.

On viral vectors, our proprietary suspension cell line PowerSTM-293T enables efficient viral vector packaging and higher supernatant titer. Also, we launched our AAV platform, which enables us to offer total IND solutions covering cell banking, process development for different serotypes, and IND filing.

Protease for Liquid Detergent Puzhi™ 1.0 L

During the reporting period, our subsidiary Bestzyme upgraded its core products, optimized the formulation of two lead products, and optimized strains for six products.

We refined our products for downstream applications, and launched China's first protease for liquid detergent and muramidase Puzhi™ 1.0 L. This product features superior heat-resistant storage stability and compatibility with various detergent formulations.

Improved
detergent effect

Superior
storage stability

Compatibility with various
detergent formulations

Product Specifications

Activity: ≧250,000 u/g
Appearance: clear transparent liquid
Color: light brownish-yellow
pH: 5.0–7.0
Protease activity determined according to GB/T 23527-2009 folin method for protease

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

- ## R&D Collaboration

On the basis of openness, tolerance, mutual benefits and win-win results, GenScript has intensified international strategic collaboration, expanded the cooperation platform, and boosted product quality.

Strategic Collaboration — Working with Applied Cells to Offer Solutions for Cell Therapy Development

On November 18, 2022, GenScript and Applied Cells entered into strategic collaboration to deliver cell isolation solutions for global cell therapy development. Under this collaboration, GenScript will develop and supply its proprietary cGMP grade CytoSinct™ reagents for use in developing CAR-T and other cell therapy products on the Applied Cells MARS® Platform.

Strategic Collaboration — Working with Hibiocy to Develop COVITRAP™

During the reporting period, GenScript's subsidiary GenScript ProBio and Hibiocy, a subsidiary of Rojukiss (KISS), a leading Thai-based beauty & health company, entered into strategic collaboration for the development and manufacturing of COVITRAP™ and future new products. The parties are committed to the discovery of human antibody that can bind to SARS-CoV-2 and effectively inhibit infections. This partnership will leverage synergies in the complementary strengths and capabilities to accelerate the development of SARS-CoV-2 antibody drugs from target discovery to commercial manufacturing.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Strategic Collaboration — Working with Trinity College Dublin and Saint James Hospital to Develop 3D Models

During the reporting period, Legend Biotech and Trinity College Dublin and Saint James Hospital (SJH) entered into strategic collaboration. Together, the entities will develop three-dimensional models exploring chimeric antigen receptor T-cell (CAR-T) cell therapies in solid tumors. The research will be led by a clinical scientist and clinician team at Trinity/SJH, Dr. Sharon O'Neill, and Associate Director of Business Development & Operations at Legend Ireland. The collaboration will focus on hard-to-treat cancers, including lung, colorectal and gastric. The collaboration aims to develop 3D models that will resemble the three tumor types for use in the discovery of new treatment targets and for screening novel CAR T-cell therapies. Through the collaboration, Legend Biotech and Trinity College expect to significantly benefit their respective research programs and improve treatment options for patients.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

- ## Innovation Awards

GenScript has continuously enhanced its innovation capabilities and competitiveness in R&D, garnering public acclaim.

- GenScript was awarded the "Best Contract Development and Manufacturing Organization Award (CDMO)" for the third year in a row
- GenScript and its subsidiary Legend Biotech ranked among "Top 30 Listed Companies by Innovation"
- GenScript was awarded "Top 10 Innovative Drug Service Providers of the Year"
- GenScript was awarded "Top 10 Innovative Drug Service Providers of the Year 2021"
- GenScript ranked among the "2022 Top 100 China's Life Science Service Enterprises"
- ProBio was named "Jiangsu Hi-tech Zone Unicorns 2022"
- Legend Biotech was named "Newcomer of the Year"

2.2 Value Orientation

GenScript is value-oriented and strives for higher quality, efficiency and sustainability. We work to accelerate the launch of products and improve human well-being.

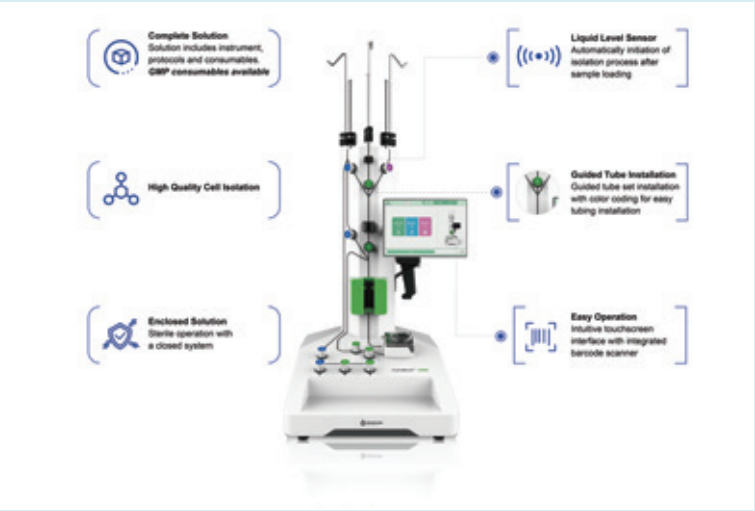
Launch of Legend Biotech's First Proprietary Cell Therapy Product CARVYKTI®

During the reporting period, Legend Biotech received marketing approvals in the US, Europe and Japan for its proprietary cell therapy product, ciltacabtagene autoleucel (cilta-cel, commercial name: CARVYKTI®). Cilta-cel brings hope to patients with relapsed or refractory multiple myeloma (R/R MM). Cilta-cel is the first cell therapy product developed in China and successfully commercialized overseas, marking Legend Biotech's first step to advance its R&D pipelines targeting various diseases.

In the future, we will strive to obtain more CARVYKTI approvals in other markets worldwide while advancing other cell therapies for liquid and solid tumors driven by clinical needs and innovation. In addition, we implement a global strategy and seek international collaboration to bring more proprietary cell therapy drugs to the global market. We aim to build Legend Biotech into a leading cell therapy company with sustainable growth.

Launch of China's First Cell Isolation Instrument CytoSinct™ 1000

During the reporting period, GenScript launched its proprietary CytoSinct™ 1000 cell isolation instrument, which is China's first automated, enclosed cell isolation instrument. Based on magnetic separation technology, the instrument allows an operator to perform the enrichment or removal of target cells in an enclosed, sterile system. This is an easy-to-use, safe and highly efficient solution, featuring excellent cell recovery, purity, viability and activation.



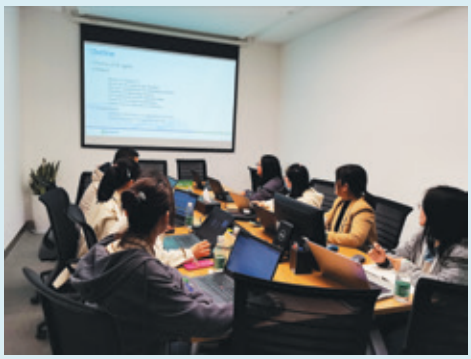
ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

2.3 Intellectual Property

GenScript strictly complies with the Patent Law of the People's Republic of China, the *Trademark Law of the People's Republic of China*, *Copyright Law of the People's Republic of China*, the *Hong Kong Patents Ordinance of 27 June 1997*, the *Hong Kong Trade Marks Ordinance (Cap. 559)*, the *Title 35 of the United States Code — Patents*, the *15 US Code Chapter 22 — Trademarks*, and other intellectual property protection laws and regulations of countries where GenScript operates. We never infringe upon intellectual property and strengthen our intellectual property protection and management. We have a professional intellectual property team in place for intellectual property management. Also, we organize training to raise employees' awareness of intellectual property protection and confidentiality.

Intellectual Property Training

During the reporting period, we arranged a number of intellectual property training sessions for R&D, production and sales teams and all senior scientists in China and overseas. Training covered basic knowledge of patents and applications, private trade practices, and personal information management. This raised employees' awareness of intellectual property right protection and enhanced the ability to turn technological innovations into products.



GenScript Patents in 2022

Patents granted in 2022: 57
Total patents: 217

* During the reporting period, patents of the Company's subsidiary CUSTOMARRAY in Washington and Legend Biotech are counted.

III. SUPERIOR SERVICE & QUALITY ASSURANCE

GenScript prioritizes its product and service quality. We established a quality management system for the entire product life cycle, and protect trade secrets, personal privacy, and data security. We set up a comprehensive supplier management system to ensure stable and sustainable supply chain development.

3.1 Quality Assurance

GenScript has developed an efficient collaborative quality management system. We comply with the laws and regulations of governments and regulatory agencies worldwide. We leverage industry advantages to explore high-quality development models.

- **Quality Management**

  GenScript has established a quality system throughout product development, clinical manufacturing, and commercial manufacturing, and launched digital management systems. We take ISO 9001 quality management system as the core, and implement the *Medical Device Quality Management System for Regulatory Requirements* (ISO 13485:2016) based on our business requirements. We facilitate R&D projects with higher standards.

  By the end of the reporting period, GenScript had no product recalls due to quality or safety issues.

- **External Audit Certification**

  Driven by the vision to "Become the Most Trustworthy Biotech Company", GenScript has assisted customers and the NMPA with audits. During the reporting period, we accepted over 80 external audits and 100% passed the audits, with no critical issues observed. We have obtained ISO 9001 and ISO 13845quality management systems certifications.

Certification	Company
ISO 9001 Quality Management Certification System	Nanjing GenScript Biotech Co., Ltd. Jiangsu GenScript Biotech Co., Ltd. Nanjing ProBio Biotech Co., Ltd. Jiangsu GenScript ProBio Biotech Co., Ltd.
ISO 13485 Medical Device Quality Management System	Nanjing GenScript Biotech Co., Ltd.
ISO 22000 Food Safety Management System	Jinan Bestzyme Bio-engineering Co., Ltd.

GenScript's Certificates

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

- ## GMP Quality Management

In accordance with the requirements of the US FDA, EMA, NMPA, and International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH), we have established a quality system comprising quality assurance, manufacturing management, laboratory management, plant, facilities and equipment, materials, and personnel and organizational structure. Based on characteristics of different phases in the drug life cycle, we have established and improved phase-appropriate quality systems, which are managed and implemented by different teams.

GMP Quality Management System

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Quality Management System

GenScript launched a digital system to enhance quality-related training and document management. Digital transformation is an important part of GenScript's quality management reform. The digital system helps us clarify quality management procedures, address quality management weaknesses, and upgrade quality management.

Document Management System	Training Management System	Quality Management System
Digital document management with the OpenText Documentum for Life Sciences solution	Digital training management with the ComplianceWire system	TrackWise quality management solution, consisting of change, supplier management, validation management, OOS/MDD, R&D, deviation, CAPA and audit
DMS	TMS	QMS

GMP Warehouse of GenScript ProBio

During the reporting period, GenScript ProBio commissioned a new GMP warehouse in Building 52, where we set up an area for materials pending inspection, an area for qualified materials, and an area for unqualified materials according to GMP requirements, and posted signs indicating materials status. The warehouse was equipped with an EMS system for real-time environment monitoring in the warehouse and evaluation of thermal shift in the storage area, ensuring a warehouse environment that meets different material storage requirements.

GMP Warehouse of GenScript ProBio

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

- ## Quality Audit Team

GenScript builds an internal quality audit team. During the reporting period, we added 108 quality auditors, and now we have a total of 187 quality auditors. This team helps improve overall quality management and internal quality audit efficiency and ensure product quality and safety.

- ## Quality Training

GenScript raises the quality management awareness of all employees to ensure the effectiveness and efficiency of our products and services. During the reporting period, we organized distinctive quality management activities, among which the Quality Month event involved 3,660 participants. In our "Feedback and Correction" campaign, we collected 1,378 quality-related feedback and supervised corrective actions. This campaign aroused enthusiasm for risk identification and involved employees in quality management.

Training Activities

During the Reporting Period, Nanjing GenScript ProBio organized 4,052 employee training sessions on GMP knowledge, quality management and qualifications. These training sessions involved 77,357 participants, lasting 30,035 hours. Jiangsu GenScript ProBio organized 11 company-level annual training sessions, covering aseptic operation and facility management, microbiological knowledge, and validation management, with a total of 3,831 participants. In addition, we provided training on revised or new quality policies, involving 36,849 participants, which enhanced employees' GMP awareness and production quality management capabilities. As a result, we lowered quality incidents rate by 20% and quality deviation rate by 10% in 2022 compared to 2021, while achieving a 100% pass rate in external audits.

3.2 Responsible Purchasing

Suppliers are indispensable to our company development. To ensure supply chain safety and stability, we abide by the laws and regulations, continuously improve the supplier management system, and identify and prevent supply chain risks through regular supplier reviews, enhancing our supply chain resilience. Also, we stick to win-win cooperation and take responsibility to stimulate industry vitality. We interact with and provide training for suppliers to facilitate the healthy development of the industry.

- ### Supply Chain ESG Management

  GenScript strives to improve ESG management in supply chain, accelerate supplier localization, and optimize purchasing standards, supplier access standards, and supplier management processes. During the reporting period, we optimized and updated 10 internal management policies and process documents including the *Supplier Management Procedures* and the *Integrity Undertaking*. In supplier access, we optimized the supplier questionnaire by supplier type and added water use, carbon emissions, waste emissions, and animal welfare targets. In annual supply chain performance evaluation, we evaluated suppliers in terms of the environment, labor management, and human rights. We refined the evaluation requirements for suppliers on transportation documents and packaging.

GenScript Supplier Management

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

- ## Supplier Quality Management

GenScript implements its supplier quality management policy, optimizes supply chain synergy, and reduces supply chain risks through purchasing risk control, on-site visits, and supplier audits. We screen, grade, and classify suppliers by process, supplier qualification, compliance risk, material category, and periodic review, and set different review cycles for suppliers of different risk levels to improve supplier management effectiveness. During the reporting period, we conducted regular quality audits on 42 key suppliers, with a 100% pass rate.

- ## Suppliers Interaction

GenScript values collaboration with suppliers and interacts with suppliers. We ensure supply chain compliance by leveraging technological innovation. During the reporting period, GenScript organized more than 50 workshops involving over 1,000 participants, covering frontier technology analysis, new equipment performance introduction, and new inspection methods.

GenScript Supplier Workshop

GenScript Strategic Supplier Interaction

3.3 Customer Service

GenScript has optimized services based on customer needs and established open customer communication channels. We value feedback from customers and protect information security for customers by limiting access to customer data. Also, we have put in place an accident analysis and emergency response mechanism, improved employees' security awareness, and protected customer privacy as a way to offer safe and trustworthy services.

- ### Customer Feedback Management

GenScript has established a customer feedback management procedure, a closed-loop customer feedback process, and an efficient feedback platform. In response to customers' feedback, concerns and pain points, departments will promptly discuss and develop solutions. During the reporting period, our timely response rate for customer feedback was 99.3%.

Customer Feedback Channels

Email	Complaint: qa@genscript.com After-sales: cpbu.techsupport@genscript.com
Dedicated Customer Service	Follow our WeChat account "GenScript Biotech" and talk to your dedicated customer service agent
Questionnaire	Regular customer satisfaction surveys
Contact Information	After-sales: 400-025-8686 ext. 6707 Fax: 025-58897288-5815

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

- ## Customer Satisfaction Survey

GenScript always pursues customer satisfaction. During the reporting period, we started a new customer satisfaction questionnaire, focusing on the average customer satisfaction in product quality, technical support, response time, purchase experience, website and delivery time. Our overall customer satisfaction was 88.96 points (80 points indicate satisfaction), and the Net Promoter Score (NPS) result was 62.98% (up 1.86% from 2021).

- ## Information Security and Customer Privacy

During the reporting period, GenScript updated the *Information Security Management Policy*, optimized the existing detection and control measures for external data transmission, tightened the management of data transfer permissions, and conducted regular reviews. We have passed the annual audit of ISO 27001 information security certification and continuously improved our information security management system with new technologies.

ISO 27001 Information Security Certification

GenScript inspects information security on a weekly basis, and timely provides feedback for and resolves anomalies and risks. During the reporting period, we had a third-party security service provider conduct four vulnerability scan and penetration tests on major systems and followed up on 16 high risks identified, ensuring the safety and stability of information systems. We organized information security awareness training and assessments, and initiated three phishing email attacks to enhance employees' security awareness. In addition, we organized data backup and recovery drills half a year to ensure effective data recovery in case of accidents.

3.4 Animal Welfare

For animal facilities, GenScript has obtained the permit for the use of laboratory animals, and has been accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) and the Office of Laboratory Animal Welfare of the National Institutes of Health of the United States (OLAW).

GenScript complies with animal welfare standards in animal experiments to advance scientific development. We strictly abide by the *Biosafety Law of the People's Republic of China*, the *Regulation on the Administration of Laboratory Animals*, the *Measures of Jiangsu Province on Administration of Affairs Concerning Experimental Animals*, the *Animal Welfare Act,* the *Guide for the Care and Use of Laboratory Animals*, the *Guidelines for the Euthanasia of Animals, 2020,* and the *Health Research Extension Act*.

To ensure animal experiment ethics and scientific use of animals, we established the Institutional Animal Care and Use Committee (IACUC) to protect animal health and welfare.

Daily Management

- Optimize the daily inspection plan of the veterinary team: increase the frenqency, expand inspection areas, improve daily monitoring and management of IACUC, and secure animal health and welfare. No adverse events occured during the reporting period;
- Develop an emergency response plan and 14 contingency plans for animal factilities, covering power and water cut, fire hazards, pandemic, and Business Continuity Planning (BCP);
- Optimize rules and plans for animal facility environment and animal quality monitoring: optimize rules and plans for internal monitoring and external inspections, which accomodate facility operation and experimental requirements, ensure zero contamination, and support research projects.

Facility Upgrade

- Upgrade the air-conditioning system in animal facilities

Training

- Oragnize training for the facility management team and veterinary team according to the annual training plan;
- Organize training on animal ethics review for IACUC members;
- 80 animal facility managers and veterinarians attended 80 external training sessions or discussions.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Laboratory Animal Memorial Week themed "Your Gratitude Speaks Volumes"

IV. EMPLOYEE SUCCESS & FULFILLMENT

GenScript believes that talents are the cornerstone for sustainable development. GenScript values talent acquisition, retention, development and management, and aims to create an equal, diversified, harmonious and inclusive working environment for employees. We are concerned about the health and safety of employees, and help employees unleash potential and achieve shared success with the Company.

BioSpace's 2023 "Best Places to Work" — GenScript USA Inc.

Extraordinary Employer of the Year 2022 from Liepin

China Preferred Employer of the Year 2022 from Zhaopin.com

HR Best Practice Award (Case & Team) from GHR

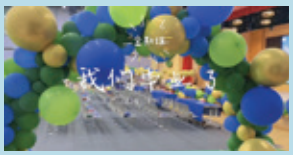
4.1 Talent Acquisition

GenScript acquires talents on the basis of fairness and impartiality in accordance with the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Employment Promotion Law of the People's Republic of China*, the *Trade Union Law of the People's Republic of China*, the *Law of the People's Republic of China on the Protection of Minors*, the *Provisions on Prohibition of Child Labor*, and the *US Fair Labor Standards Act of 1938 (FLSA)*. We have continuously improved our Recruitment and Hiring Management Policy and standardized the talent recruitment process and policy. Also, we forbid child labor and forced labor, and protect the legal rights and interests of employees.

GenScript's workforce is made up of talents in different countries and regions worldwide. We provide equal opportunities for all employees regardless of religion, race, skin color, gender, age or national origin. During the reporting period, we developed the *Affirmative Action Plan*, which has been implemented by GenScript's subsidiaries in China and overseas. This ensures the diversity of our employees and creates a diverse and inclusive environment at GenScript.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

To fill needed positions at GenScript, we acquire talents through internal referral, internal job competition and external recruitment and grow our talent base. During the reporting period, we launched an HR IT system, which enabled information communication between business needs and talent acquisition, streamlined the recruitment process, and improved GenScript's talent pool.

Multi-Channel Recruitment at GenScript	
Livestreaming campus recruitment	At the autumn career fair, GenScript hosted two livestreaming campus recruitment sessions, including 2023 College Recruitment Launch and Job Introduction. Each session lasted 1 hour, getting over 28,000 views.
Publicity video	GenScript started a WeChat Channels account in September 2022 and shared employee work, life and canteen environment. During the reporting period, the account received over 80,000 views. The videos were also uploaded to RED and Bilibili. 
Livestreaming on LinkedIn	During the reporting period, to attract more overseas talents, GenScript live streamed on LinkedIn to introduce work, life and job responsibilities at GenScript to outstanding overseas talents.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

As of December 31, 2022, GenScript has 6,213 employees, including 6,209 full-time employees and 4 part-time employees. We have 1,265 overseas employees, accounting for 20.36% of our workforce. Upholding employee diversity and equality, GenScript is committed to eradicating sexism and optimizing the career development environment for female employees. We have 3,567 female employees, accounting for 57.41%, and females make up 30.43% of our Executive Management Team (EMT).

GenScript strives to enhance sense of identity and belonging of employees at work. During the reporting period, the overall turnover rate lowered from 18.75% last year to 15.85%. The specific employee structure and turnover rate are as follows:

		2021	2022
Total number of employees		5,260	6,213
By gender	Male	2,236	2,646
	Female	3,024	3,567
By employment type	Full-time	5,255	6,209
	Part-time	5	4
By age	＜30	2,583	2,991
	30–50	2,498	2,981
	＞50	179	241
By region	Mainland China	4,381	4,948
	Overseas	879	1,265

		Male	Female	Total
By age	＜30	18.45%	14.89%	16.13%
	30–50	17.79%	14.13%	15.91%
	＞50	6.98%	3.70%	6.19%
By region	Mainland China	16.95%	14.07%	15.24%
	Overseas	23.49%	20.32%	22.08%
Overall employee turnover rate		17.72%	14.49%	15.85%

※ Data related to Legend's overseas site is not counted in the turnover rate.

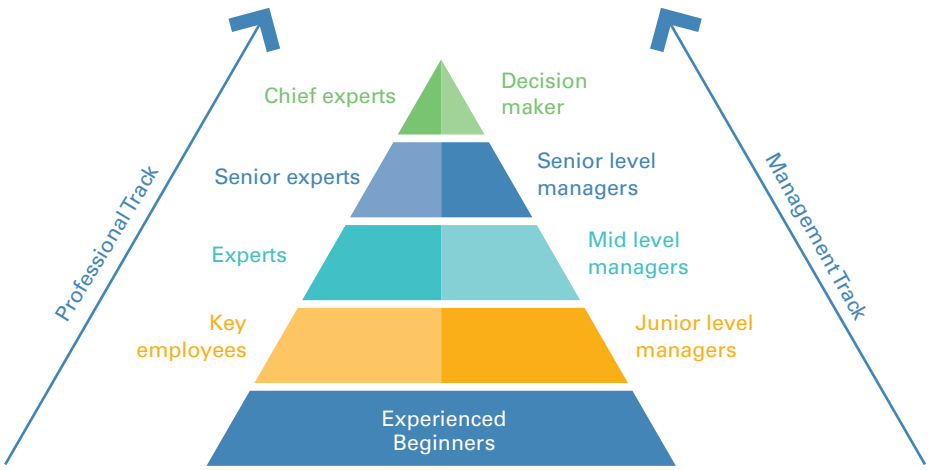
ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

4.2 Employee Development

• Employee Promotion

GenScript has dual career ladders in place for employees. We rate employees' competencies and qualifications and standardize employee training and selection, driving employees' self-improvement. We help employees leverage their strengths and timely adjust career planning by providing continuous feedback.

To ensure fair and equal promotion opportunities for employees, GenScript has established a two-tiered review system for performance evaluation, where the HR team oversees and inspects the process and accepted complaints from employees. During the reporting period, we continued to update our management policies and processes, refined our employee evaluation standards and systems, and launched a new employee performance goal setting system to improve work efficiency, standardization and traceability.



GenScript dual career ladders

- ## Employee Training

GenScript cares about employee development. We have offered a variety of training courses and programs to suit employees at different levels and functions and meet their needs for career development. GenScript has organized a number of training programs, including onboarding training for new employees, general competency training for all employees, and training programs for leaders. During the reporting period, we provided leadership training to implement the talent selection system and provide more career development opportunities for employees. Also, GenScript has a training feedback system in place to collect and evaluate training outcomes and employee satisfaction to optimize training courses.

Employee Training System

Type	Program	Trainee	Content & Objective
New Employee Training	Onboarding training	All new employees	We introduce the industry, our corporate culture, policies and compliance to help new employees quickly fit in to work at GenScript.
	Young Talent training	Fresh graduates	We train and select fresh graduates to foster loyal, responsible and mission-driven talents and management and technical successors.
Leadership development	General training	Senior level managers	We empower senior managers in strategy, marketing, management, organization and products through training, workshops, e-Learning, study tours, etc.
	Colonel training	Mid level managers	For mid level managers, we organize workshops and combine training and practice, covering the value, mission and key tasks of mid level managers, and tools and methodologies necessary for fulfilling the mission and tasks.
	Captain training	Junior level managers	We organize training-practice-review to help junior level managers continuously improve team management, goal setting, and process optimization skills, and grow with the Company.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Type	Program	Trainee	Content & Objective
	New manager transition program	Promoted leaders Hired leaders	We provide a number of courses to help new leaders accelerate the transition in new roles, quickly fit in to the team, and become competent for new roles.
	Mid level manager succession training program	Mid level manager backup	We empower mid level managers in terms of role awareness, motivation and coaching, combine training and practice based on business characteristics to help mid level manager backups improve capabilities for higher-level positions.
	Junior-level manager succession training program	Junior level manager backup	We organize training for junior level managers in role awareness, personnel management and team building to help junior level manager backups learn management methods and develop leadership and managerial skills.
Professional development	Professional competency training	Commercial/ Technical/R&D track employees	By identifying the competencies of key functions such as technology, R&D and business, we combine training and practice to help potential talents in the professional track quickly improve competencies.
	Learning map	Core position employees	We create learning maps for key positions, provide learning topics, methods, content, assessment methods and training resources in the priority (time and importance) of competencies required to perform job tasks, and present the same in a visual way to improve employees' skills.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Type	Program	Trainee	Content & Objective
General competency and digital learning	General competency training	All employees	General competency training combines on-site training and e-learning platform. Training courses cover self-management and learning, problem analysis and solving, teamwork and execution, interpersonal relationship and communication, office software and skills, and career development, which help employees develop standardized work competencies and improve organizational performance.
	e-learning platform	All employees	We have e-Learning platform in place to provide diverse online learning resources, covering general competency, professional skills, leadership and management, and operational compliance. This platform enables game-based learning to help shape a self-study habit, make full use of fragmented learning time, improve the learning environment, and create a learning organization.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Training at GenScript in 2022

Employee Skill Contest

During the reporting period, GenScript held various contests to allow employees to show and improve skills.

GenScript Program for Transition from an Associate to a Bachelor's Degree

To facilitate employees to enhance capabilities and earn a higher degree, GenScript launched the Program for Transition from an Associate to a Bachelor's Degree in April 2022, which will add to the high-caliber talent pool for the Company. We selected employees for the program (including both regular employees and interns) and formed a class consisting of 30 members along with China Pharmaceutical University in Nanjing and Jiangsu University in Zhenjiang. We also organized a trainer team to support the program.

Trainees prepared for the exam in spare time with the guidance of the trainer team. GenScript will reimburse tuitions in full for those who complete the program and earn the diploma.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Deputy Leader Development Program

To support robust growth of the Company, implement the talent selection system, and provide more career development opportunities for employees, GenScript launched the deputy leader development program during the reporting period. The program is intended to enable deputies to quickly master practical managerial skills, take charge of a team, and improve competencies.

Combining training and practice, we offer a hybrid model featuring "theoretical knowledge & case study" in on-site training and online courses to help trainees understand their roles and accumulate management knowledge. In 2022, we trained a total of 150 deputy leaders with overall satisfaction of 96.7%. In 2023, we will continue to work on deputy leader training and development.

Deputy Leader Development Program

During the reporting period, training at GenScript involved 114,186 participants cumulatively, with 100% participation. Employees received an average of 30.82 hours of training, increasing by 47% year on year. The training ratio and training hours per employee by category are as follows.

	Male		Female		Total	
	Number of trainees	Average training hours	Number of trainees	Average training hours	Number of trainees	Average training hours
Managers	5,493	32.37	4,563	37.56	10,056	34.72
Non-managerial employees	39,425	28.42	64,705	31.68	104,130	30.45
Total	44,918	28.90	69,268	32.07	114,186*	30.82

* Legend's overseas training data is not counted in the training data.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

4.3 Employee Care

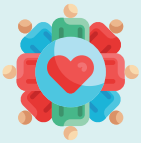
GenScript shows care for employees from multiple perspectives. We maintain communication with employees and offer a comprehensive employee benefits, care and support system, in an effort to enhance employee well-being and sense of belonging.

• Employee Communication

At GenScript, we carry out employee communication by listening to the voice of employees and involving employees in the development of the Company as a way to enhance employee satisfaction. To ensure effective and active employee communication, we offer two-way communication channels including the staff briefing on business results, CEO luncheon, Employee Voice Mailbox, and Voice of GenScript.

To understand real willingness and thoughts of employees and identify potential issues and annual improvements, we conducted Gallup Q12 engagement survey during the reporting period. In 2022, we conducted two surveys and collected 9,479 questionnaires, involving over 90% of our employees, with an overall average score of 4.34. Also, we signed a non-disclosure undertaking with an employee responsible for processing original data from Gallup Q12 survey, and encouraged internal supervision by employees to ensure anonymous feedback without concerns.

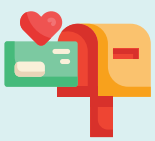
Voice of GenScript



Employee Appreciation Party

Internship graduation ceremony

Employee Voice Mailbox



Staff briefing on business results

CEO luncheon

• Compensation and Benefits

GenScript appreciates employees' contributions to the development of the Company. We regularly benchmark our employee compensation against the market average, update the compensation policy, and offer competitive compensation. Also, we have developed short-term and long-term incentive policies. During the reporting period, we adjusted employee compensation packages and set up an incentive pool to encourage employees to be self-driven and improve performance.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

• Employee Well-being

During the reporting period, GenScript launched the Employee Flexible Benefits Platform, featuring holiday-specific stores with a variety of benefits options. The platform is well received by employees, with 95.40% satisfaction rating. In addition, GenScript provides convenience for employees at work by updating the overseas travel subsidy policy to encourage employees to be part of business and regional development. Considering local characteristics of different locations of assignment, we have developed differentiated policies to ensure employees' quality of life. Also, we have purchased global travel insurance for employees on international assignment to ensure access to medical care overseas.

GenScript Caring Fund

GenScript has established a caring fund to provide necessary assistance to employees in need. In running the fund, we strictly follow the laws and regulations of the places where we operate. During the reporting period, we organized several events and donated a total of RMB147,000 to our employees and their families.

• Employee Activities

GenScript promotes work-life balance. We regularly organize activities to enrich employees' daily lives, publicize corporate culture, and create a positive working environment. During the reporting period, we organized a number of employee activities for the Women's Day, Dragon Boat Festival, Mid-Autumn Festival, Mother's Day, and Father's Day. In the burning summer, the Company distributed refreshing supplies to employees to enhance their sense of belonging.

Reopening red packets

Women's Day

Mother's Day

Dragon Boat Festival

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Sales meeting

Team building activities

Club Activities

During the reporting period, GenScript's employee clubs organized tug of war, basketball, motorcycle, soccer, dance and yoga activities, which facilitated communication among employees and enriched employees' daily lives.

Tug of war

Basketball match

Motorcycle club activity

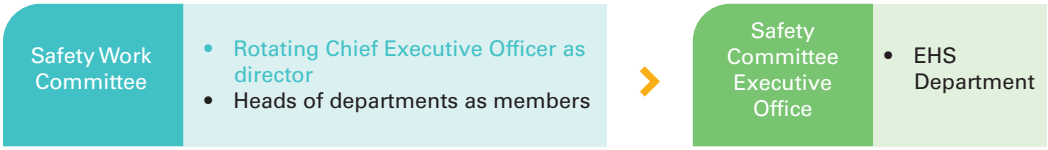
Soccer club activity

4.4 Health and Safety

GenScript is concerned about employee health and safety, and ensuring employee health and work safety is a top priority. In accordance with laws and regulations as well as local regulatory requirements on occupational health and work safety, we have in place a comprehensive occupational health and safety management system, and work safety policies and targets. We work to identify and control occupational risk and provide a healthy and safe working environment for employees.

• Work Safety Standardization

Regarding work safety management, GenScript strictly abides by the *Law of the People's Republic of China on Work Safety*, the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases*, and other relevant laws and regulations. GenScript Work Safety Committee has set up a work safety standardization promotion group to further implement the requirements of work safety supervision authorities at all levels on work safety standardization.



We have improved work safety standardization in 13 aspects.

- Objectives
- Organizational structure and responsibilities
- Investment in work safety
- Laws, regulations, and safety management policies
- Education and training
- Production equipment and facilities
- Operation safety
- Hazard identification and governance
- Major hazard monitoring
- Occupational health
- Emergency rescue
- Accident reporting, investigation and handling
- Performance evaluation and continuous improvement

During the reporting period, GenScript's six major sites passed the level 3 work safety standardization assessment and completed the publicity period. We have improved our safety management system to mitigate risks. The lost time injury frequency rate (excluding traffic accidents outside sites) in Nanjing Site and Zhenjiang Site decreased by 23.53% to 0.26 from 0.34 last year.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

- ## Occupational Health

In accordance with the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases*, the *Protective Equipment Rules for Employers* and other relevant laws and regulations of countries where we operate, we have developed the *Occupational Health Management Policy* and the *Management Rules for Personal Protective Equipment*, clarifying occupational health and safety guidelines. Also, to ensure employees' health and prevent occupational diseases, we arrange for all employees to identify occupational hazards, revise personal protective equipment standards, and create personal health surveillance archives every year while reminding employees of occupational hazards prevention.

During the reporting period, GenScript continued to carry out COVID-19 prevention initiatives. During COVID outbreaks, we safeguarded the health and safety of employees by monitoring employee health, providing shuttles from/to metro stations, delivering meals, disinfecting sites, advocating social distancing, distributing epidemic supplies, and organizing emergency drills.

- ## Publicity and Training

GenScript provides on-site and online occupational health training for employees, and sets up external certification training for principals, safety liaisons, and special equipment operators. We developed the EHS Training Management Policy, strengthening standardized management of EHS training. During the reporting period, GenScript organized more than 200 internal training sessions involving 15,000 trainees. We conducted 396 potential hazard inspections, 48 of which was led by the management. The hazards have been 100% corrected. We arranged more than 120 emergency drills, involving more than 5,200 participants. In June, we rolled out a publicity video for the Work Safety Month, identified hazards, and organized emergency drills, shaping the safety culture and employees' safety awareness at GenScript.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

GenScript "Work Safety Month"

In June 2022, GenScript's subsidiaries and branches launched the "Work Safety Month" event themed "Compliance with the Work Safety Law as the First Person Responsible". The event focused on environment, health, safety and fire prevention, and featured a video for the work safety month, signing of safety undertaking, a safety knowledge contest, an emergency drill, and hazard identification and management, involving 4,386 participants.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Safety Training

Emergency drill

Launch of Hazard Reporting App

In February 2022, GenScript launched a Hazard Reporting App in place of registration in Excel, which facilitated hazard reporting and streamlined the process for hazard identification, tracking, analysis and correction. Through internal training, publicity and motivation, we encouraged employees to use the App and involved employees in health and safety management. During the reporting period, a total of 5,800 hazards were reported by 2,282 employees, and 5,381 hazards were corrected. This reduced on-site safety risks and protected employee safety.

During the reporting period, 15 work-related injuries occurred in the Company. In the past three years, no work-related death occurred.

Safety statistics	2020	2021	2022
Work-related injuries	9	7	15*
Work days lost due to work-related injuries	278	26	298

* Eight accidents occurred during the employees' commute to and from work, three occurred during working hours but were not directly related to work, and four were work-related (two were lost workday accidents).

V. CARBON REDUCTION & GREEN OPERATIONS

GenScript sticks to green development and is committed to its mission to "Make People and Nature Healthier Through Biotechnology". During operations, GenScript has continuously optimized its environmental management capabilities, improved internal management policies and processes, and implemented low-carbon production and operations, as a way to contribute to environmental wellness.

5.1 Climate Changes

Climate change has become a major global issue of great concern to the international community and global companies. To perform social responsibility and manage the impact of climate changes, companies are taking on a more important role in response to climate changes. GenScript has taken action to address risks and opportunities related to climate changes. We analyzed our risks and opportunities by using the disclosure approaches and suggestions provided by the Task Force on Climate-related Financial Disclosures (TCFD).

Risks of climate changes

Climate Change Risk (Primary Level)	Climate Change Risk (Secondary Level)	Item	Impact Description
Transition Risks	Policy and Legal	Enhanced emissions-reporting obligations	As a HKEX-listed company, GenScript would face increasingly stricter disclosure requirements for climate change-related information, resulting in an increase in operating costs in the short term, while investment in energy saving and emission reduction technologies would reduce long-term operating costs.
	Technology	Replacing existing products and services with low-emission options	Due to the governmental energy conservation and emission reduction policies or market trends, there is a risk of replacing the existing energy consumption structure with low-emission options. Low-emission options would increase costs for technical equipment and operation & maintenance.
		Failed investment in new technology	Biomaterial selection due to climate changes might lead to GenScript's increased investment in new technologies, but the uncertainty of future technological changes might lead to investment failure.
		Front-end costs arising from low-emission technology transformation	Low-emission technology transformation would incur front-end costs, including front-end testing and application costs.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Climate Change Risk (Primary Level)	Climate Change Risk (Secondary Level)	Item	Impact Description
	Market	Changing customer behavior	Increase in infectious diseases due to climate changes would have an impact on GenScript's biomaterial selection for R&D and production and the direction of biologics development, resulting in changes in GenScript's revenue structure and sources.
		Uncertainty in market signals	Climate changes might result in changes in the direction of disease research, changes in market demand and the energy structure in operations.
		Increased cost of raw materials	Climate changes would lead to higher raw material prices.
	Reputation	Shifts in consumer preferences	Climate changes might result in changes in product preferences due to health concerns, leading to changes in GenScript's revenue structure and sources.
		Stakeholders' rising concern about negative feedback	The corporate reputation of GenScript and its supply chain might be affected by climate changes, which would have a financial impact on GenScript.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Climate Change Risk (Primary Level)	Climate Change Risk (Secondary Level)	Item	Impact Description
Physical Risks	Acute	Cyclones	As GenScript operates in Nanjing, Zhenjiang, Jinan, China, and New Jersey, U.S., staff commuting and research continuity of GenScript might be affected by typhoons/ hurricanes, resulting in delayed product delivery.
		Extreme heat	Continued high temperature would affect GenScript's operations in terms of product production process, storage, transportation, etc.
		Floods	Electricity, as the primary energy for GenScript's operations, might be affected by flooding, which would affect production lines and delays product delivery.
	Chronic	Changes in precipitation patterns and extreme variability in weather patterns	Extreme precipitation might lead to erosion of buildings and affect employee commuting.
		Rising mean temperatures	Rising mean temperatures would increase cooling demand of sites and offices, and lead to the outbreak and spread of new diseases, affecting GenScript's R&D operations.
		Rising sea levels	GenScript's Nanjing and Jinan Sites would be directly threatened by rising sea levels, and the infrastructure and R&D equipment in sites might be damaged.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Opportunities of climate changes

Opportunity of Climate Changes		Financial Impact	Direction of Development
Opportunity 1	Resource efficiency	• Reducing operating costs • Improving productivity and increasing revenue	• **More efficient shipping methods:** Under the pressure of climate changes, GenScript could optimize logistics routes and improve shipping efficiency to ensure smooth transportation, and reduce operation and maintenance costs • **More efficient production processes:** Low-carbon resources and low-carbon operations might lead to more efficient production processes • **More efficient buildings:** Low-carbon technology and low-carbon awareness are conducive to future environmental cost savings, preserving the value of GenScript's fixed assets • **Reduction of water usage and consumption:** By improving production processes or operating techniques, GenScript could reduce operating costs while reducing water usage to cope with water risks
Opportunity 2	Energy source	• Reducing the risk of rising energy prices • Improving reputation	• **Low-emission energy sources:** By adopting more lower-cost remission reduction measures, GenScript could reduce the risk of future energy price rise while benefiting the environment. • **New technologies:** In large production sites, clean energy such as solar energy and wind energy could be used instead of fossil energy. • **Reputation improvement:** By transformation of energy use, GenScript could improve corporate reputation and attract more investors who prefer low-emission manufacturers.

Opportunity of Climate Changes		Financial Impact	Direction of Development
Opportunity 3	Products and services	• Product and service transformation: proposing new climate adaptation solutions to improve competitive status in the industry, reflect the shift in consumer preferences, and increase revenue	• **Proposing climate adaptation solutions through R&D and innovation:** Identifying potential health conditions due to climate changes and proposing biopharmaceutical solutions; improving competitive advantages in the industry through innovative low-carbon solutions
Opportunity 4	Market	• Entering new and emerging markets to increase revenue	• Reducing carbon footprint would facilitate GenScript to enter markets with stricter carbon governance. • GenScript's innovative products in response to climate changes facilitate future entry to markets.
Opportunity 5	Adaptability	• Increasing revenue • Lowering costs	• **Improving supply chain reliability:** By identifying climate risks and taking appropriate actions, GenScript could improve supply chain reliability and operational capabilities under different conditions. • **New product and service R&D:** Early R&D of low-carbon products and services and development of climate and health solutions may help GenScript increase adaptability.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

5.2 Green Management

In accordance with the *Environmental Protection Law of the People's Republic of China*, the *Energy Conservation Law of the People's Republic of China*, the *Clean Air Act (CAA)*, the *Clean Water Act (CWA)*, and other environmental protection requirements of countries where we operate, we have improved our internal green management policies to mitigate impacts on the environment during operations.

In response to "carbon peak" and "carbon neutrality" goals, GenScript has continuously optimized operations, enhanced green management, and reduced emissions. We have regularly disclosed GenScript's greenhouse gas emissions in our ESG reports and refined our energy conservation and emission reduction measures through data analysis and trend comparison. During the report period, we reduced energy consumption, greenhouse gas emissions, water resources consumption and waste emission intensity. We will stick to our environmental targets and further reduce emissions so as to achieve sustainable development.

- ### Energy Management

GenScript strictly complies with the ISO 50001 energy management system for energy management during day-to-day operations. We developed the *Energy Management Policy* to strengthen electricity, gas and steam consumption management. We summarized and analyzed monthly data on energy consumption to identify and investigate abnormality.

Solar heating system after repair

Renovation of air-conditioning system

- We installed a central control function for the air conditioning system in Building 10, Yongxi Site, Nanjing Genscript to control air conditioners at specified time every day, thereby reducing energy waste.

Lighting upgrade in public areas

- We installed a timed control function for the lighting system on 5F, Building 1, Yongxi Site, Nanjing Genscript, enabling automatic switchoff after working hours. This would avoid waste and saved lighting costs.

Repair and renovation of the solar heating system

- We repaired the solar heating system in Building 7, Yongxi Site, Nanjing Genscript and enabled repeated water heating by solar energy to reach a set temperature, thereby reducing the use of conventional energy.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

U-shaped Phase-Change Energy-saving Unit for the Air-Conditioning System

During the reporting period, GenScript installed a U-shaped phase-change energy-saving unit for the air-conditioning system. The unit can transfer heat through phase change in an enclosed space based on the air temperature difference of the surface cooler and enable pre-cooling and reheating of the air conditioning units. This would reduce energy consumption of the air-conditioning system in cooling and heating modes.

Air-conditioning unit with U-shaped phase-change energy-saving unit

Energy Consumption and Carbon Emissions***	2020	2021	2022
Energy consumption (MWh)	58,281.05	80,093.03	95,982.59
Energy intensity (MWh/US$10,000)	1.49	1.57	1.53
Steam (tons)	47,378.43	52,833.66	47,457.32
Steam intensity (tons/US$10,000)	1.21	1.03	0.76
Natural gas ('000 cubic meters)	516.44	605.71	1,732.50*
Natural gas intensity (cubic meters/US$10,000)	13.21	11.85	27.69
Diesel (tons)	—	12.22	193.32**
Greenhouse gas emissions (tons CO_2-e) (Scope 1 only)	1,116.64	1,302.90	4,305.52
Greenhouse gas emissions (tons CO_2-e) (Scope 2 only)	48,305.92	76,173.32	68,306.95
Greenhouse gas emission intensity (tons CO_2-e/US$10,000)	1.26	1.52	1.16

* During the reporting period, due to launch of new facilities at Zhenjiang Site, natural gas usage increased significantly compared to last year.

** During the reporting period, due to electricity rationing in China, diesel generators were used for power supply at Nanjing Site.

*** Main sources of greenhouse gas emissions (Scope 1) are from diesel, gasoline and natural gas. Greenhouse gas emissions (Scope 2) are from purchased electricity and purchased steam. Greenhouse gas emissions are calculated in accordance with the *Guidelines for Accounting and Reporting Greenhouse Gas Emissions from Enterprises Other Industries (Trial)* issued by the National Development and Reform Commission of the People's Republic of China, and some parameters are from the *WRI/WBCSD GHG Protocol* and the GHG Emission Factors Hub — U.S. EPA.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

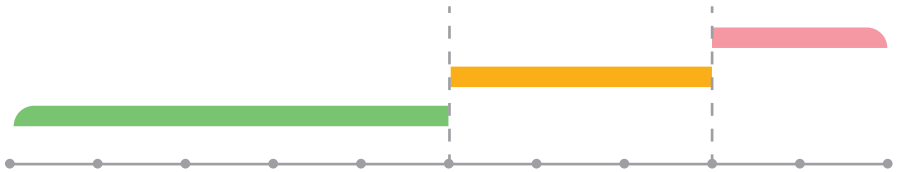
- ### Water Management

GenScript attaches great importance to water resource management and consumption. In accordance with the *Water Law of the People's Republic of China* and other laws and regulations of countries where we operate, we have continuously monitored water consumption and drainage and upgraded equipment and processes in an effort to optimize water resources management and improve water resources recycling.

Water Consumption	2020	2021	2022
Water consumed ('000 cubic meters)	579.28	689.68	828.99
Intermediate water recycled ('000 cubic meters) (water recycling facilities are installed only at the headquarters in Jiangning District, Nanjing)	27.87	0.00	3.57
Intermediate water recycling rate (%)	4.81	0.00	0.43
Water consumption intensity (cubic meter/US$10,000)	14.82	13.50	13.25

5.3 Emissions Management

In accordance with the requirements of the *Law of the People's Republic of China on Prevention and Control of Water Pollution*, the *Law of the People's Republic of China on the Prevention and Control of Air Pollution*, the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste*, and other environmental protection laws and regulations of countries where we operate, we have controlled sewage, exhaust gas and solid waste generated during production and operations. During the reporting period, we established a monitoring and warning mechanism for electricity consumption for sewage and exhaust emissions, and set up a daily and quarterly reporting system for emission factors. Also, we set a warning threshold, and relevant responsible persons will be urged to take emergency measures when the threshold is reached. We collected and analyzed daily emissions data and regularly conducted environmental monitoring to ensure emissions management and up-to-standard discharge.



- When emissions reach 50%, responsible persons will be notified to stay updated on emissions changes.
- When emissions reach 80%, responsible persons will analyze and identify causes and commission equipment.
- When emissions exceed 100%, responsible persons will suspend emissions for commissioning, and report such abnormality.

- ### Wastewater Management

Wastewater generated at GenScript is mainly domestic sewage and R&D and production sewage. In accordance with requirements of countries where GenScript operates, we pretreat wastewater and have online monitors in place for real-time monitoring of emission intensity (pH, COD, ammonia nitrogen, etc.). Also, we have engaged a third-party testing organization for regular testing of wastewater quality to ensure our wastewater discharge meets relevant requirements.

Renovation of the Sewage System at Nanjing GenScript

During the reporting period, we renovated three sewage treatment stations at Nanjing GenScript. We treated domestic sewage by using our internal sewage treatment facilities, established a rainwater collection system, and renovated treatment facilities to increase treatment capacity. Among others, we installed a backup MBR membrane tank in the phase III sewage treatment station. We installed new online pH detectors, upgraded flowmeters, online COD detectors and online ammonia nitrogen detectors in two sewage treatment stations so as to meet the requirements of the latest online monitoring regulations and monitor sewage treatment capacity. Also, we optimized the exhaust gas collection and treatment equipment in sewage treatment by adding water spraying and activated carbon treatment steps. We reduced the total emissions of ammonia and hydrogen sulfide by 70%.

New equipment for improving wastewater quality

New equipment for exhaust gas collection and treatment

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

• Exhaust Gas Emissions

With regard to the exhaust gas treatment system, GenScript has clarified exhaust gas types, pollutants and treatment methods during production and operation. We have set the parameters and required ranges for exhaust gas treatment processes. We regularly inspected exhaust gas pipelines to reduce unorganized exhaust emissions, and timely replaced filtering and adsorption materials to ensure efficient removal.

During the reporting period, GenScript inspected the exhaust gas collection system and corrected issues identified. We installed a power distribution monitoring unit for all exhaust gas treatment facilities to optimize the detection and emergency management of abnormalities.

Exhaust Gas Collection System Optimization

During the reporting period, GenScript inspected all laboratory exhaust systems, and installed a new ventilation and exhaust gas collection system for equipment locations, explosion-proof laboratory cabinets, and acid and alkali storage cabinets. In this way, we optimized exhaust gas treatment systems, minimized unorganized emissions, and ensured the safety of laboratory staff.

Exhaust gas collection and treatment units

Exhaust Gas	2020	2021	2022
Total exhaust emissions ('000 cubic meters)	1,066,964	1,350,746	2,374,434*
Emissions of smoke and dust (tons)	0.24	0.14	0.18**
Sulfur dioxide emissions (tons)	0.16	0.09	0.16**
NOx emissions (tons)	1.68	1.45	1.37

* During the reporting period, the commissioning of the incubation center, Kejie, new facility in Ruihong and Building 48 at Zhenjiang Site resulted in an increase in total exhaust emissions compared to last year.

** During the reporting period, new boilers installed at Zhenjiang Site resulted in an increase in total emissions of exhaust gas, dust and sulfur dioxide.

- ## Waste Management

GenScript has developed the *Solid Waste Management Procedures* and the *Management Rules for Domestic Waste and General Solid Waste Treatment*, specifying control measures throughout the process from waste generation, identification, confirmation, collection, transfer, storage, declaration to disposal. During the reporting period, we installed an intelligent terminal management system for hazardous waste, ensuring hazardous solid waste management from generation, warehousing to ex-warehousing (transfer).

Chemical Solvent Recycling

We have a third party incinerate acetonitrile waste, a hazardous waste generated from production. During the reporting period, we worked out a way to recycle acetonitrile by process survey, and now we work with a qualified third party to recycle acetonitrile by enrichment.

Waste	2020	2021	2022
Domestic waste (tons)	6,268.83	9,843.38	6,417.14
Intensity of domestic waste generation (tons/US$10,000)	0.16	0.19	0.10
Hazardous waste (excluding medical waste) (tons)	1,338.13	1,623.10	1,700.84
Intensity of hazardous waste generation (tons/US$1 million)	4.35	3.18	2.72
Medical waste (tons)*	363.49	385.62	461.57

* During the reporting period, we recorded the weight of recycled waste. Recycled waste mainly includes waste cartons, waste foam boxes, and organic waste.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

VI. WIN-WIN COLLABORATION

As the world's leading provider of gene synthesis services, GenScript is committed to its responsibility and mission. We conducted research exchanges to accelerate the development of the industry and improve human well-being. Also, we supported charity and worked alongside our customers and partners to forge ahead.

6.1 Industry Collaboration

GenScript is aware that health is a prerequisite of happy life. As an industry leader, we proactively communicate and collaborate with industry players to synergize resources.

During the reporting period, GenScript attended more than 50 industry events in China, the US and Asia Pacific, including the American Society of Hematology (ASH) Annual Meeting, American Society of Clinical Oncology (ASCO) Annual Meeting, and China Biopharma Industry Symposium. Also, we offered a number of informative lectures on frontier topics, such as "GenScript Gene & Cell Engineering Virtual Summit", "One-stop mRNA Solution", "CRISPR Experiment Optimization Techniques and Applications in Gene Editing", "Update on Universal CAR-T and Core Processes", and "Comprehensive Strategy for Non-Viral T-Cell Therapy Development". We also attended industry summits and exhibitions and shared insights into frontier technologies with industry partners, promoting industry collaboration.

VacFuture 2022 RNA Therapy & Novel Vaccine Industry Summit

IGC 2022 6th International Immunology and Gene Therapy Forum & Exhibition

BioCon China Expo 2022 9th International Biologics Conference & Exhibition

International Genetically Engineered Machine Competition

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

GenScript 2nd Annual Gene & Cell Engineering Virtual Summit

On July 28, 2022, GenScript hosted the 2nd Annual Gene & Cell Engineering Virtual Summit. The event brought together life science experts in the academic community, pharmaceutical and biotech industries who leveraged the advantages of synthetic biology and discussed paradigm-shifting treatment. At the event, GenScript shared insights into gene and cell engineering research, which advanced gene and cell engineering and facilitated the development of treatment options.

ASCO Annual Meeting & ASH Annual Meeting

In June 2022, our subsidiary Legend Biotech presented the 28-month follow-up data from CARTITUDE-1 study evaluating cilta-cel for the treatment of patients with relapsed/refractory multiple myeloma (R/R MM) at the ASCO Annual Meeting. Data showed a very high overall response rate of 98% after a single infusion of cilta-cel, and median progression-free survival (PFS) and median overall survival (OS) were not reached yet. Data from Cohort A and Cohort B in CARTITUDE-2 study reinforce the potential of cilta-cel in earlier line of treatment.

In December 2022, Legend Biotech presented the latest on the clinical development program for cilta-cel at the 64th ASH Annual Meeting. The management believes that cilta-cel is a potentially life-saving approach for patients with R/R MM.

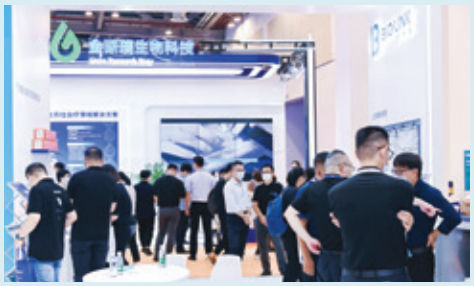
ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

The 4th GenScript Cell and Gene Therapy Industry Development & Cooperation Forum

On November 20, 2022, the 4th GenScript Cell and Gene Therapy Industry Development & Cooperation Forum took place virtually. The event brought together more than 30 industry KOLs, who shared insights into differentiated trends of gene and cell therapy (GCT) and explored ways to accelerate GCT commercialization. The forum focused on "how to create competitive differentiation in the GCT field" and "how to address commercialization challenges for GCT amid capital boom and industry transformation". The event facilitated communication among research institutes, pharmaceutical companies and regulatory authorities and intensified innovation collaboration among industry, academia and medicine, fueling the development of the GCT industry. The event got over millions of online views and coverage by 462 articles.

Biologics Commercialization Exploration and Breakthrough Symposium

During the reporting period, GenScript and its subsidiary, ProBio, attended the 7th EBC Bio-Industry Conference and discussed advances in GCT and antibody drugs. At the event, GenScript ProBio hosted a biologics commercialization exploration and breakthrough symposium, covering biologics topics including "Accelerating Innovative Biologics R&D through a Bispecific Antibody Platform", "CMC Development Strategy for Bispecific/Multi-Specific Antibody", and "Total Solution from Plasmid to mRNA".



6.2 Giving Back to Society

GenScript has continuously fulfilled social responsibility by showing care, supporting the community, and hosting charity events. During the reporting period, we donated $208,126 in total.

- ### University-Enterprise Cooperation

  During the reporting period, GenScript launched University-Enterprise Cooperation to support education. We entered into strategic collaboration and internship programs with several universities to leverage university advantages and corporate resources and build a talent pipeline.

Inauguration Ceremony for Strategic Collaboration Between GenScript and Nanjing University

Inauguration Ceremony for Southeast University Internship Site

Inauguration Ceremony for China Pharmaceutical University Internship Site

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

- ## Science Popularization

GenScript shares knowledge through its social media platforms. During the reporting period, we posted 83 science articles, 42 featured articles, and 45 short videos covering trending topics, GCT and healthcare in our Weibo official account, WeChat official account and WeChat Channels. We also involved employees in content creation for science popularization. Our laboratory series videos received over 40,000 views and 500 comments. Those efforts helped the public learn more about GenScript and the industry and broaden pharmaceutical knowledge.

- ## Charity Event

By organizing charity events, GenScript leveraged industry advantages and involved different parties to build a caring social environment.

"Ultimate Care, Tech for Global Healing" Charity Week for GenScript's 20th Anniversary

In celebration of GenScript's 20th anniversary, we worked with DEBRA Shanghai to launch "Ultimate Care, Tech for Global Healing" Charity Week to give care and support for children with epidermolysis bullosa (EB) (known as "**Butterfly Children**"). This endeavor is intended to call upon the society, the industry and the academia focus on drug R&D innovation for rare diseases, explore potential GCT treatment options, and make rare diseases more visible to the public. At the event, we contributed over RMB1 million yuan to Butterfly Children charity by means of donation and fund raising. We released a documentary and a wish list of Butterfly Children, and hosted the Charity Art Exhibition. At the event, employees at GenScript helped Butterfly Children accomplish their dreams as a way to contribute to public welfare. The documentary "A Glimpse Into Butterfly Children" received over 230,000 views. The exhibition themed "Support Butterfly Children — Through a Gentle Lens" attracted nearly 3,000 in-person and virtual visits. The hashtag "GenScript Butterfly Children Campaign" got over 6 million views on Weibo. The event got coverage in 986 articles by CCTV, Xinhua Daily, Yangtse Evening Post, Nanjing Radio and TV Station, Healthcare Executive, etc.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

2nd GenScript Nanjing Universities 100K Relay

To spread the health and fitness philosophy and uphold positivity, GenScript launched the "GenScript Nanjing Universities 100K Relay", shaping a leading university relay brand in China. On November 13, 2022, the 2nd GenScript 100K Relay kicked off at Niushoushan Mountain, Nanjing, attracting over 500 runners. This event unfolded persistence, enthusiasm and solidarity of university students as well as innovation vitality of GenScript.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

APPENDIX I. LIST OF AWARDS AND CERTIFICATION FOR 2022

This section listed the awards and certifications granted to GenScript and its subsidiaries during the reporting period.

No.	Awards and Certifications
1	GenScript passed the qualification review of Jiangsu Province Little Giant for Specialized, Refined, Featured and Novel Products
2	GenScript received the "Best Contract Development and Manufacturing Organization Award (CDMO)" for the third year in a row
3	GenScript was awarded the 5th New Fortune "Best IR Hong Kong-Listed Company"
4	GenScript was awarded the "Best IR Team Award" by Zhitong Finance
5	GenScript was awarded "Top 10 Innovative Drug Service Providers of the Year"
6	GenScript was awarded "2021 Top 10 Innovative Enterprises of Zhenjiang New Area "
7	GenScript ProBio ranked among Top 100 Unicorns
8	GenScript and its subsidiary Legend Biotech ranked among "Top 30 Listed Companies by Innovation"
9	GenScript was listed in "China Top 20 CXO" in 2021
10	GenScript ProBio won the award on "EBC 2021 Outstanding Service Provider"
11	GenScript ranked among Top 10 Biopharma by Innovation Potential 2022
12	GenScript won the "Best Charity Communication Creativity Award" on the 9th Suqin Awards
13	GenScript ProBio was named "Jiangsu Hi-tech Zone Unicorns 2022"
14	GenScript won the 2022 Sunshine Award of China Health Industry
15	GenScript ranked among the "2022 Top 100 China's Life Science Service Enterprises"
16	GenScript won the 2022 Golden Flag Award "Top 25 Brand Innovation", "Top 100 Brand Personality Award", and "Golden Award for Brand Innovation"
17	GenScript won the 2022 Charity Innovation Award
18	GenScript's subsidiary Legend Biotech was awarded the title of "2021 Innovation Breakthrough Company"
19	Legend Biotech was named Newcomer of the Year by Flanders Investment and Trade.
20	Legend Biotech was awarded "Future Healthcare VB 100" by Vbdata
21	Legend Biotech ranked among "50 Smartest Companies 2021" by MIT Technology Review
22	Legend Biotech was awarded the title of "Nanjing Unicorn" for the second year in a row
23	Legend Biotech landed in the "2022 China Biopharmaceutical Industry Value Ranking"
24	Legend Biotech was awarded the title of "2021 Innovation Breakthrough Company" at the 7th EBC 2022
25	Legend Biotech was awarded the "Most Valuable Biotech Shining Star of the Year"
26	Legend Biotech ranked among "Top 100 Innovative Biopharmaceutical Enterprises in China 2021"
27	Legend Biotech was named "Top 100 Innovative Pharmaceutical Enterprises in China 2022"
28	Legend Biotech was named "Top 20 Most Influential Innovative Therapy Enterprises" in the "2022 China Biopharmaceutical Industry Value Ranking"
29	Legend Biotech ranked among "Top 30 Listed Companies by Innovation"
30	Legend Biotech was named "Top 20 Most Influential Innovative Therapy Enterprises" at the 2022 China Biotech & Pharmaceutical Innovation Forum
31	Legend Biotech topped the list of "China's Top 30 Innovative Enterprises by Novel Technology Drug"

APPENDIX II: LIST OF DISCLOSURE POLICIES AND LEGAL REGULATIONS

This section lists laws and regulations applicable to the Company in the order of ESG indicators in accordance with "the policies"and "compliance with relevant laws and regulations that have a significant impact on the issuer" contained in the "General Disclosure" of the HKEX ESG Reporting Guide.

Classification	Laws and Regulations
Environmental protection	• *Environmental Protection Law of the People's Republic of China* • *Water Law of the People's Republic of China* • *Law of the People's Republic of China on Prevention and Control of Water Pollution* • *Law of the People's Republic of China on Prevention and Control of Environmental Noise Pollution* • *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution* • *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste* • *Law of the People's Republic of China on Environmental Impact Assessment* • *Energy Conservation Law of the People's Republic of China* • *National Hazardous Waste Inventory* • *Regulations on the Administration of Medical Waste* • *Integrated Wastewater Discharge Standard* • *The Clean Air Act* • *The Clean Water Act* • *Resource Conservation and Recovery Act* • *National Environmental Policy Act*
Animal welfare	• *Regulations on the Administration of Laboratory Animals* • *Measures for the Administration of Laboratory Animal Licenses (Trial)* • *Biosafety Law of the People's Republic of China* • *Guide for the Care and Use of Laboratory Animals* • *Animal Welfare Act* • *Europe guide ETS 123*
Labor	• *Labor Law of the People's Republic of China* • *Labor Contract Law of the People's Republic of China* • *Law of the People's Republic of China on Mediation and Arbitration of Labor Disputes* • *Law of the People's Republic of China on the Protection of Rights and Interests of Women* • *Law of the People's Republic of China on the Protection of Minors* • *Special Rules on the Labor Protection of Female Employees* • *Social Insurance Law of the People's Republic of China* • *Employment Promotion Law of the People's Republic of China* • *Trade Union Law of the People's Republic of China* • *Law of the People's Republic of China on the Protection of Disabled Persons* • *Regulations on Unemployment Insurance* • *Regulations on Work-related Injury Insurance* • *Regulations on Public Holidays for National Annual Festivals and Memorial Days* • *Provisions on Prohibition of Child Labor* • *Fair Labor Standards Act (FLSA) of the United States* • *Civil Rights Act* • *Equal Employment Opportunity (EEO) laws*

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Classification	Laws and Regulations
Product liability and service	• *Product Quality Law of the People's Republic of China* • *Advertisement Law of the People's Republic of China* • *Contract Law of the People's Republic of China* • *Regulations on Quality Responsibility for Industrial Products* • *Regulations of the People's Republic of China on the Administration of Human Genetic Resources* • *Provisions on Prohibition of Infringement of Trade Secrets* • *Modern Uniform Product Liability Act*
Anti-commercial bribery law	• *Anti-Unfair Competition Law of the People's Republic of China* • *Criminal Law of the People's Republic of China* • *Foreign Corrupt Practices Act*
Antitrust, company	• *Anti-monopoly Law of the People's Republic of China* • *Company Law of the People's Republic of China* • *Basic Norms of Enterprises Internal Control* • *Interim Provisions on the Prohibition of Commercial Bribery* • *Civil Code of the People's Republic of China* • *The Securities Exchange Act of 1934* • *US Clayton Act of 1914* • *US Sherman Act of 1890*
Information security	• *Cybersecurity Law of the People's Republic of China* • *Regulations of the People's Republic of China on the Administration of Human Genetic Resources* • *Law of the People's Republic of China on the Protection of Consumer Rights and Interests* • *Tort Liability Law of the People's Republic of China* • *Strengthening American Cybersecurity Act* • *Secure Equipment Act* • *Secure and Trusted Communications Networks Act*
Intellectual property	• *Patent Law of the People's Republic of China* • *Guidelines for Patent Examination* • *Trademark Law of the People's Republic of China* • *Copyright Law of the People's Republic of China* • *Title 35 of the United States Code — Patents* • *Hong Kong Patents Ordinance of 27 June 1997* • *Hong Kong Trade Marks Ordinance (Cap. 559)*
Health and safety	• *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* • *Food Safety Law of the People's Republic of China* • *Code of Practice for Food Safety in Catering Services* • *Management Rules for Labor Protection Supplies of Employers* • *Measures for the Occupational Safety and Health Act Administration of Emergency Response Plans for Work Safety Accidents* • *Occupational Safety and Health Act*

APPENDIX III. INDEX OF HKEX ESG REPORTING GUIDE

Indicator	Description	Indexes
A. Environmental		
Aspect A1:	**Emissions**	
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	5.2 Green Management 5.3 Emissions Management
KPI A1.1	The types of emissions and respective emissions data.	5.2 Green Management 5.3 Emissions Management
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	5.2 Green Management
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	5.3 Emissions Management
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	5.3 Emissions Management
KPI A1.5	Description of emission target(s) set and steps taken to achieve them.	5.2 Green Management
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	5.2 Green Management 5.3 Emissions Management
Aspect A2:	**Use of Resources**	
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	5.2 Green Management
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in'000s) and intensity (e.g. per unit of production volume, per facility).	5.2 Green Management
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	5.2 Green Management
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	5.2 Green Management
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	5.2 Green Management

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Indicator	Description	Indexes
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Not applicable Due to nature of business and characteristics of the Company, packaging materials are not an important issue and not disclosed.
Aspect A3:	**The Environment and Natural Resources**	
General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources.	5.2 Green Management 5.3 Emissions Management
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	5.2 Green Management 5.3 Emissions Management
Aspect A4:	**Climate Change**	
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	5.1 Climate Change
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	5.1 Climate Change
B. Social		
Employment and Labor Practices		
Aspect B1:	**Employment**	
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	4.1 Talent Acquisition 4.2 Employee Development 4.3 Employee Care
KPI B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	4.1 Talent Acquisition
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	4.1 Talent Acquisition
Aspect B2:	**Health and Safety**	
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	4.4 Health and Safety
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	4.4 Health and Safety
KPI B2.2	Lost days due to work injury.	4.4 Health and Safety
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	4.4 Health and Safety

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Indicator	Description	Indexes
Aspect B3:	**Development and Training**	
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	4.2 Employee Development
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	4.2 Employee Development
KPI B3.2	The average training hours completed per employee by gender and employee category.	4.2 Employee Development
Aspect B4:	**Labor Standards**	
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labor.	4.1 Talent Acquisition
KPI B4.1	Description of measures to review employment practices to avoid child and forced labor.	4.1 Talent Acquisition
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	4.1 Talent Acquisition
Operating Practices		
Aspect B5:	**Supply Chain Management**	
General Disclosure	Policies on managing environmental and social risks of the supply chain.	1.2 Operational Compliance 3.2 Responsible Procurement
KPI B5.1	Number of suppliers by geographical region.	3.2 Responsible Procurement (Suppliers classified by region are confidential to the Company and are not disclosed)
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	3.2 Responsible Purchasing
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	3.2 Responsible Purchasing
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	3.2 Responsible Purchasing
Aspect B6:	**Product Responsibility**	
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	2.2 Intellectual Property 3.1 Quality Assurance 3.3 Customer Service
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	3.1 Quality Assurance

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Indicator	Description	Indexes
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	3.3 Customer Service
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	2.2 Intellectual Property
KPI B6.4	Description of quality assurance process and recall procedures.	3.1 Quality Assurance
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	3.3 Customer Service
Aspect B7:	**Anticorruption**	
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	1.2 Operational Compliance
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	1.2 Operational Compliance
KPI B7.2	Description of preventive measures and whistleblowing procedures, and how they are implemented and monitored.	1.2 Operational Compliance
KPI B7.3	Description of anti-corruption training provided to directors and staff.	1.2 Operational Compliance
Community		
Aspect B8:	**Community Investment**	
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	6.1 Industry Collaboration 6.2 Giving Back to Society
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	6.1 Industry Collaboration 6.2 Giving Back to Society
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	6.2 Giving Back to Society