维亚生物科技控股集团
VIVA BIOTECH HOLDINGS
(Incorporated in the Cayman Islands as an exempted company with limited liability)
Stock Code: 1873

# 2024

# ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

# CONTENTS

# ABOUT THE REPORT

## Overview of the Report

Viva Biotech Holdings (the "**Company**", together with its subsidiaries, "**Viva Biotech**", the "**Group**" or "**we/us**") is pleased to release the sixth Environmental, Social and Governance Report (the "**Report**") to society, in a bid to disclose the relevant performance of the Group in environmental, social and governance ("**ESG**") aspects in the past year in a transparent and open manner and address the concerns and expectations of various stakeholders on the sustainable management of the Group.

## Reporting Scope

The Report covers the performance of Viva Biotech Holdings and its subsidiaries in fulfilling corporate social responsibility in the ESG aspects within Mainland China, and a time span from January 1, 2024 to December 31, 2024 (the "**Reporting Period**" or the "**Year**").

## Basis of Preparation

The Group prepared the Report in accordance with the Environmental, Social and Governance Reporting Code (the "**Code**") as set out in Appendix C2 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**Hong Kong Stock Exchange**"). The Report has complied with the "Comply or Explain" provisions contained in the Code and followed the four reporting principles of materiality, quantitative, balance and consistency as the basis of preparation.

## Reporting Principles

Materiality: Stakeholder communication and materiality assessment have been incorporated into the preparation of this ESG report as a basis for identifying material ESG issues.

Quantitative: The Report presents environmental and social key performance indicator(s) ("**KPI(s)**") in the form of quantitative data, accompanied by explanations to illustrate their purposes and impacts. We also provide comparative data on environmental KPIs in the Report.

Balance: This ESG report follows the principle of balance and presents our ESG performance in an impartial manner.

Consistency: The methodologies for working out this ESG report are consistent with those adopted in the 2022 and 2023 ESG reports to ensure comparability of information.

## Release Channel

The Report is available for inspection and download at the "HKEXnews" website of the Hong Kong Stock Exchange (www.hkexnews.hk) and the website of Viva Biotech (www.vivabiotech.com).

## Feedback to the Report

Your valuable advice serves as impetus for our continuous improvement. If you have any comments or suggestions on the Report or our related efforts, please contact the Group via the following means:

Tel: +86(0) 21 6089 3288
Fax: +86(0) 21 5824 3936
Website: www.vivabiotech.com
Email: info@vivabiotech.com

# CHAIRMAN'S STATEMENT

Dear shareholders,

On behalf of the Board, I am pleased to present the Group's environmental, social and governance ("ESG") report for the year 2024.

During 2024, as global biopharmaceutical investment and financing activities gradually picked up, companies engaged in novel drug development also saw a turnaround in pipeline advancement and R&D investments, leading to revenue rebounds across the CRO industry at a quarterly pace. Throughout the year, Viva Biotech continued to provide clients with one-stop integrated services from early-stage structure-based drug research and development to commercial drug production, and overall maintained a steady growth trajectory in performance. The Group earnestly embraced the principles of ESG, achieving an array of highlights and operational results in areas such as technology platform development, responsible investment, energy conservation, emission reduction, and the fulfillment of social responsibilities.

I wish to look back on our operating results and ESG highlights achieved in 2024 together with you:

## Business review:

During the Reporting Period, the Group achieved revenue of RMB1,986.7 million, gross profit of RMB687.4 million and net profit of RMB222.0 million, a significant turnaround from the net loss of RMB99.8 million for the corresponding period of last year, mainly benefiting from the elimination of relevant financial adjustments due to the full repayment of convertible bonds. Besides, the Group achieved adjusted net profit of RMB314.6 million, representing a year-on-year increase of nearly 50.6%. This was mainly attributable to an increase in operating profit margin driven by the recovery of CRO business growth and the improving operational efficiency in the second half of the year, as well as the recognition of investment income from milestone payments received by the Group during the year.

**Dr. Mao Chen Cheney**
Chairman and Chief Executive Officer of Viva Biotech

# CHAIRMAN'S STATEMENT

## Technology platform development:

During the Reporting Period, the Group invested RMB88.0 million in R&D. Building on its global leadership in protein structure analysis, Viva has continuously enhanced and strengthened the capabilities of its CRO-related biological and chemical technology service platforms. Additionally, artificial intelligence (AI) technology, developed and refined over years of accumulation, is now empowering the entire drug discovery platform. The current AI capabilities cover the entire workflow of first-in-class (FIC) drug R&D and are gradually transforming the logic of drug discovery through end-to-end integration. Focusing on new target, novel mechanisms of action (Novel MOA), and new molecular modalities (New Modality), Viva has developed unique AI capabilities, driving the evolution of its one-stop innovative drug discovery platform from "AI-assisted" to "AI-driven".

Looking ahead, Viva will build upon its existing technology platforms and, with the goal of serving a broader range of client needs, continue to strengthen the development, expansion and refinement of emerging technology platforms – further driving sustained growth in CRO revenue.

## Responsible investment:

The Group is committed to the principle of responsible investment. With the support of its professional post-investment management, the R&D progress of incubated portfolio companies has went smoothly. As of the end of the Reporting Period, the total number of pipelines under development by the Group's incubated portfolio companies increased to 227, of which 41 have entered the clinical stage. The Group has invested in and incubated a cumulative total of 93 startups, of which 15 have achieved full or partial exit. Additionally, there are several projects with potential exit opportunities, and a peak in exits is expected within the next three years.

## Environmental:

During the Reporting Period, Langhua Pharmaceutical submitted its decarbonisation and emission reduction commitment to the Science Based Targets initiative (SBTi), fully demonstrating its determination and initiative in addressing climate change and reducing greenhouse gas emissions. Concurrently, the Group disclosed partial Scope 3 carbon emission data in this report to prepare for upcoming climate disclosure requirements, and has implemented a series of carbon reduction measures to mitigate Scope 3 emissions, including encouraging and prioritising the procurement of domestic or locally sourced services and products, reducing transportation-related carbon emissions, and advancing paperless office initiatives.

# CHAIRMAN'S STATEMENT

## Social:

The Group has always adhered to its "people-oriented" philosophy, continuously focusing on employee health and safety, respecting and nurturing their potential, and advancing talent development initiatives. A dedicated Occupational Health Management Task Force has been established to conduct regular occupational hazard assessments and health checkups, strengthening workplace safety awareness and safeguards. Additionally, we have implemented a dual-track career advancement system with incentive mechanisms. Through training programs led by both internal and external instructors, we place special emphasis on business English communication skills to enhance global integration and broaden employees' international perspectives, supporting their professional growth.

The Company has been committed to aligning pursuit of business development with fulfilment of its environmental and social responsibilities, and while proactively propelling business growth, the Group has integrated the ESG philosophy into the whole process of business development. Dedicated to operation with integrity, we have made constant efforts to improve corporate governance standards and optimize our ESG governance structure. Meanwhile, the Company has been pursuing sustainability in each and every process of its production and operation activities, in an endeavor to reduce emission and enhance efficiency, conserve resources and contribute to the establishment of an environmental-friendly society and ecological value chain.

We believe that our growth is indispensable from the trust and support of various stakeholders, including our shareholders, employees, clients and business partners. This is the sixth environmental, social and governance report of the Company since its listing on the Hong Kong Stock Exchange, which demonstrates the achievements made by the Group in the environmental, social and governance aspects during the Reporting Period, as well as how we actively responded to the expectations and concerns of our stakeholders with concrete acts. Looking ahead, the Company will continue to improve business performance, cement our foundation with core competitiveness, bear in mind our corporate social responsibilities along our journey forward and live up to our mission to be innovation-driven, empowered by cutting-edge technology, strive for excellence and benefit patients all around the world, aspiring to realize our vision of becoming a long-term partner of global innovative biotech companies.

**Dr. Mao Chen Cheney**
*Chairman and Chief Executive Officer of Viva Biotech*
April 21, 2025

# STATEMENT OF THE BOARD OF DIRECTORS

Viva Biotech recognizes the importance and necessity of sustainable development for its business, and is committed to improving its sustainability governance system and mechanism and earnestly integrating sustainability requirements into its operations and management, in an endeavor to create sustainable value for employees, shareholders and society. As the highest responsibility owner for managing and publicly disclosing ESG issues of the Company, the Board of Directors (the "**Board**") plays a leading and supervisory role and assumes full responsibility.

The Group regards ESG and sustainability as a guarantee for its long-term stable development, and incorporates ESG factors into the course of decision-making and daily operations to continuously improve its risk resistance. The Board is the highest responsibility owner and decision-maker for ESG issues of the Group. The Board assumes ultimate responsibility for ESG management policies, ESG strategies, formulation of ESG goals, review of progress towards the goals and ESG performance, and plays a leading and supervisory role in overall ESG strategy and ESG risk management of the Group. In business operation, the Board is responsible for assessing and determining ESG risks, and ensuring that the Group has established an adequate and effective ESG risk management and internal monitoring system.

Directors review and approve our sustainable development goals through regular meetings. Through the ESG working group, directors guide and monitor the development and implementation of our ESG vision, strategy and structure; review important ESG issues, major ESG risks and opportunities; monitor communication channels and methods with shareholders; and review the ESG related disclosures. The Board holds a hearing to review Environmental, Social and Governance Report of the Group annually, and checks the implementation progress against the defined ESG goals.

The Board and all directors warrant that there are no false representations or misleading statements contained in, or material omissions from, the Report and jointly and severally accept responsibility for the truthfulness, accuracy and completeness of the Report. The Report was considered and approved by the Board on April 21, 2025.

# ABOUT VIVA BIOTECH

Established in 2008, Viva Biotech (01873.HK) provides one-stop integrated services from early-stage structure-based drug discovery to commercial drug delivery to global biopharmaceutical innovators. As a Contract Research Organization (CRO) service provider with well-established leadership in structure-based drug discovery ("**SBDD**"), we offer leading early-stage to late-phase drug discovery expertise by integrating our cutting-edge technology platforms and state-of-the-art equipment in X-ray crystallization, Cryo-EM, ASMS, SPR, HDX-MS, CADD, etc. Our team led by senior pharmaceutical chemists and drug discovery biologists provides drug design, pharmaceutical chemistry (H2L, LO), compound synthesis, chemical analysis and purification, kilogram scale-up, polypeptide synthesis and relevant biological activity assay services. Through our subsidiary Langhua Pharmaceutical ("**Langhua**"), we offer our worldwide pharmaceutical and biotech partners one-stop integrated Chemistry, Manufacturing and Controls (CMC)/ Contract Development and Manufacturing Organization (CDMO) services from preclinical to commercial manufacturing. In addition, we are committed to the identification of and investment in biopharmaceutical start-ups with high potential. Viva has embedded an equity for service (EFS) model to high potential start-ups to address unmet medical needs.

As of December 31, 2024, Viva Biotech has provided drug R&D and production services to 2,465 biotech and pharmaceutical clients around the world. We have invested and incubated 93 biotech start-ups in total. In the future, the Company will continue to strengthen its technical barriers, and improve its R&D and production level and service capacity, so as to provide high-quality and diversified services for more drug discovery start-ups, as well as the medium and large pharmaceutical enterprises around the world. We hope to help more patients through Viva's platform.

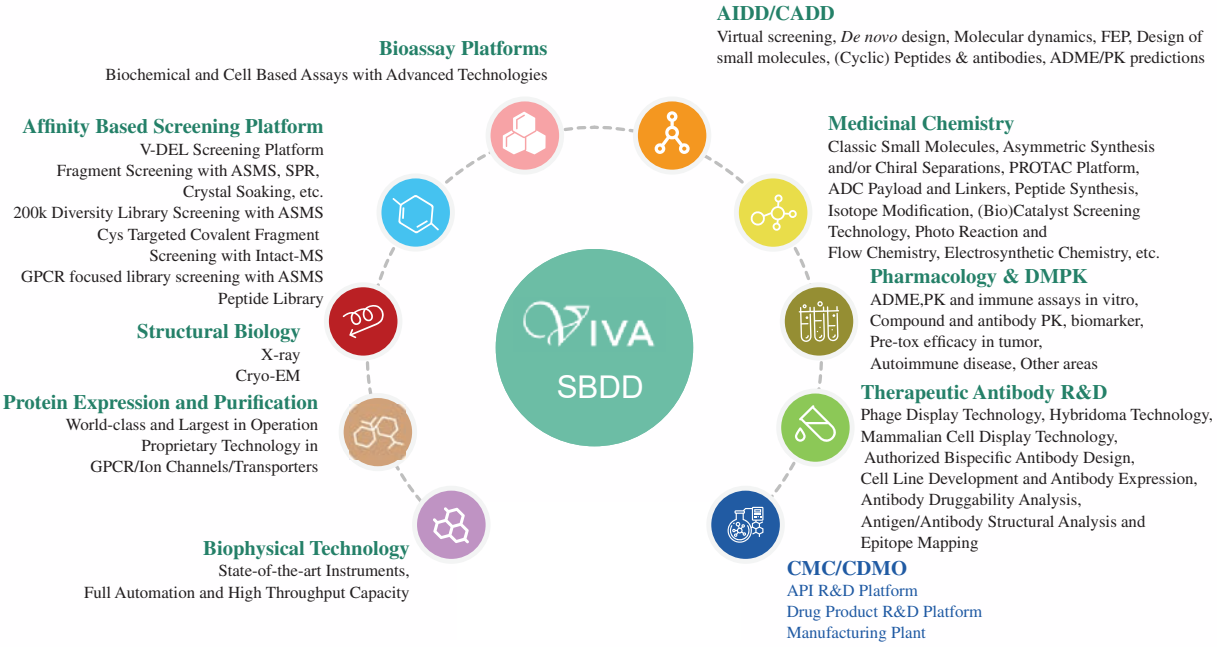
2,465 biotech and pharmaceutical clients worldwide

2,063 employees worldwide

79 domestic and foreign patents

93 portfolio companies

## Technology platforms



## Corporate Culture

We provide one-stop integrated services from early-stage structure-based drug discovery to commercial drug delivery to global biopharmaceutical innovators.

### Vision

To become a long-term partner of global innovative biotech companies

### Mission

To be innovation-driven, to be empowered by cutting-edge technology, to strive for excellence, and to help patients all around the world

### Our values

Innovation
Integrity and Professionalism
Customer Success
Win-win Cooperation

## Honors

Top 100 Chinese Brands of Life Science Service Providers in 2024


Standing member of the National Biopharmaceutical Enterprise Platform


API Development & Innovation Award


Excellence Award for standing member of the National Biopharmaceutical Enterprise Platform


Received a low risk rating in the audit of the Pharmaceutical Supply Chain Initiative (“PSCI”)

PSCI PHARMACEUTICAL SUPPLY CHAIN INITIATIVE
Building responsible supply chains

Langhua Pharmaceutical received a CDP climate rating of “B” in 2024

CDP

## Overview of ESG KPIs in 2024

### Environmental

| | | |
|---|---|---|
| Scope 1 and Scope 2 greenhouse gas emission intensity: 21.59 $tCO_2e$/revenue of RMB million | Scope 3 greenhouse gas emission disclosure for the first year: 674.85 $tCO_2e$ | Hazardous wastes generated 7,798.34 tons |
| Non-hazardous waste generated 833.55 tons | Langhua Pharmaceutical submitted a commitment application to SBTi for its decarbonization and emission reduction goals | |

### Social

| | | |
|---|---|---|
| Gender ratio 55%:45% | Average training hours per employee 14.9 hours | Percentage of professionally trained employees 60% |

### Governance

| | | |
|---|---|---|
| Number of corruption and fraud incidents involving the Company or its employees: 0 | Number of major information security and major privacy protection incidents: 0 | Business ethics and anti-corruption training rate: 100% |

# SUSTAINABLE DEVELOPMENT STRATEGIES

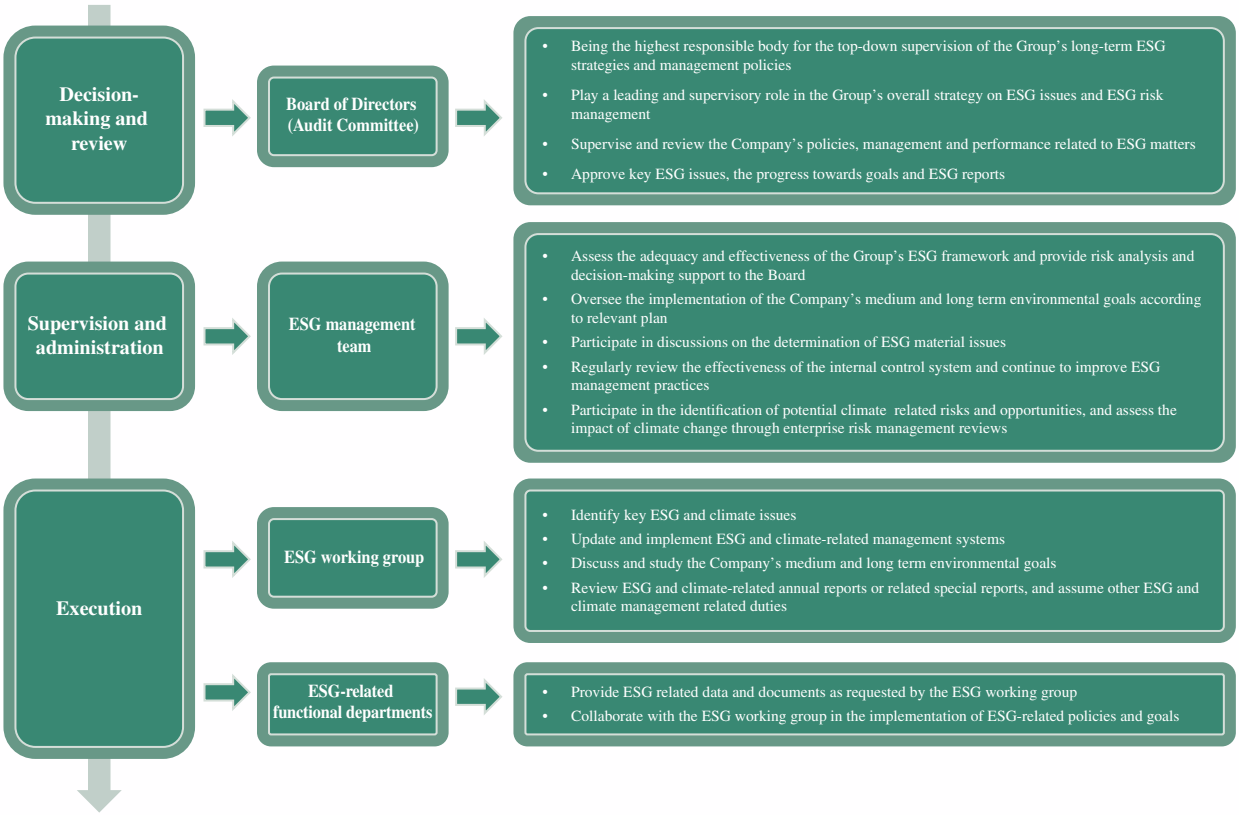
## ESG Strategies and Goals

Deeply integrating the ESG concept into its operation system as the foundation of sustainable development, Viva Biotech continues to fulfill its commitment to sustainable development by building a growth platform for employees, creating technological value for customers, and delivering sound returns to shareholders. Based on the Group's strategic plan and actual business operations, we have established a management framework covering five core aspects. This framework systematically connects our ESG goals and business execution paths, employing quantitative indicator monitoring and a dynamic optimization mechanism to ensure that we live up to our long-term vision and ESG mission through implementation across all levels of the Group:


## ESG Governance Structure

Sound and effective ESG governance is the foundation for ensuring ESG performance and the quality of ESG reports. In terms of ESG governance, the Group has established a sound governance structure covering four levels, namely the Board, the management, the ESG working group and the functional departments, and has formed an efficient work mechanism to implement management functions of the organizations at all levels in respect of sustainability-related matters, so as to continuously enhance the performance of corporate sustainability governance.

## SUSTAINABLE DEVELOPMENT STRATEGIES




Viva Biotech places great importance on the shared value of all stakeholders and has established transparent communication mechanisms. Through regular engagement with stakeholders, the Company identifies, assesses, and manages key ESG issues of concern. Meanwhile, the Board conducts annual reviews of the Group's Environmental, Social, and Governance (ESG) Report, evaluates the progress of set ESG goals, clarifies the Company's material ESG issues, assesses corporate ESG performance, and continuously improves the sustainability strategy and framework to enhance ESG governance standards.

## Communications with Stakeholders

Stakeholders' opinions are a key input to sustainable corporate development. Viva Biotech has established a sound and smooth communication channel, maintains effective interaction with all stakeholders in an open and transparent manner, listens to them and actively responds to the common concerns of all parties in order to continuously optimize its sustainability strategy and management methods, earnestly fulfill its corporate social responsibility, and create more value for its stakeholders. During the Reporting Period, we reviewed and confirmed seven types of most important stakeholders based on the two dimensions of "impact by the Group" and "impact on the Group". The following table sets forth in detail the concerns of various stakeholders, as well as the communication channels and specific responses of the Group.

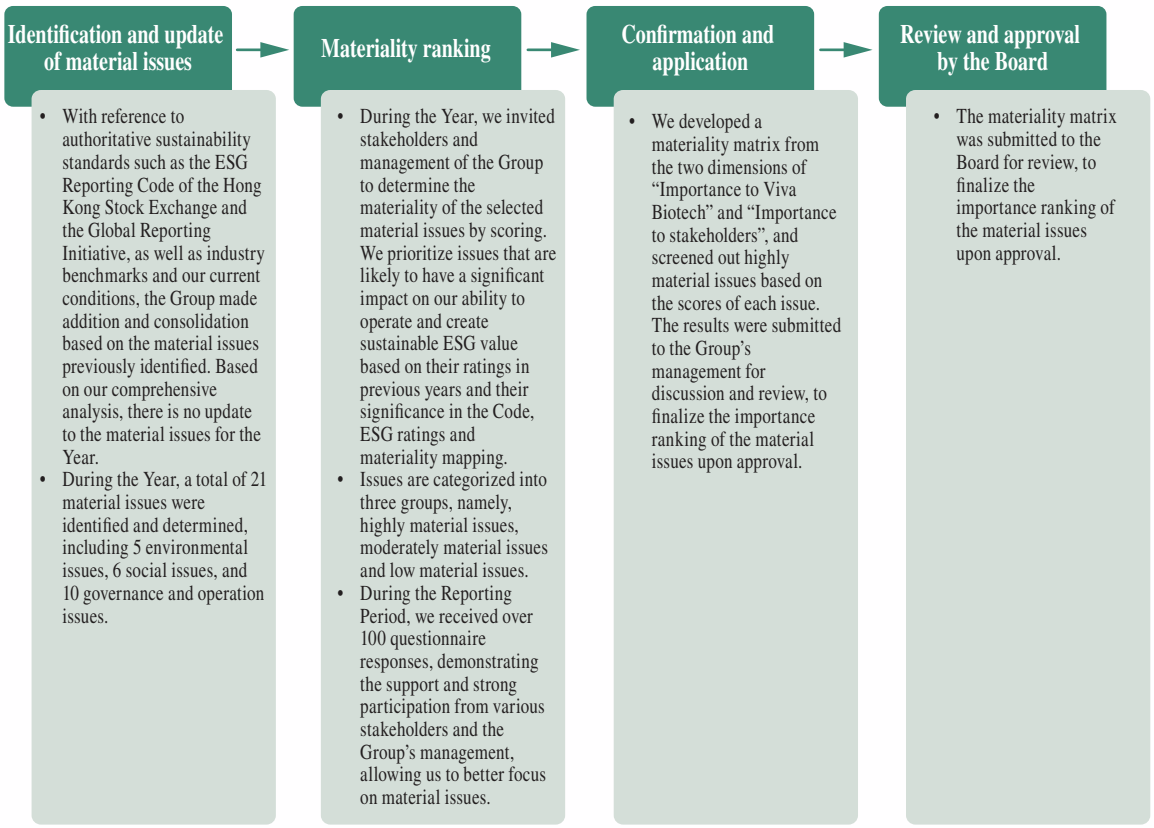
| Stakeholders | Focus issues | Communication channels and response of the Group |
|---|---|---|
| **Government and regulators** | • Compliance with laws and regulations<br>• Promote employment<br>• Drive local economic development<br>• Address climate change | • Abide by laws and regulations and strictly implement the government's policy requirements<br>• Actively participate in government-enterprise cooperation projects |
| **Shareholders/Investors** | • Information disclosure<br>• Financial performance<br>• ESG governance | • Convene general meetings<br>• Improve information disclosure and issue financial reports and other special reports<br>• Hold investor conferences, conduct roadshows and reverse roadshows, publish newsletters or WeChat official account articles, and communicate online |
| **Portfolio companies/ Clients** | • Product quality and safety<br>• Privacy and security<br>• Intellectual property protection<br>• Efficient delivery<br>• Increase R&D investment | • Improve the customer service mechanism<br>• Conduct customer satisfaction surveys<br>• Organize regular visits to customers<br>• Regular teleconferences |
| **Suppliers** | • Fair trading<br>• Win-win cooperation | • Improve the procurement and tender system<br>• Strengthen supplier management and annual supplier evaluation |
| **Business partners** | • R&D platform and investment<br>• Supply chain management | • Hold meetings for communication<br>• Actively participate in industry cooperation and exchanges |

| Stakeholders | Focus issues | Communication channels and response of the Group |
|---|---|---|
| **Employees** | • Compensation and benefits<br>• Occupational health and safety<br>• Employment compliance<br>• Talent attraction and retention<br>• Career development and growth | • Employ staff legally, formulate and implement sound employment policies<br>• Provide comprehensive and competitive compensation and benefits<br>• Provide comprehensive safety protection for employees and strictly implement epidemic prevention and control policies<br>• Hold employee communication meetings regularly<br>• Set up an employee suggestion box<br>• Improve the training system and carry out training activities |
| **Media** | • Information disclosure and transparency | • Hold press conferences<br>• Attend media events and accept media interviews |

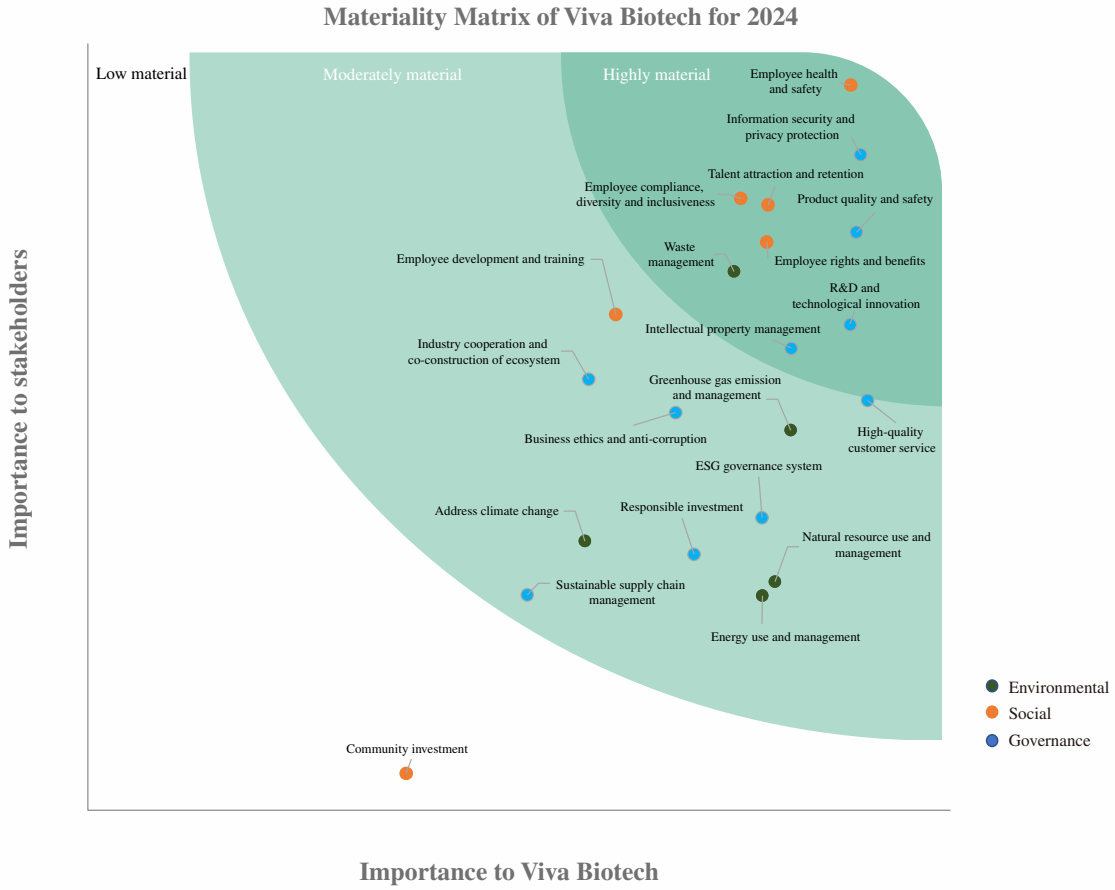
## Materiality Assessment

To systematically review the Group's strategic commitments, institutional framework and practical effectiveness in sustainable development and actively respond to the core concerns of stakeholders regarding ESG governance, we have established a normalized evaluation mechanism and continuously identify material ESG issues of strategic value through regular questionnaire surveys. Our evaluation work for the Year adopts dual materiality matrix analysis, which not only focuses on financial impact of the issues on our sustainable development, but also attaches importance to their environmental and social effect. We also ensure that these issues of concern are well aligned with the United Nations Sustainable Development Goal(s) ("**UNSDG(s)**") and the expectations of stakeholders.

## Materiality assessment process:



## SUSTAINABLE DEVELOPMENT STRATEGIES




Based on the materiality matrix, during the Reporting Period, we identified a total of 9 highly material issues, 11 moderately material issues and 1 low material issue. The Report will respond to and disclose the material issues, particularly all the highly material issues.

| Importance | Issues | Relevant sections | |
|---|---|---|---|
| Highly material issues | Waste management | 4.3 | Waste Management |
| | Employee compliance, diversity and inclusiveness | 5.2 | Diversity and Inclusiveness |
| | Employee health and safety | 5.3 | Occupational Health and Safety |
| | Employee rights and benefits | 5.1 | Employment Compliance and Employee Benefits |
| | Talent attraction and retention | 5.4 | Human Capital Development |
| | R&D and technological innovation | 2.1 | R&D and Innovation |
| | Product quality and safety | 2.3 | Quality Management |
| | Information security and privacy protection | 2.5.3 | Privacy Protection and Information Security |
| | Intellectual property management | 2.2 | Intellectual Property Management |
| Moderately material issues | Greenhouse gas emission and management | 4.2 | Energy Conservation and Emission Reduction Actions and Measures |
| | Natural resource use and management | 4.4 | Resource Management |
| | Energy use and management | 4.2 | Energy Conservation and Emission Reduction Actions and Measures |
| | Address climate change | 4.1 | Supporting the Climate Actions |
| | Employee development and training | 5.4 | Human Capital Development |
| | High-quality customer service | 2.5 | Protection of Clients' Rights and Interests |
| | Sustainable supply chain management | 2.6 | Sustainable Supply Chain |
| | Industry cooperation and co-construction of ecosystem | 3.2 | Promoting Industry Cooperation |
| | ESG governance system | ESG Governance Structure | |
| | Responsible investment | 3.1 | Responsible Investment |
| | Business ethics and anti-corruption | 1.2 | Business Ethics and Anti-corruption |
| Low material issues | Community investment | 5.5 | Community Responsibility and Contribution |

## SUSTAINABLE DEVELOPMENT STRATEGIES

### Alignment with United Nations Sustainable Development Goals

In working on a number of sustainability issues, the Group actively contributes to ensure that our efforts are closely aligned with the UNSDGs, thereby making a meaningful contribution to global sustainable development.

| Aspect | Corresponding UNSDGs | Relevant material issues | Our actions |
|---|---|---|---|
| Commitment to responsible corporate governance |  | – ESG governance system<br>– Business ethics and anti-corruption | • Establish a systematic ESG governance structure<br>• Establish a business ethics supervision mechanism and an anti-fraud working group to deepen integrity management |
| Innovation-driven approach to shared value creation |  | – R&D and technological innovation<br>– Intellectual property management<br>– Quality management and safety<br>– High-quality customer service<br>– Information security and privacy protection<br>– Sustainable supply chain management | • Build up a cluster of pharmaceutical innovative technology platforms and an industrial collaboration network<br>• Implement a full lifecycle quality management system to ensure drug safety and compliance<br>• Improve our patent portfolio strategy and strengthen the protection for core technologies |
| Industry leadership and multi-dimension empowerment |  | – Responsible investment<br>– Industry cooperation and co-construction of ecosystem | • Establish an investment ESG evaluation system to strike a balance between economic benefits and social value<br>• Deepen exchanges with various institutions and promote in-depth industry-university-research collaboration |
| Environmental benefits and ecological protection |  | – Address climate change<br>– Greenhouse gas and waste gas emission and management<br>– Energy use and management<br>– Waste management<br>– Natural resource use and management | • Implement the action plan on green operation and establish a low-carbon production system<br>• Optimize pollution prevention and control technology solutions to realize full-process monitoring of emissions<br>• Promote the circular economy model to improve utilization rate of recycled resources |
| People-oriented and harmonious community |  | – Employee rights and benefits<br>– Employee compliance, diversity and inclusiveness<br>– Employee health and safety<br>– Employee development and training<br>– Talent attraction and retention<br>– Community Investment | • Create a diverse and inclusive workplace ecology, and improve the fair development mechanism<br>• Establish an occupational health and safety management system to prevent occupational risks<br>• Develop a tiered talent cultivation plan and improve the talent reserve system |

# 1. COMMITMENT TO RESPONSIBLE CORPORATE GOVERNANCE

Viva Biotech regards corporate governance as the cornerstone of its strategic development and has established a multi-level internal control system to ensure decision-making transparency. The Board continues to improve our anti-corruption compliance mechanism, ensuring that our R&D, cooperation and business practices are in compliance with domestic and international indicators and standards through a full-process business ethics review and conflict of interest management system.

Corresponding UNSDG:


## 1.1 Corporate Governance

Adhering to stringent corporate governance standards, the Group aims to effectively safeguard shareholders' rights and interests, enhance corporate value, develop efficient business strategies and policies, and continuously enhance transparency and accountability. We strictly abide by the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Corporate Governance Code contained in Appendix C1 to the Listing Rules of the Hong Kong Stock Exchange and other laws, regulations and regulatory documents.

### Board Governance Structure

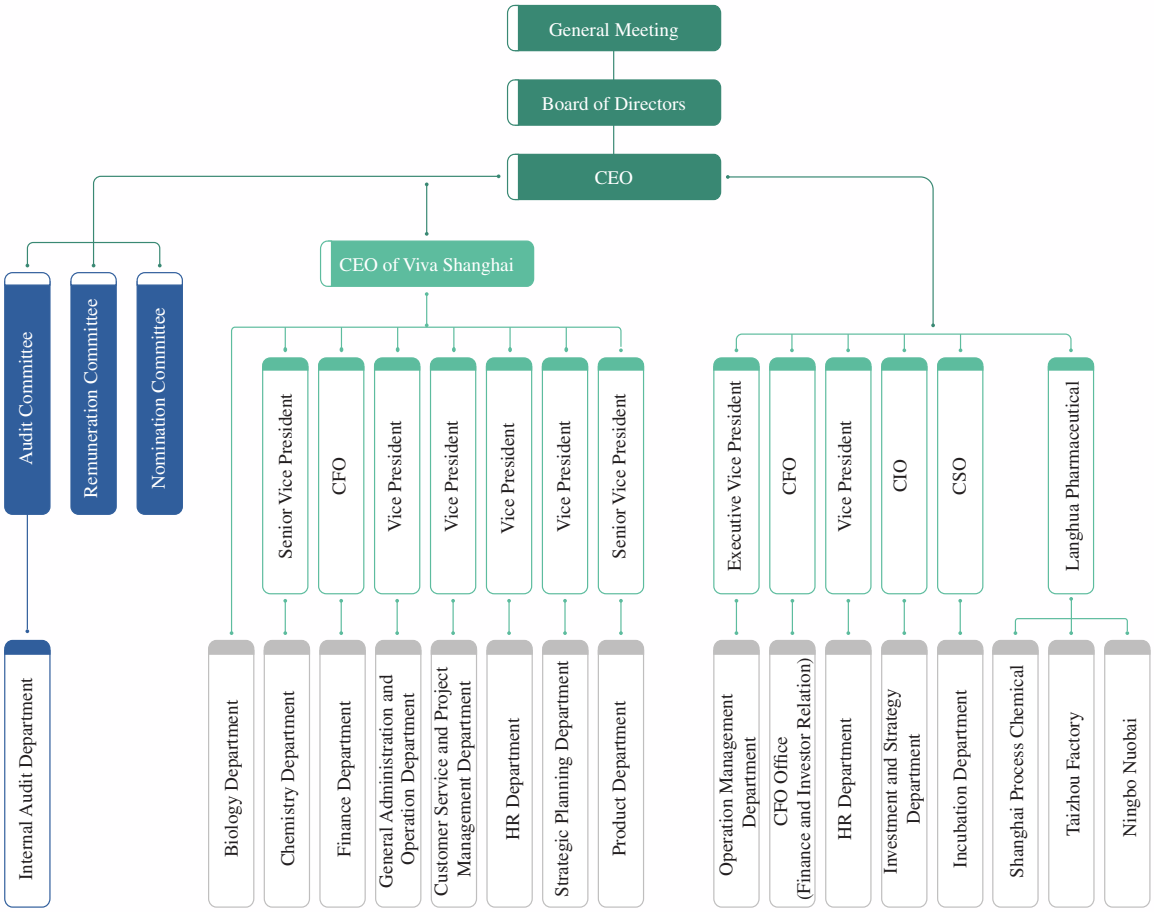
The Board of the Group has established the Nomination Committee, the Remuneration Committee and the Audit Committee, which provide direct and indirect guidance and support to the management. The Board formulates strategies and oversees their implementation and comprehensively monitors the Company's operational and financial performance to ensure that sound internal control system and risk management system are in place. The terms of reference of each committee of the Board have been published on the website of the Group and the website of the Hong Kong Stock Exchange and are available for inspection by shareholders.

## 1. COMMITMENT TO RESPONSIBLE CORPORATE GOVERNANCE

### Board Diversity

The Group has adopted a Board independence and diversity policy, which defines the principles of Board composition and the implementation methods. The policy emphasizes the improvement of decision-making quality through a combination of diverse backgrounds. In the talent selection process, we consider multidimensional factors including but not limited to personality traits, age distribution, cultural perspectives, education level, professional qualifications, skills and expertise, knowledge structure, industry experience and regional operational experience, so to ensure that the Board members have diverse capability reserves that are in line with the Company's strategic direction, corporate governance needs and business development characteristics.

The Nomination Committee is responsible for specific implementation, such as evaluating the current Board structure based on the standards above and continuously optimizing composition of the Board members. As at the end of the reporting period, the current Board consisted of eight members, including three executive directors, two non-executive directors and three independent non-executive directors. The professional qualifications and practical experience of each member complement each other, effectively meeting the Group's needs for high-standard operation. Looking into the future, the Board will continue to monitor the effectiveness of policy implementation, make adjustments and optimizations through a dynamic review mechanism, and strengthen our response capabilities to ESG issues at the decision-making level, laying a governance foundation for achieving sustainable development goals.


General Meeting
Board of Directors
CEO
Audit Committee
Remuneration Committee
Nomination Committee
CEO of Viva Shanghai
Senior Vice President
CFO
Vice President
Vice President
Vice President
Vice President
Senior Vice President
Executive Vice President
CFO
Vice President
CIO
CSO
Langhua Pharmaceutical
Internal Audit Department
Biology Department
Chemistry Department
Finance Department
General Administration and Operation Department
Customer Service and Project Management Department
HR Department
Strategic Planning Department
Product Department
Operation Management Department
CFO Office (Finance and Investor Relation)
HR Department
Investment and Strategy Department
Incubation Department
Shanghai Process Chemical
Taizhou Factory
Ningbo Nuobai

# 1. COMMITMENT TO RESPONSIBLE CORPORATE GOVERNANCE

## 1.2 Business Ethics and Anti-corruption

The Group upholds the philosophy of honest operation and continues to build up a standardized, open and compliant business operation system. With respect to business practices, we abide by the requirements of the Corporate Governance Code, the Criminal Law of the People's Republic of China, the Company Law, the Anti-unfair Competition Law and relevant laws and regulations, and have established an ethical code system that covers all stakeholders. In all aspects including Board governance, investor relations, government-enterprise communication, supply chain collaboration and social interaction, we always follow internationally recognized standards of professional conduct, strictly enforce anti-commercial bribery, anti-fraud, anti-money laundering and other compliance bans, and implement a zero tolerance policy for any irregularities.

To effectively prevent and curb corruption and money laundering, the Group has established a dedicated anti-fraud working group and published the Anti-money Laundering Management System and the Anti-fraud Management System, which define the irregularities and corresponding penalties, to promote standardized and systematic management of our anti-corruption activities. As the Company's anti-fraud organ, the Audit Department is responsible for supplementary cross-departmental and company-wide anti-fraud efforts, such as leading and organizing the management to conduct annual fraud risk assessments, conducting anti-fraud reviews for major audit projects, and assisting departments in conducting annual anti-fraud self-assessment and anti-fraud publicity activities, to ensure a clean and honest corporate culture.

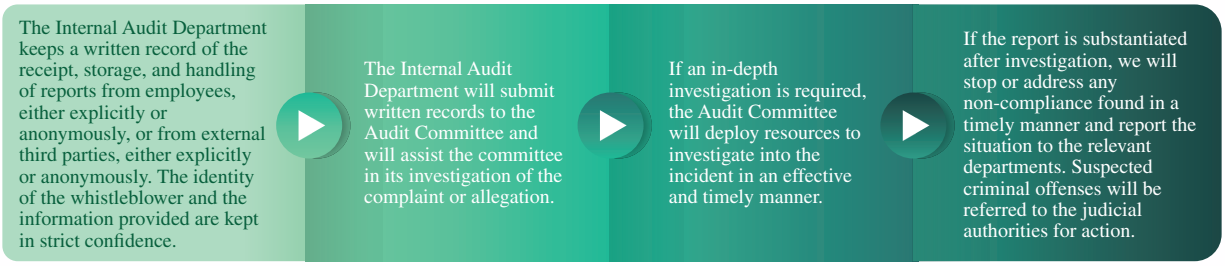
To further standardize our business environment, the Group requires its employees holding key positions to sign the Anti-bribery/Anti-corruption Commitment Letter upon joining the Group in order to eliminate any act of seeking undue benefits. The management of the Company has set an example by taking the lead in strictly complying with the rules and regulations of the Company. During the Reporting Period, nearly 100 employees and 3 executive directors signed the commitment letter, which jointly maintained the positive business culture and corporate image of the Company.

During the Reporting Period, the Group systematically conducted special training on anti-corruption with a theme of "Upholding integrity and combating fraud", to build up compliance awareness among all employees. With a focus on preventing the risk of official embezzlement, the training drew upon judicial precedents to analyze the legal consequences and professional costs of corrupt behaviors. We also established a standard whistleblowing mechanism and identification guidelines against workplace fraud scenarios such as false reimbursement and commercial bribery invitations. During the Year, a total of 2,063 employees and 3 executive directors participated in anti-corruption and integrity-related training, effectively translating the cultural concept of "Keeping integrity in mind and practicing integrity through actions" into a professional code of conduct.

### Whistleblowing and Investigation

Viva Biotech has established a transparent whistleblowing mechanism, and collaborates with internal and external stakeholders to jointly supervise the compliance and business ethics responsibilities. The Company maintains diverse whistleblowing channels such as telephone hotlines and email to accept real-name/anonymous reporting from employees and business related parties regarding fraud, violation of professional ethics, and accounting or auditing issues. The anti-fraud working group is tasked to handle the whistleblowing information, including strictly implementing the standardized procedures for case acceptance, registration, written records and escalating to the Audit Committee, and assists in the investigation process. Any irregularities found and verified must be promptly stopped, handled and reported to relevant departments, and suspected criminal offenses will be referred to judicial authorities according to law.

The entire whistleblowing and handling process follows the principle of confidentiality. It is strictly prohibited to divulge identity of the whistleblower and the information provided, or disclose details of the case to the accused party. During the investigation process, it is prohibited to present the original or photocopy of whistleblowing materials and anonymous materials shall not undergo handwriting identification, in order to ensure that the rights and interests of the whistleblower are protected adequately. After receiving a complaint, the Internal Audit Department will initiate the appropriate handling and investigation process as follows:




### Whistleblowing and investigation process

During the Year, the Group did not receive any relevant complaints or reports. In case of any complaints or reports, the Internal Audit Department will handle and address them in a timely manner in accordance with the relevant complaint and whistleblowing process. In addition, we did not receive any reports or judicial proceedings against the Group or its employees in relation to corruption, bribery, extortion, fraud or money laundering.

### Whistleblowing method

Whistleblowing email:

✉ fanwubi@vivabiotech.com

## 1.3 Risk Management

The Group always gives priority to information security and customer privacy protection. In order to enhance information security management, we have not only identified potential risks, but also formulated and implemented comprehensive information security management policies and measures while continuously optimizing our management system and structure. Under the framework of the Company Law of the People's Republic of China and the Articles of Association, we have established a series of internal control policies such as the Basic Standards for Internal Control of the Company, the Risk Management System and the Business Continuity Management, and carry out risk-oriented internal audit to timely identify and manage the existing and new risk exposures.

In addition, we further improved our internal control management system in accordance with the Anti-unfair Competition Law of the People's Republic of China, the Foreign Corrupt Practices Act (FCPA) of the United States and other laws and regulations. We also conducted fraud risk audit in the annual audit process, to effectively prevent and manage compliance risks and provide solid assurance for our sustainable development. The Board is responsible for assessing the risks that the Group is willing to take to achieve its strategic objectives and establishing compliant and effective risk management measures and internal control system. The Internal Audit Department closely works with the Audit Committee to strengthen the risk management and internal control system, and is responsible for investigating into important matters.

| | |
|---|---|
| **Board of Directors** | Manage and monitor the risk management and internal control systems |
| **Audit Committee** | Guide risk avoidance, and supervise and verify the implementation and effectiveness of risk management and internal control systems |
| **Internal Audit Department** | Lead the risk management and internal control of day-to-day operations and establish a risk avoidance and internal control system to improve the Group's operation and management process and effectively address and reduce overall operational risks |
| **Various departments** | Monitor and manage daily operational processes and procedures, identify major risks, conduct self-inspection, and implement main monitoring processes |

## 1. COMMITMENT TO RESPONSIBLE CORPORATE GOVERNANCE

The Group keeps abreast of significant changes in national, market and industry conditions on a regular basis, adjusts specific risk control strategies accordingly, and has applied them to all relevant types of business. The Audit Committee annually reviews and reflects on the appropriateness of the corresponding risk strategies, including ESG risks and climate-related risks, based on market conditions. Any significant ESG risks identified will be reported to the ESG working group and the Board in a timely manner, and we will assess the risks and formulate response plans to ensure stable and safe operation of the Group. The ESG indicator audit work performed by the Internal Audit Department in the Year included:

- Check and compare annual environmental data with last year, and understand the data collection and record information to ensure authenticity of the data

- Identify the key areas to be optimized in ESG policies and measures, including environmental (e.g. carbon emissions, waste management), social (e.g. labor relations management, data privacy), and governance (e.g. corporate governance, business ethics) aspects

- Provide recommended improvements to help optimize our ESG management process

# 2. INNOVATION-DRIVEN APPROACH TO SHARED VALUE CREATION

Riding on the wave of biopharmaceutical innovation, Viva Biotech drives long-term development through technological R&D and responsible operations. As a pioneer in drug discovery, we provide customers with one-stop integrated solutions from early-stage structure-based drug discovery to commercial drug delivery. Remaining honest with a passion for excellence to ensure superior quality of products and services, we continuously improve customer experience and satisfaction, and proactively build an open platform for cooperation of biopharmaceutical innovators around the world to achieve a mutually beneficial and win-win ecosystem.

Corresponding UNSDG:


## 2.1 R&D and Innovation

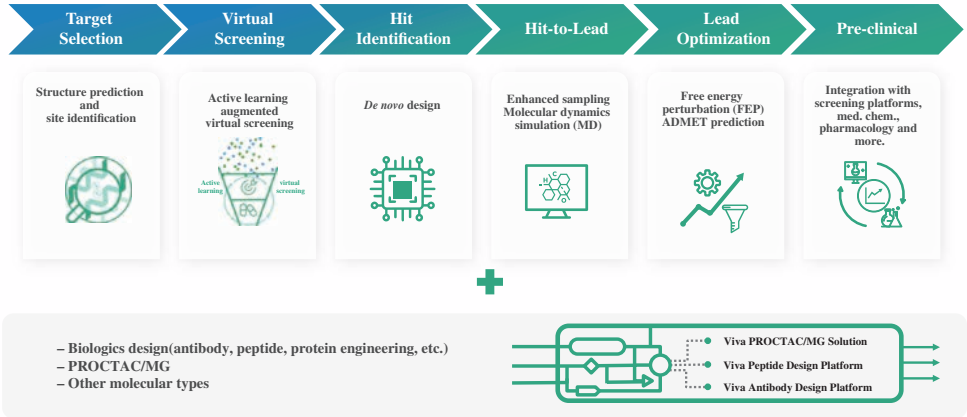
The Group's CRO business leverages its leading expertise in structure-based drug design (SBDD) technology to provide global partners with CRO services at the stage of new drug research. It has established multiple advanced technology platforms, including X-ray protein crystallography, cryo-electron microscopy (Cryo-EM), DNA-encoded compound library (DEL), affinity selection mass spectrometry (ASMS), surface plasmon resonance (SPR) technology, hydrogen-deuterium exchange mass spectrometry (HDX-MS) technology, and AIDD/CADD. Additionally, a team led by seasoned medicinal chemists and drug discovery biology experts offers services such as drug design, medicinal chemistry (Hit-to-Lead, Lead Optimization), compound synthesis, chemical analysis and purification, kilogram-scale upscaling, peptide synthesis, and corresponding bioactivity testing. For the CDMO business, we are continuously advancing automation upgrades to further enhance production automation levels, while steadily building production platforms such as active pharmaceutical ingredient (API) technology platforms and formulation technology platforms.

With Viva Biotech's top-notch R&D team, high-end R&D laboratories and advanced technology platforms, we are able to offer more diversified and robust one-stop CRO-CDMO service chain. We have established various pharmaceutical technology and R&D platforms, and invested RMB88 million in R&D to fuel continuous advancement of our innovation projects.

### 2.1.1 AIDD/CADD Platform

The Computer-Aided Drug Discovery (CADD) and Artificial Intelligence Drug Discovery (AIDD) platforms utilize physicochemical models and artificial intelligence algorithms to empower the development of various molecular modalities, facilitating the rapid and efficient advancement of diverse drug discovery projects. Grounded in a profound understanding of structure and mechanism, these platforms truly realize computation-driven drug development. Structure and mechanism represent the unique technical advantages of Viva's AIDD platform, enabling it to deliver significant benefits in addressing research challenges involving novel targets, complex mechanisms and multiple drug types. The Company's computational platform has developed a series of advanced algorithms targeting key project challenges to solve practical problems in drug design, such as covalent and non-covalent free energy perturbation, offering higher computational accuracy and a broader adjustable parameter space. To address gaps in traditional computational chemistry methods, the platform incorporates generative AI algorithms, leveraging de novo generation to break through chemical space limitations and achieve groundbreaking drug design from scratch with computational support. Additionally, the platform focuses on developing ADME/PK prediction models, achieving comprehensive coverage across all stages of drug development and systematic integration of computational tools. The methods developed by the computational chemistry and AI platforms have been applied to various drug modalities, including small molecules, antibodies, peptides, PROTACs, molecular glues and RNA-targeting small-molecule drug development. Throughout algorithm development, the platforms maintain close collaboration between dry and wet lab experiments, with computational results validated through experiments and computational models iteratively optimized to ultimately achieve breakthroughs. Overall, Viva's CADD and AIDD platforms possess the capability for self-developed algorithms and platform construction, extensive experience in researching multiple drug modalities, and fully leverage Viva's strengths in structure-based drug discovery. Supported by the computational power of Viva's Shanghai supercomputing cluster, these platforms provide comprehensive enablement across all aspects of early-stage drug discovery.

AIDD/CADD platform: Empowering the whole drug R&D process through one-stop solutions

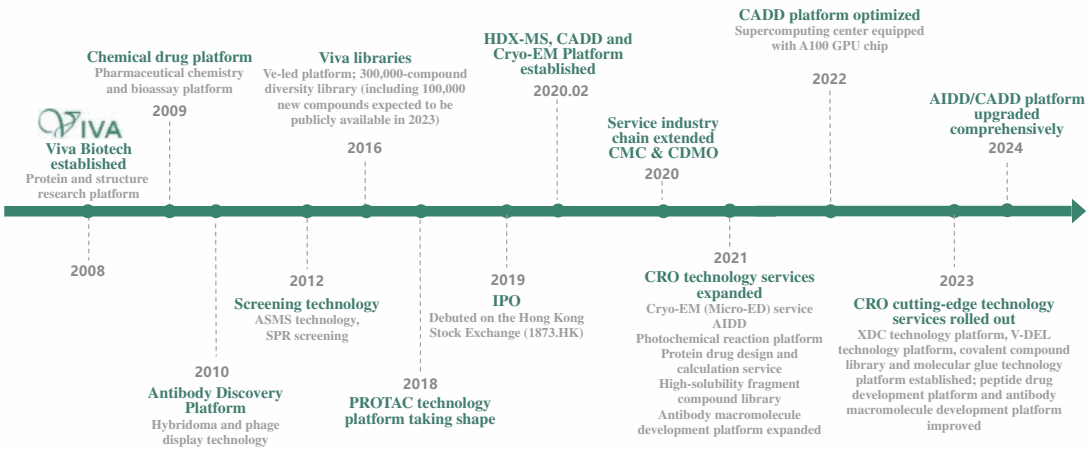


## 2. INNOVATION-DRIVEN APPROACH TO SHARED VALUE CREATION

Strengths of the AIDD/CADD platform:

| | |
|---|---|
| AI x Micromolecule design | Enrichment factor achieves 20 times |
| AI x Compound design | The hit compound discovery cycle is shortened from 12-36 months to 6-18 months |
| AI x Targeting RNA micromolecule design | Viva employs its proprietary AI + SBDD to study a wider range of drug targets and design drugs for previously "undruggable" targets |
| AI-driven antibodies (de novo design) | Utilising advanced structural biology knowledge and AI technologies, de novo antibody design can be performed without requiring an initial antibody sequence |
| AI x Macromolecule field | Compared to the traditional 3-6 month antibody discovery cycle, the process is now significantly shortened to 1 month per design iteration |

### R&D Milestones of Viva Biotech



## 2.2 Intellectual Property Management

Upholding the belief of "to be Innovation-Driven, to be Empowered by Cutting-Edge Technology, to Strive for Excellence, and to help patients all around the world", Viva Biotech has established and implemented comprehensive intellectual property management system and infringement accountability system in promoting its innovation-focused business activities aiming for win-win cooperation. We strive to apply the industry-leading intellectual property protection practices to all of our operating sites around the world to enhance our business competitiveness and earn the trust of our customers.

Viva Biotech strictly abides by the Patent Law of the People's Republic of China, the Trademark Law of the People's Republic of China, the Copyright Law of the People's Republic of China and other laws and regulations related to intellectual property rights and their implementation rules. In the meantime, as a biopharmaceutical company targeting the international market, we also strictly comply with the Patent Cooperation Treaty and other relevant international provisions and treaties.

In accordance with the requirements of the Enterprise Intellectual Property Management Standards (GB/T29490-2013), the Group has established a dedicated intellectual property department. The department, composed of professional personnel, undertakes the responsibilities of formulating intellectual property development plans, establishing a relevant management performance evaluation system, supervising and assessing relevant bodies, and comprehensively managing our intellectual property matters.

In addition, the Group has developed systematic intellectual property control procedures covering the management of resources (including human resources, infrastructure, financial resources and information resources), basic management (covering acquisition, maintenance, application, protection, contract management and confidentiality of intellectual property), implementation and operation (covering processes of project initiation, research and development, procurement, sales and after-sales service), and audit and improvement (including internal audit, analysis and optimization). These measures are designed to strengthen the responsibility for intellectual property protection and ensure efficient management of intellectual property rights at all stages, thereby protecting them from the risks associated with internal and external infringements.

**Patent achievements in 2024**

| 8 | 79 | 79 |
|---|---|---|
| Patents granted during the Year | Total patents granted | Authorised |

## 2.3 Quality Management

### 2.3.1 Quality Management System

Viva Biotech adheres to the principle of "Providing high-quality products with high standards", and continuously improves product quality management capabilities to empower clients and the industry. We strictly abide by the Product Quality Law of the People's Republic of China and other relevant laws and regulations on production and quality to ensure that every aspect complies with national standards. In view of the stringent requirements for product health and safety in the pharmaceutical industry, we pay special attention to and abide by the Drug Administration Law of the People's Republic of China and its implementation rules, the Good Manufacturing Practice of Medical Products in China, the Measures for the Supervision and Administration of Drug Production, the Measures for the Administration of Drug Registration and other relevant regulations to ensure that we assume full professional, managerial and technological responsibilities for the quality, effectiveness, accuracy, timeliness and reliability of our services.

In terms of CDMO business, all API products of Langhua passed China's Good Manufacturing Practice (GMP) certification, and its main products obtained such international certifications as EU-GMP, WHO-PQ, and Accreditation of Foreign Manufacturers (AFM) in Japan. Langhua has also passed the GMP quality management system certification of the State Food and Drug Administration and the certifications of the Food and Drug Administration (FDA), the World Health Organization (WHO) and the European Directorate for the Quality of Medicines (EDQM), and has become a qualified supplier and R&D and production base of many renowned multinational pharmaceutical companies.

In order to ensure that our drugs comply with international safety standards, we have formulated the Management Procedures for the Assessment and Control of Genotoxic Impurities to govern the risk assessment of genotoxic impurities in terms of raw materials, intermediates, reaction by-products, degradation products, product packaging materials as well as shared equipment and facilities, entrust third parties to develop and validate the relevant detection methods, and conduct testing of at least three consecutive batches of products to determine the need to take further actions. In addition, we have formulated the QC Procedures for Laboratory Inspection Process Management which set out the sample storage and management procedures, to prevent contamination or cross-contamination in circulation and ensure accuracy and validity of inspection data.

### 2.3.2 Recall Procedures

The product recall procedures are key measures taken by the Company in response to potential or existing product quality problems. Once a product is identified through investigation and risk assessment as posing a potential threat to public health, or upon receipt of a recall order from the relevant authorities, the Group will immediately set up a recall team in accordance with the Administrative Measures on Drug Recalls, and will seek assistance from the community and the drug regulatory authorities if necessary. After assessing the risk, the recall team will define the recall level and request each department to formulate and implement detailed recall plans. Once the products have been recalled to the warehouse through various channels, we will carefully check the quantity and batch number of the recalled products to ensure that they are correct. Upon arrival of the products, the quality department will organize investigation, prepare reports, and propose corresponding corrective and preventive measures in accordance with the Corrective and Preventive Measures Management Regulations to prevent the recurrence of similar problems.

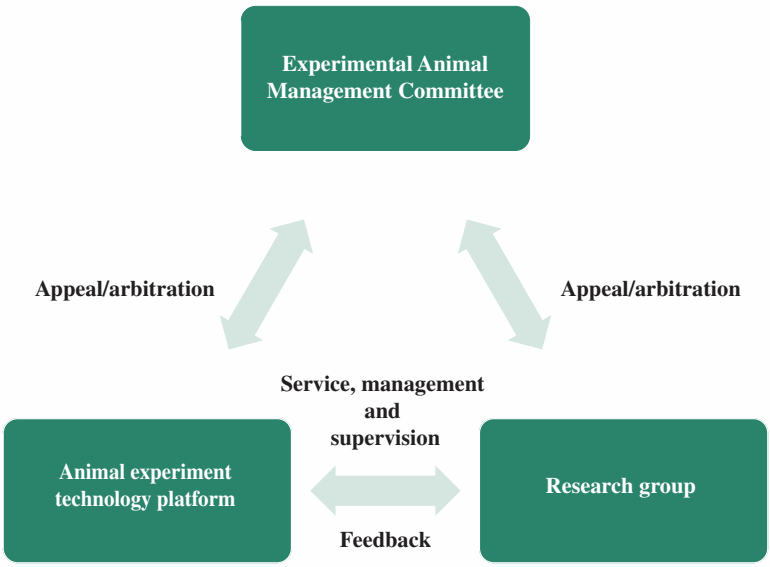
We always stay true to our original faith and continuously improve our quality management system. Within the Group, we have established comprehensive quality review and assessment and quality and safety emergency response and recall procedures, and regularly review, organize and revise our internal regulatory documents to ensure that they are up-to-date. In risk management, internal audit and error correction, staff training, supplier verification and training, we always adhere to the principle of quality first, and establish a set of coherent and efficient quality control systems to provide customers with safe and effective products. Through our stringent control of product quality and safety, the Group has not experienced any product recalls for health and safety reasons during the Year.

## 2.4 Animal Welfare and Rights

### 2.4.1 Experimental Animal Management System

The Group attaches great importance to the social concern about animal welfare, uses experimental animals in a responsible manner, and strictly follows the laws and regulations in the places where the Group operates and the ethical principles for animal experiments. To standardize our management practices, the Group has formulated the Regulations on Experimental Animal Management, which clearly requires all platform staff and laboratory personnel to follow standard operating procedures, and accept supervision by the Experimental Animal Management Committee directly appointed by the President. The committee is responsible for ensuring that experimental designs comply with scientific and humane management requirements, while introducing non-research background members to conduct independent evaluation from the perspectives of public safety and employees' rights and interests and regularly communicate on animal health and welfare related issues.

All experimental projects should have the Experimental Animal Research Plan and the Experimental Animal Welfare and Ethics Review Form submitted before conducting animal experiments, and must be approved by the Animal Management Committee before purchasing animals and conducting experiments. In addition, all animal laboratory personnel must pass the professional skills training and assessment by the Government Experimental Animal Research Center, and obtain the Group's internal laboratory practical certification before assuming their positions. A violation of the rules and regulations, depending on its severity, is subject to disciplinary actions such as warning, public criticism, suspension or revocation of qualifications to strengthen accountability. The committee continues to optimize the approval mechanism and training system, to ensure that animal experiments are in compliance with ethical standards and regulatory requirements throughout the process.



### 2.4.2 Animal Welfare Initiatives

The Company strictly implements the principle of "3R" (reduce, refine, replace) in all animal experiments, and prioritizes the use of non-living alternatives. Our feeding management practices not only comply with national standards, but also are subject to the preset limits on feeding density and the social interaction norms specific to animal species, in order to reduce animal stress responses. Meanwhile, we adopt an all-weather environmental monitoring system to ensure constant temperature control, clean ventilation and regular disinfection procedures for animal houses, comprehensively maintain physiological and behavioral health needs of animals, and implement a scientific and humanized welfare management mechanism.

## 2.5 Protection of Clients' Rights and Interests

### 2.5.1 Customer Services

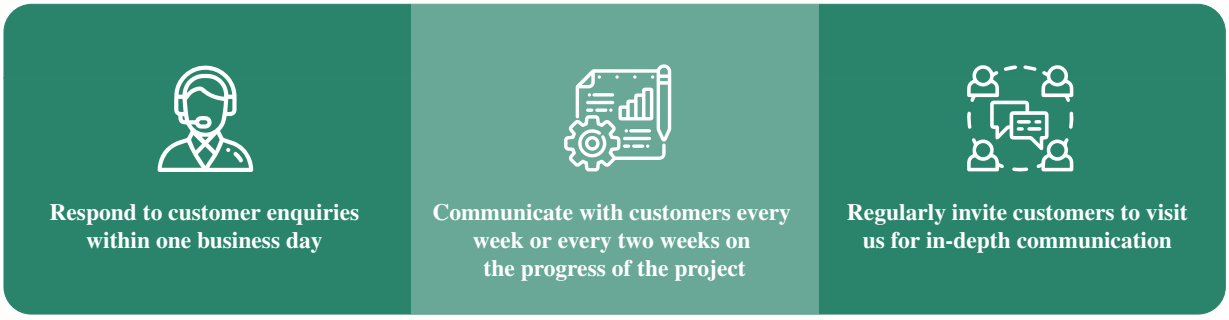
The Group regards customer feedback as the key to enhancing service quality and is committed to providing excellent customer experience. In our marketing activities, we adhere to the principle of ethical, scientific and objective practices, and strictly comply with the Advertising Law of the People's Republic of China and relevant laws and regulations. To optimize customer experience, we have developed rules such as the Brand Strategy Management System and the Anti-unfair Competition and Fair Marketing Procedures, to ensure that all marketing materials are reviewed strictly and meet the requirements of compliance, authenticity, rationality and accuracy. We resolutely prohibit any false or misleading promotions to earnestly protect clients' rights and interests. During the Reporting Period, the Group was not involved in any legal proceedings related to false marketing.

For business development, we always standardize our services with the highest standards in the industry, and have accumulated profound experience in CRO drug R&D services and CDMO R&D and production services. We have put in place a well-established customer service system from R&D to production delivery. In order to ensure smooth communication, we provide diversified communication channels including hotlines, mailboxes and direct access to the Customer Service Department or the Research and Development Department, so as to identify and solve problems promptly. In addition, we conduct regular customer satisfaction surveys through the Customer Questionnaire Management Process, to understand customers' evaluation on our service quality, response speed, intellectual property protection and other aspects. During the Reporting Period, we achieved a customer satisfaction score of 97.4, demonstrating our continuous service quality enhancements and high recognition from clients.

### 2.5.2 Customer Response Mechanism

Upholding an approach to putting customers first, the Group is committed to establishing a smooth channel for customer service complaints and listening carefully to the opinions and suggestions of each customer. In order to ensure that complaints are handled in an efficient and standardized manner, we have formulated the Operational Procedures for Handling Customer Complaints and the Complaint Management Regulations to specify the complaint handling process and feedback mechanism. Once we receive a customer complaint, we will immediately organize in-depth discussions with relevant department heads, project managers, the Internal Control Department and the Customer Service Department to analyze the root cause and formulate a practical and feasible solution.

In addition, we regularly conduct systematic review and evaluation of the customer complaint handling process, so as to learn from the experience and continuously optimize our management and business operation processes, thereby further enhancing the quality and performance of our customer services. We recognize that only through continuous innovation and improvement can we better meet the needs and expectations of our customers. The Group did not receive any customer complaints during the Year. Should there be any complaint cases, we will ensure that each complaint is taken seriously and handled appropriately with a timely handling rate of 100%, to highlight our strong commitment and high priority to customer service quality.



### 2.5.3 Privacy Protection and Information Security

The Group takes information security and privacy of our stakeholders as a key priority. To achieve this, we strictly comply with the Cybersecurity Law of the People's Republic of China, the Data Security Law of the People's Republic of China, the Personal Information Protection Law of the People's Republic of China and relevant laws and regulations. In addition, the Group has formulated a series of internal management systems, such as the Standards for Computer Information Security Management and the Computer Management System, to govern the practices of employees in aspects including information collection, storage, sharing, use and destruction, and specify relevant provisions on privacy protection, so as to ensure compliance and lawfulness in handling information and data. In order to further strengthen information security management, the Group's Public Administration Department has set up an information security team, which is responsible for publishing information security-related documents, carrying out information security training, actively preventing information leakage risk and continuously optimizing information security processes.

For customer privacy protection, we have formulated the Regulations on Confidentiality of Customer Information, which requires us to make every effort to ensure customer safety and privacy in accordance with our internal systems and standards. When conducting clinical trials, we ensure that each participant fully understands the content, potential risks and expected benefits of the trial and makes a decision to participate on an informed and voluntary basis. We always ensure that fully informed consent is given and require participants to sign a voluntary participation agreement, so as to ensure that the rights and interests of each customer are fully respected and protected. During the Reporting Period, the Group did not receive any complaints regarding infringement of customer privacy or loss of customer data.

## 2.6 Sustainable Supply Chain

Viva Biotech maintains a responsible sourcing strategy and strives to build a resilient and sustainable supply chain that will have a positive impact on the Company, the society and the environment. In the process of procurement and operations, Viva Biotech strictly abides by the laws and regulations of the countries and regions where it operates, including the Law of the People's Republic of China on Bidding and Tendering. The Group has formulated and implemented and regularly updates the Supplier Access Regulations, the Supplier Management Procedures, the Bidding Management System, the Supplier Management System and other relevant policies to maintain clear rules on supplier admission, selection, classification, acceptance inspection, evaluation and management.

## 2. INNOVATION-DRIVEN APPROACH TO SHARED VALUE CREATION

### 2.6.1 Supplier Admission

The Group has established a sound supplier admission system to standardize the entire management process covering selection, classification, acceptance inspection and dynamic evaluation of suppliers. The Procurement Department conducts qualification review and preliminary screening of potential suppliers based on the admission criteria, and comprehensively evaluates their technical capabilities and commercial reputation based on the data collected. For candidate suppliers, we provide product standards or samples and conduct sample tests and quotation analysis to ensure technical compliance. A procurement involving genetically modified ingredients shall strictly follow the requirements under the Administrative Regulations on Safety of Agricultural Genetically Modified Organisms. To enhance resilience of the supply chain, we select two to three core producers for each item of raw materials, auxiliary materials and packaging materials to establish long-term strategic cooperation and ensure supply stability. During the Year, we focused on deepening collaboration with suppliers in Mainland China, taking initiatives such as strengthening technology partnership and the risk sharing mechanism, continuously optimizing the supply network and reducing the risk of supply chain disruption to support our sustainable business development.

We resolutely combat unfair competition and are committed to maintaining a fair and equal partnership. Pursuant to the Law of the People's Republic of China on Bidding and Tendering, we have established the Bidding and Tendering Management System. We uphold an equitable and fair attitude of cooperation, standardize the operation and management mode of unified procurement, rationalize the process of business cooperation, and maintain a cooperative system of mutual trust and assistance. We adopt a competitive tendering model and implement a multi-party supervision mechanism for all procurement contracts through internal audits to ensure the fairness and transparency of the procurement process. Joint departmental approvals can also effectively avoid procurement risks and protect the Company's interests. For suppliers with poor performance, fraud, malpractice or integrity issues, we will blacklist them and notify the Procurement Department that we will not conduct any further transactions with such suppliers.

The Group also actively integrates the concept of green supply chain management into its strategic development plan and sets a clear objective of green supply chain management. In order to achieve this objective, we have set up a special management department dedicated to the promotion of green supply chain management. We continue to optimize and improve our procurement standards and systems to ensure that the concept of green procurement is integrated into every aspect of the procurement of raw materials, equipment and services. Meanwhile, we actively lead and drive the upstream and downstream enterprises in the supply chain to jointly enhance the efficiency of resource and energy utilization and improve environmental performance, so as to realize the green development of the entire supply chain. We firmly believe that through continuous efforts and cooperation, we will jointly advance towards a greener and more sustainable future.

| | |
|---|---|
| **Green Procurement** | • Upstream suppliers shall have certificates of ISO 9001 (Quality Management System), ISO 14001 (Environmental Management System) and ISO 45001 (Occupational Health and Safety Management System)<br>• The products supplied by the supplier must meet the requirements of human and environmental friendliness and the relevant environment, health and safety ("**EHS**") regulations<br>• The products shall not consume more energy or generate more waste during use<br>• All packaging materials must be made of recycled materials and labeled as recyclable. If the packaging contains plastic materials, biodegradable materials should be used as much as possible<br>• If polymeric materials are used for packaging, we encourage to use plant fibers and starch-based materials that are non-polluting and renewable |
| **Green Logistics** | We cooperate with logistic service providers to:<br>• realize automation with the goal of improving the environmental friendliness of logistic services<br>• achieve effective management of toxic and hazardous materials<br>• promote green recycling and reuse of scrap materials and reagents |

We also require suppliers participating in procurement cooperation to sign the Procurement Contract in order to jointly fulfill social responsibilities. If a supplier uses child labor, prison labor, forced and compulsory labor, or overtime work that poses a serious health and safety hazard to employees and fails to take corrective action, we will terminate the cooperation.

### 2.6.2 Supplier Evaluation

To strengthen supply chain management, the Group has established a rigorous supplier evaluation system. We conduct a comprehensive assessment on key suppliers every year, covering key indicators such as product quality, procurement process, after-sale service, warehouse management and production utilization. The evaluation results will determine the tiers of suppliers, namely core suppliers, standby suppliers and restricted suppliers. In case of a significant quality issue identified, we will immediately suspend cooperation and demand rectification. Suppliers terminated for cooperation will be removed from the system, and those with serious malpractices will be permanently expelled. This system effectively ensures security and efficiency of our supply chain.

## 2. INNOVATION-DRIVEN APPROACH TO SHARED VALUE CREATION

Viva Biotech incorporates suppliers' environmental protection and social responsibility performance into a routine management mechanism, to ensure that the supply chain meets the Group's sustainable development goals through systematic assessments. At procurement side, we regularly evaluate the environmental impact and social responsibility performance of cooperative suppliers, and take measures such as warning for improvement or termination of cooperation for suppliers with significant environmental risks. We actively advocate for suppliers to participate in social welfare projects to deepen corporate responsibility practices. To strengthen supplier management, the Group adopts various methods such as social responsibility questionnaire and on-site audit to enhance overall performance of suppliers in environmental protection and ESG.

The evaluation work is jointly carried out by the Procurement Department, the Marketing Department and the Quality Department, requiring all suppliers to strictly abide by the code of business ethics, and provide assurance in key aspects such as product and service quality, protection of employees' rights and interests, strictly prohibiting employment of child labor and forced labor, reasonable working hours and compensation, and health, safety and environmental protection measures by strictly benchmarking against the Supplier Management Procedures and our green supply chain values. Through dynamic supervision and collaborative improvement, Viva Biotech is committed to promoting win-win development in social responsibility and business value with its supply chain partners.

During the Reporting Period, we had a total of 2,580 cooperative suppliers, mainly for raw materials. The suppliers are mainly based in Mainland China, totaling 2,540 suppliers, of which approximately 84% are in East China, 8% in Central China, 7% in North China and 1% in South China and Northeast China. All suppliers are subject to the Group's supplier engagement and management regulations.

| Indicator | 2023 | 2024 |
|---|---|---|
| **Total number of suppliers** | 2,565 | **2,580** |
| Mainland China | 2,348 | **2,540** |
| – East China | 1,916 | **2,132** |
| – Central China | 148 | **202** |
| – North China | 159 | **176** |
| – South China and Northeast China | 125 | **30** |
| Overseas | 32 | **40** |

# 3. INDUSTRY LEADERSHIP AND MULTI-DIMENSION EMPOWERMENT

As a key promoter for global biopharmaceutical innovation, Viva Biotech has been committed to investment and incubation business for years on a mission of improving human health. The Company upholds a responsible investment strategy to provide strong support to development and commercialization of innovative drugs. Meanwhile, Viva Biotech is committed to promoting industry exchanges and cooperation, establishing open and shared industry ecosystem and platforms to promote domestic and international technology exchanges and cooperation and contribute to a more sustainable future for the biopharmaceutical industry.

Corresponding UNSDG:


## 3.1. Responsible Investment

Viva Biotech upholds the principle of responsible investment and is committed to serving the pharmaceutical needs of patients around the world. Relying on the EFS investment incubation business model, we are building a global incubation and growth platform for innovative biopharmaceutical companies pivoting on Viva Bio Innovator (VBI). In our pre-investment and post-investment management, we conduct rigorous due diligence processes, participate in the decision-making of our portfolio companies, and systematically analyze ESG factors. Our efforts focus on evaluating whether innovative drug companies can bring innovative therapies to patients and address clinical needs, and examining the market potential of their chosen diseases. Through this series of initiatives, we ensure that our investment practices are both economically beneficial and socially responsible, contributing to the health of more patients.

## 3. INDUSTRY LEADERSHIP AND MULTI-DIMENSION EMPOWERMENT

### Our Investment Strategy

| | |
|---|---|
| **Groundbreaking innovation concept** | The target company should have a unique vision to address the unmet medical needs or overcome the technical challenges |
| **Strong team** | The founder and management team should have proven integrity and track record of business expansion, and extensive experience in the healthcare industry |
| **Commercial viability** | It is able to benefit patients and unlock significant market potential in the next 5 to 10 years |
| **Strategic fit** | We focus on investing in early-stage players, and prefer to provide assistance to portfolio companies through a combination of cash capital and physical services |

## 3. INDUSTRY LEADERSHIP AND MULTI-DIMENSION EMPOWERMENT

### Professional Post-investment Management and Support

In the rapidly changing biopharmaceutical industry, technological innovation is the core driver to sustainable development of an enterprise. VBI focuses on identifying, investing in, and serving innovative biopharmaceutical projects with medical value around the world, with an aim to promote the "zero-to-one" transformation of innovative drug R&D from conception to commercialization. During the Reporting Period, the Company achieved partial investment exits from a number of portfolio companies (Focus-X, Saverna, Dogma, Riparian, DTX and Nerio), realizing corresponding investment returns and generating total proceeds of nearly RMB162.5 million. As at December 31, 2024, the Group had invested in a total of 93 portfolio companies. The portfolio companies are mainly from the United States, Canada, Europe and China.

In 2024, 11 of our portfolio companies completed or were close to completing a new round of financing, raising approximately US$292.7 million in total. The R&D efforts of the portfolio companies were advancing smoothly, with the total number of pipeline projects reaching close to 227, of which 186 pipelines are in the preclinical stage and 41 pipelines are in the clinical stage. So far, the Group has successfully realized 15 investment exits or partial exits. Furthermore, Group may have several potential exits of our portfolio companies, and it can also be foreseen that a peak season of investment exits will arrive in the next three years.

Through comprehensive post-investment management support, we facilitate the continuous growth of biopharmaceutical companies, contributing to the cause of human health. Leveraging on Viva Biotech's technological strengths and profound experience in new drug R&D, VBI not only provides financial support, but also optimizes a full spectrum of post-investment value-added services including R&D guidance, site and logistic support, industry partnership, and investment and financing services.

## 3. INDUSTRY LEADERSHIP AND MULTI-DIMENSION EMPOWERMENT

| | |
|---|---|
| **Capital** | Provide subsequent fundraising and financial support |
| **Industrial connectivity** | Assist in utilizing internal or external resources (VC, MNC, CDMO)<br>Early warning of market dynamic changes |
| **Operation** | Laboratories and offices in Shanghai, Jiaxing, Chengdu, Suzhou and other cities<br>Provide multi-dimension support services covering human resources, accounting, procurement, business development and financing |
| **Expert and technical support** | Our business partners provide professional advice on business operations and compliance<br>Our scientific consultants provide professional advice on scientific research and drug development expertise |

### Portfolio company added in the Year

| No. | Company Name | Type | Indications / Primary Technology / Business |
|---|---|---|---|
| 1 | Protirna | Asset investment | a preclinical-stage startup focused on the field of oncology therapeutics |

| Overview of updates on incubation portfolio companies | |
|---|---|
| 天境生物 TJ BIOPHARMA | I-Mab and Jumpcan Pharmaceutical jointly announced the acceptance of marketing application for Eftansomatropin Alfa by NMPA; I-Mab entered into strategic collaboration with Sanofi for innovative CD73-targeted oncology therapy in Greater China |
| ANTAG THERAPEUTICS | Antag completed €80 million series A financing; FDA clears IND application for its lead molecule AT-7687 |
| VIVAVISION | VivaVision's non-hormonal eye drop VWN461 meets primary endpoint in US phase II clinical study for post-surgical inflammation |
| seraxis | Seraxis received FDA clearance to proceed with clinical study of SR-02 as insulin replacement for type 1 diabetes |
| CYBREXA THERAPEUTICS | Cybrexa presented positive final phase I data for peptide-drug conjugate CBX-12 in advanced solid tumors at 2024 ESMO Congress |
| HAYA Therapeutics | HAYA and Eli Lilly entered into collaboration to leverage proprietary RNA platform for novel epigenomic target discovery in obesity and related metabolic disorders |
| NERIO THERAPEUTICS | Nerio and Boehringer Ingelheim entered into an acquisition agreement with potential deal value of up to US$1.3 billion |
| APEIRON | Apeiron Bio sold 50% stake in CDK7 Inhibitor Program to Exscientia |
| FULL-LIFE TECHNOLOGIES | Full-Life Technologies and SK Biopharmaceuticals signed licensing agreement for innovative therapies targeting multiple solid tumors; Full-Life Technologies completed series B USD financing |

## 3. INDUSTRY LEADERSHIP AND MULTI-DIMENSION EMPOWERMENT

| Overview of updates on incubation portfolio companies | |
|---|---|
| QurAlis | Quralis entered into global exclusive licensing agreement with Eli Lilly for ASO Therapy QRL-204 |
| lucytherapeutics | LucyTx secured US$12.5 million extension funding to advance novel therapies for Alzheimer's and Parkinson's diseases |
| TECHNODERMA | TechnoDerma initiated phase II clinical trial of TDM-180935 for Atopic dermatitis/eczema; confirmed hair growth promotion in androgenic alopecia patients with TDM-105795 in phase II clinical trial; completed multi-million US dollar pre-series B financing |
| Proviva Therapeutics | Proviva Therapeutics completed US$18 million series A financing to advance clinical development of core product PTX-912 |
| AceL Where Science andMedicine Meet | AceLink announced phase I clinical trial data of AL01211 in healthy volunteers |
| Basking Biosciences | Basking completed US$55 million financing to accelerate clinical development of reversible thrombolytic agents |

## 3.2. Promoting Industry Cooperation

Relying on the core drivers of technological innovation, model transformation and strategic cooperation, Viva Biotech is committed to building an integrated service platform combining drug discovery, production and cooperation. We proactively organize and hold industry forums, aiming to build a professional and efficient communication platform in the biopharmaceutical sector. Our frequent presence at important industry conferences and customer communication activities at home and abroad demonstrated the Company's professional expertise and global footprints in the biopharmaceutical sector. In addition, we maintain close dialogues with senior experts in the industry, to jointly analyze frontier dynamics and standard specifications in the industry and proactively build a positive and interactive industrial ecosystem. These efforts not only help to promote collaborative innovation with our global partners, but also contribute to sustainable development in the industry.

**SAPA-China 2024 pharmaceutical industry conference**

During the Year, the SAPA-China pharmaceutical industry conference was held in Suzhou, with a focus on hotspot areas such as macromolecules/micromolecules, cell gene therapy and AI pharmaceuticals. Dr. Dai Han, Chief Innovation Officer of the Group, and our vice presidents Dr. Xia Bing and Dr. Deng Xinyu were invited as special guests to deliver professional presentations. In a presentation titled "Probing Chemical Space for Modality Assessment and Target Triage: SM and Beyond", Dr. Xia Bing shared in detail Viva Biotech's innovation achievements in DNA encoded library (DEL) technology. The presentation also explained how the V-DEL platform developed by the Group utilizes an AI intelligent evaluation system to integrate over 100 diversity libraries, develop screening plans tailored for different R&D needs, and scientifically evaluate the applicability of micromolecule drugs.

## 3. INDUSTRY LEADERSHIP AND MULTI-DIMENSION EMPOWERMENT

**AI Roundtable Discussion: In-Depth Exploration of AI-Driven Drug R&D Collaboration**

At the "2024 Empowering Global Life Sciences Ecosystem" healthcare conference hosted by Temasek Suzhou, Dr. Qian Yue, CEO of Viva Biotech's AIDD platform, was invited as a guest speaker to share the Group's exploration and insights in the field of AI-driven drug development. Dr. Qian emphasized that the future of AI in the pharmaceutical industry lies not only in solving major challenges but also in achieving "ubiquitous small breakthroughs" that permeate every stage of R&D. However, the field still faces obstacles such as data silos and talent shortages. To address these challenges, Dr. Qian proposed three key directions for breakthroughs: first, building a collaborative platform integrating computation and experimentation to generate high-quality, usable data; second, enhancing in-depth data mining and cleaning to extract potential correlations from limited datasets; and third, developing universal models based on physical principles to understand the essence of data through phenomena, thereby improving generalization capabilities. By tightly integrating computational tools with experimentation, Viva Biotech is committed to optimizing R&D efficiency from the ground up, injecting innovative momentum into the global life sciences ecosystem.

### 3.3. Empowering Industry Development

Viva Biotech has always been committed to its mission of empowering the industry with socially responsible practices. We strive to build resource platforms for our portfolio companies, reach out to external partners, and provide comprehensive support in terms of technology and funding, aiming to empower sub-sectors including biopharmaceuticals, medical services, medical informatization, digital therapy, nutrition and health, thereby enhancing drug accessibility and medical convenience globally. As of the end of the Reporting Period, we realized full or partial exits from 15 of our portfolio companies, and the cash and investment income received from the exits will be used to support the Company's future development. Through these initiatives, we aim to help the companies realize sustainable development and contribute to the cause of social healthcare.

# 4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

As a key player in the global biopharmaceutical industry, Viva Biotech regards environmental benefits as an integral part of its core value. Guided by green operation, we are committed to achieving low-carbon and sustainable development, taking environmental initiatives in resource management, waste treatment and climate change response to publicize the green concept. By establishing an efficient and scientific environmental management system, we continuously improve resource utilization efficiency, explore the application of clean energy, and strictly comply with environmental laws and regulations, to actively meet expectations and standards of the industry and society on sustainable development.

Corresponding UNSDGs:


## 4.1. Supporting the Climate Actions

Climate actions have become a global focal point of concern, as climate change not only affects the international community but also poses a critical issue for sustainable corporate development. We deeply understand the challenges posed by climate risks to our business, and are committed to strengthening our management capabilities for physical and transitional risks, developing industry-specific response strategies and enhancing our climate resilience, to actively respond to the national goal of carbon peaking and carbon neutrality. With reference to the framework of the Task Force on Climate-related Financial Disclosures (TCFD) and the implementation guidance for climate disclosures newly published by the Hong Kong Stock Exchange, we disclosed climate risks and opportunities in an open and transparent manner, and took active optimization actions in the Year to contribute towards building a climate-friendly society.

## 4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

### Climate Strategy

The Group has identified and managed climate-related risks and opportunities, and developed relevant preventive measures to reduce the negative effect of climate risks on the Group.

During the Year, we added the time horizons for identifying the impact of different climate-related risks. We evaluate the impact based on three time horizons namely short-term (within 3 years), medium-term (3-6 years), and long-term (over 6 years).

| Risks | Aspect | Description of risk/opportunity | Potential financial impact | Time horizon of impact | Our actions |
|---|---|---|---|---|---|
| **Physical risks** | Acute physical risks | Frequent occurrence of extreme weather events (e.g., typhoons, rainstorms, floods, etc.) may affect the safety of the Company's buildings and equipment, lengthen the commuting time of employees, and have certain impacts on the safety of employees and the normal operation of the Company | • Increase in operating costs<br>• Increase in employee insurance and subsidies<br>• Decrease in revenue | Medium– to short-term | Strengthen disaster-resistant design of buildings, deploy waterproof and flood control facilities, and install backup power generation systems; Establish emergency plans for extreme weather, implement a flexible office system, ensure employee safety and uninterrupted operation of core equipment, and coordinate with local emergency agencies for response actions. Our bases in coastal areas have introduced elevated foundation and other designs during construction to reduce the impact of rainstorm and flood. |
| | Chronic physical risks | Sustained high temperatures due to global warming may increase the energy consumption of the Company's cooling equipment (e.g., air conditioners)<br>Sustained high temperatures may also cause problems with the quality of drugs during transportation and storage | • Increase in operating costs | Long-term | Upgrade to efficient refrigeration equipment, introduce intelligent temperature control system and photovoltaic energy storage technology, and optimize energy consumption of laboratory environment; Regularly maintain equipment performance, renovate buildings with insulation materials, and reduce the long-term dependence of heat load on energy.<br>Regularly review the process and condition of drug storage to ensure that the temperature does not affect the quality of the drugs |

| Risks | Aspect | Description of risk/opportunity | Potential financial impact | Time horizon of impact | Our actions |
|---|---|---|---|---|---|
| **Transitional risks** | Policy and legal | Changes in climate change-related policies, both domestically and internationally, may result in additional costs for the Company to ensure compliance | • Increase in compliance costs | Medium– to short-term | Establish a compliance monitoring team to dynamically track domestic and international climate policies, deploy low-carbon technology R&D in advance, regularly evaluate the impact of policy and regulatory risks on enterprises, and develop the corresponding risk response strategy |
| | Market | As public awareness of sustainability grows, investors and consumers may demand more on animal rights, natural and organic medical products. If the Group's products are perceived as violating animal rights or being less sustainable than alternatives, a decline in demand may occur | • Increase in operating costs<br>• Decrease in revenue | Long– to medium-term | The Group operates a stringent quality control and assessment system to ensure that all pharmaceutical products are free from animal rights violations or genotoxic and genetically modified plants<br>Establish a regular market analysis mechanism, strengthen trend tracking, optimize supply chain management, and timely grasp market dynamics. |
| | Reputation | Failure of the Company in fulfilling its social responsibility to take appropriate measures to manage the potential impacts of climate change may affect the perception of the Company by various stakeholders, including investors | • Damage to corporate image<br>• Reduced investment | Long-term | Develop a carbon neutrality roadmap and set short-term emission reduction targets, incorporate a third-party sustainability rating system, and enhance stakeholder trust through transparent disclosure of our climate action results and continuous communication with stakeholders to understand their concerns and needs.<br>In addition, Langhua Pharmaceutical discloses its own climate-related information on the Carbon Disclosure Project (CDP) platform to enhance information transparency |

## 4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

| Risks | Aspect | Description of risk/opportunity | Potential financial impact | Time horizon of impact | Our actions |
|---|---|---|---|---|---|
| **Opportunities** | Product | As climate change may indirectly affect public health, the demand for products and services related to monitoring and mitigating environmental health risks is likely to increase. Viva Biotech may expand into new markets with products that meet these needs | • Increase in revenue | Long-term | The Group actively employs the EFS investment and incubation business model to identify and nurture promising drug research and development companies, jointly exploring the biopharmaceutical market and achieving sustainable development |

### Climate Risk Management

To effectively respond to extreme weather events and ensure the safety of personnel and property, both Langhua Pharmaceutical and Viva Biotech have taken proactive measures. Langhua Pharmaceutical has developed the Response Plan for Environmental Emergencies to enhance its ability to address environmental risks. Additionally, during the Year, the Group has tailored the Response Plan for Environmental Emergencies for each site based on their specific operational management characteristics. The plan includes monitoring preparation, early warning procedures, response measures and evacuation plans for natural disasters such as floods. It also provides a comprehensive analysis of environmental risks, weaknesses in emergency response measures, organization of emergency team and emergency equipment resources to shorten the response time in case of environmental emergencies. Furthermore, the Group organized training sessions related to climate disaster response, such as the Safety Education and Training on Typhoon Prevention, to help employees have a correct understanding of various climate disasters and better grasp the knowledge about disaster prevention and relief, thereby jointly building a safety line of defense for the Company.

## Climate Goals

The Group's carbon emissions are primarily derived from its CDMO segment, specifically the drug production process of Langhua Pharmaceutical. In this regard, Langhua Pharmaceutical has set short-term quantitative goals for greenhouse gas emission reduction, water conservation and waste control, and is systematically promoting the carbon reduction process. The company has launched a plan for carbon inventory and supporting actions to identify its carbon emission hotspots, and has developed a carbon reduction route. During the Year, Langhua Pharmaceutical completed the inventory management task for carbon emissions in previous years and obtained a carbon inventory certificate. Meanwhile, it submitted a commitment application to SBTi, seeking to ensure close alignment of its operations with the goals of the Paris Agreement by establishing decarbonization strategy and targets that are in line with the global 1.5ºC temperature control roadmap.

| Type | Target | Target year | Progress in 2024 |
|---|---|---|---|
| **Carbon emission** | Scope 1 and Scope 2 emissions per RMB10,000 of output shall be reduced by 20% compared to the 2020 base year | 2030 | ✔ Scope 1 and Scope 2 greenhouse gas emissions intensity reduced by 48% compared to the base year |
| **Water resource** | Water consumption per RMB10,000 of output shall be reduced by 25% compared to the 2020 base year | 2025 | ✔ Water consumption per RMB10,000 of output reduced by 65% compared to the base year |
| **Non-hazardous waste** | Non-hazardous waste generated per RMB10,000 of output shall be reduced by 50% compared to the 2020 base year | 2025 | ✔ Non-hazardous waste intensity reduced by 57% compared to base year |

✓Target achieved; ○ On track; ╳ Lagging behind

Additionally, in the CRO segment, we have set targets for the coming year to conserve energy and reduce waste, which have been instrumental in driving our efforts to enhance environmental management measures.

| Type | 2024 target | Progress |
|---|---|---|
| **Energy** | Reduce electricity consumption and expect to save electricity of approximately 115 MWh | During the Year, electricity consumption in the CRO segment increased slightly by 4%, primarily due to the opening of the BC link corridor area in the Zhoupu park |
| **Solid waste** | Reduce disposal of spent reagents by 20 kg | During the Year, the waste reagents disposed of at the Shanghai park reached approximately 201 tons, representing a reduction of 13.6 tons compared to last year |

**2025 target**

| | |
|---|---|
| **Non-hazardous waste** | Reduce the amount of non-hazardous waste by 0.3 tons |
| **Hazardous waste** | Reduce the amount of hazardous waste by 10 tons |
| **Packaging materials** | Reduce the consumption of packaging materials by 0.7 tons |

**Climate Indicators**

A significant portion of the Group's indirect carbon emissions come from suppliers, logistics and customer activities. Therefore, Scope 3 disclosure is crucial for understanding the full climate impact of their operations. During the Year, the Group attempted to calculate Scope 3 carbon emissions, with a focus on Category 5 (Waste Generated in Operations) and Category 6 (Business Travel), as the initial stage for collecting comprehensive data in Scope 3. We achieved significant improvement in key climate indicators. For details, please refer to the environmental KPI table in the section headed "4.2 Energy Conservation and Emission Reduction Actions and Measures".

## 4.2. Energy Conservation and Emission Reduction Actions and Measures

### 4.2.1 Environmental Management Approach

The Group strictly abides by the Environmental Protection Law of the People's Republic of China and relevant environmental laws, regulations and industry standards, to ensure that its sustainable development is in harmony with environmental protection. In order to systematically manage its environmental protection work, the Group has formulated the Environmental Protection Management Rules to define the principles and organizational structure responsibilities of our environmental protection efforts, ensuring comprehensive coverage of environmental management issues in our production and operations. We have also set up a dedicated environment, health and safety (EHS) department responsible for emissions management, resource utilization and pollution control to ensure that all environmental indicators meet the required standards. We also encourage our companies to promote environmental system certification, so as to jointly reduce environmental impacts. During the Reporting Period, we did not find any serious violation of environmental regulations.

With regard to environmental risk management, the Group follows the Procedures for Identification and Evaluation of Environmental Factors and the Procedures for Management of Greenhouse Gas Checks, adopting standard processes to timely identify, evaluate and manage important environmental factors. We promote the implementation of improvement plans to accurately address potential risks. In addition, the Group has issued the Energy Conservation and Emission Reduction Initiative and the Green Office Initiative to our staff to promote green office measures. We encourage our staff to actively participate in energy and resource conservation in order to create an environmentally friendly office environment, and conduct environmental knowledge training through various channels.

In terms of environmental management system construction, Langhua Pharmaceutical has successfully obtained ISO 14001 system certification and obtained a low-risk rating in the audit of the ESG module by the Pharmaceutical Supply Chain Initiative (PSCI). These achievements fully demonstrate the maturity and integrity of our environmental management system, and also lay a solid foundation for us to achieve more accomplishments in the field of environmental protection in the future.

### 4.2.2 Green Operation

Viva Biotech takes proactive measures to address climate change and reduce greenhouse gas emissions by reducing energy consumption in the production process, seeking to achieve a green drug production system.

Viva Biotech has developed a series of management measures, including the Energy and Resource Management Procedures, the Measures for Energy Procurement and Approval Management, the Management Measures for Energy Production, and the Measures for Energy Performance Evaluation, Rewards and Punishments, ensuring strict energy management throughout the procurement and production processes. Through regular inspections and monitoring of energy efficiency, the Company has implemented effective measures to reduce energy consumption and improve energy efficiency. We carry out regular inspections of the energy consumption of laboratory equipment and present the energy consumption information of the relevant equipment in quarterly environmental safety meetings in order to save energy and reduce consumption. In addition, Langhua Pharmaceutical has launched the Energy Conservation Plan to strengthen energy management with clearly defined duties and work procedures and tap the potential of energy conservation. The Company proactively conducts dynamic management of relevant policies and measures and holds regular meetings under the Energy Conservation Plan on a quarterly basis, to maintain the appropriateness, adequacy and effectiveness of the plan.

In addition, we have established the Greenhouse Gas Inventory Management Procedures to standardize the Company's greenhouse gas emissions inventory management. The procedures determine the person responsible for providing data and keeping records of various projects related to greenhouse gas emissions, which strengthen the Company's greenhouse gas information management, documentation and record-keeping.

## 4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

### *Energy conservation and carbon reduction measures in the Year*

| Category of measures | Scope of business | Description of measures |
|---|---|---|
| Renewable energy | CRO | • During the Year, we installed photovoltaic panels on the non-motorized vehicle shed in our Shanghai site, to provide renewable energy for the lighting system of the shed |
| | CDMO | • Photovoltaic panels are installed on the roof of factory buildings. The photovoltaic power generation in the Year reached 92,677 kWh, equivalent to a reduction of 50,000 kg of $CO_2$ emissions |
| Optimization of equipment energy efficiency | CRO | • New ventilation storage cabinets are installed in laboratory, which can save 40% of electricity compared to traditional equipment, equivalent to saving 240,000 kWh of energy consumption<br>• Energy-saving lamps are prioritized, with an intelligent lighting control system to ensure that the lights are turned on only when needed |
| | CDMO | • Comprehensively optimized the steam system, including upgrading drain valves, installing automatic steam pressure regulating devices and optimizing production and operation processes, effectively reducing the steam loss rate. During the Year, approximately 4,100 tons of steam were saved in total<br>• The key equipment purchased such as motors and air conditioners have been replaced with energy-efficient ones, which shall meet Level 2 energy efficiency standard or above<br>• Circulating water pump equipment was optimized in the Year, which is expected to save approximately 13,500 kWh of electricity consumption annually<br>• A new set of efficient and intelligent regenerative thermal oxidizer (RTO) was added, which can reduce fuel consumption through waste heat recovery, thus enhancing comprehensive benefits of energy saving and emission reduction |

| Category of measures | Scope of business | Description of measures |
|---|---|---|
| Energy and process management | CRO | • Replace the ordinary heating reaction process with microwave heating, to reduce the time and energy consumption required for heating<br>• Increase the reaction success rate in designing experiments, and reduce unnecessary experiment scope creep<br>• Laboratory equipment is regulated by an idle-hour power-off system, to reduce energy consumption when the equipment is not in use<br>• Centralized cleaning of glassware |
| Elimination and replacement of high-emission equipment | CRO | • Gradually replace the old diesel forklifts, commercial vehicles and shuttle buses with new energy vehicles |
| | CDMO | • Eliminate all internal combustion forklifts of National II standard in the factory area, and gradually introduce electric forklifts |
| Green and energy-saving initiative | CRO | • Implement strict temperature limits, not exceeding 20 degrees Celsius in winter and not lower than 26 degrees Celsius in summer, in order to reduce energy consumption<br>• Strengthen inspections and monitoring of laboratories to ensure that equipment is promptly powered off when not in use. Appropriate penalties are imposed for instances of equipment being left on when not needed<br>• Encourage employees to choose public transport for travel |

## 4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

Photovoltaic panels on vehicle shed

Steam pressure automatic regulation device

New efficient and intelligent RTO system

Steam trap replacement

*Scope 3 carbon reduction measures*

During the Year, we attempted to disclose certain categories of Scope 3 carbon emissions to more comprehensively evaluate and control the carbon emissions impact from the upstream and downstream of our supply chain. Driven by the digital revolution, digital transformation also helps us reduce the carbon emissions generated by unnecessary paper documents and further achieve the goal of paperless office. In daily management, we further optimized the office automation system by integrating daily office and management processes including business management, personnel management, material requisition and process approval into the OA workbench, so as to enable efficient information and resource circulation and greatly reduce unnecessary resource consumption. In addition, we also encourage procurement of services and products from domestic or nearby areas as much as possible, in order to reduce the carbon emissions generated during product transportation and hence the overall carbon footprint.

**Resorting to more environmentally friendly chemical reaction pathways in experiments**

In light of the core principle of green chemistry, the Group systematically optimizes its experimental process. In designing compound synthesis routes, we prioritize green reaction routes with high atom economy and low solvent toxicity. Reaction efficiency is improved by optimizing the conditions accurately, so as to avoid unnecessary experiment scope creep and reduce resource consumption. For example, we replaced the traditional heating reaction (which may take up to 18 hours) with microwave catalysis technology, shortening the reaction time to within one hour and hence reducing energy consumption by over 90%. In the purification process, we introduced semi-automatic column-handling machines to replace traditional manual chromatography, and realized accurate collection of fractions, reducing waste liquid volume by 60% as well as electricity consumption in the concentration process.

## 4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

During the Reporting Period, the energy used in our CRO and CDMO processes was mainly purchased electricity and heat. Diesel consumption was mainly derived from our self-power generation and regenerative thermal oxidizers, while petrol consumption was derived from vehicles. Relevant figures are set out as follows:

| Indicator | 2023 | 2024 | Unit |
|---|---|---|---|
| **Greenhouse gas emissions** | | | |
| Direct emissions from energy use (Scope 1)[1] | 1,466.05 | **1,649.49** | $tCO_2e$ |
| Indirect emissions from energy use (Scope 2)[2] | 45,285.23 | **41,819.18** | $tCO_2e$ |
| Indirect emissions from energy use (Scope 3)[3] | / | **674.85** | $tCO_2e$ |
| – Category 5: Waste generated in operations | / | **319.85** | $tCO_2e$ |
| – Category 6: Business travel | / | **355.00** | $tCO_2e$ |
| Forestry emission reduction | 1.47 | **1.59** | $tCO_2e$ |
| Total greenhouse gas emissions (Scope 1 and Scope 2) | 46,731.28 | **42,907.75** | $tCO_2e$ |
| Greenhouse gas emission intensity (Scope 1 and Scope 2) | 21.68 | **21.59** | $tCO_2e$ per RMB million of revenue |
| Total greenhouse gas emissions (Scope 1, Scope 2 and Scope 3) | / | **43,582.60** | $tCO_2e$ |
| Greenhouse gas emission (Scope 1, Scope 2 and Scope 3) intensity | / | **21.94** | $tCO_2e$ per RMB million of revenue |

1 Greenhouse gas (Scope 1) emission data is calculated in accordance with the "Guidelines for Greenhouse Gas Emission Accounting and Reporting for Industrial and Other Enterprises" issued by the National Development and Reform Commission.

2 Greenhouse gas (Scope 2) emission data is calculated with reference to the "Announcement on Issuing the 2022 Carbon Dioxide Emission Factors for Electricity" by the Ministry of Ecology and Environment of the People's Republic of China, the "Notice on Adjusting the Values of Relevant Emission Factors in the Municipal Greenhouse Gas Emission Accounting Guidelines" issued by the Shanghai Municipal Bureau of Ecology and Environment, and the default carbon dioxide emission factors for heat supply corresponding to various industries in the accounting guidelines published by the National Development and Reform Commission.

3 Greenhouse gas (Scope 3) emission data is calculated with reference to the guidelines such as the International Civil Aviation Organization, the Greenhouse Gas Protocol, and Appendix II: Environmental Key Performance Indicator Reporting Guidelines for computation.

## 4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

| Indicator | 2023 | 2024 | Unit |
|---|---|---|---|
| **Energy consumption** | | | |
| Petrol consumption | 31,937.00 | **82,762.90**[4] | liter |
| Diesel consumption | 497,017.00 | **312,603.60** | liter |
| Natural gas consumption[5] | / | **2396.39** | cubic metres |
| Renewable energy[6] | 101.86 | **92.68** | MWh |
| Total direct energy consumption | 5,392.37 | **4,073.19** | MWh |
| Direct energy consumption intensity | 2.50 | **2.05** | MWh per RMB million of revenue |
| Consumption of purchased electricity | 45,442.40 | **47,260.30** | MWh |
| Consumption of purchased heat | 48,912.73 | **41,563.92** | MWh |
| Total indirect energy consumption | 94,355.13 | **88,824.22** | MWh |
| Indirect energy consumption intensity | 43.77 | **44.71** | MWh per RMB million of revenue |
| Total energy consumption | 99,747.50 | **92,804.74** | MWh |
| Energy consumption intensity | 46.27 | **46.71** | MWh per RMB million of revenue |

[4] The increase in petrol consumption during the Year was due to the inclusion of a newly acquired subsidiary's use of vehicles during business operations.

[5] During the Reporting Period, natural gas consumption was incurred due to its use in RTO treatment.

[6] During the Reporting Period, the Group generated and used renewable energy electricity by installing solar photovoltaic panels.

## 4.3. Waste Management

### 4.3.1 Waste Gas Management

The Group's waste gas is mainly derived from the CDMO drug production process. To ensure that the waste gas is properly treated, we have formulated a series of strict waste gas management rules such as the Waste Gas Management Procedures, the Operating Procedures for Waste Gas Treatment and the Waste Gas Absorption Management System, which specify the treatment methods for waste gases. In this way, we strive to achieve recycling and harmless treatment of waste gas, thereby effectively reducing its emission.

During the Year, we purchased a new set of efficient and intelligent RTO system. We followed the relevant operating rules and the procedures for resin-based adsorption of halogen waste gas to ensure stable operation of relevant facilities and process systems for up-to-standard waste gas emissions, providing important assurance for environmental protection and sustainable development. In addition, waste gas treatment through the new RTO system led to significantly improved volatile organic compounds (VOC) purification efficiency as well as lower exhaust temperature. We optimized the expansion joints of the waste gas mains, effectively reducing the risk of leakage.

In our CRO laboratories, we installed a VOC online monitoring system to monitor and raise alarms in real time for any non-compliant issues. In our biological laboratories, the harmful substances involved are adsorbed and treated by efficient processors in biosafe cabinets, which are regularly maintained to ensure their safe and reliable operation. Waste gas from laboratories is treated with activated carbon before discharged, to ensure the compliance with environmental standards. We implemented the annual environmental monitoring plan to further ensure up-to-standard waste gas emissions continuously. These measures not only effectively reduced waste gas emissions, but also provided solid support for green development of our business. Through a comprehensive waste gas management and monitoring system, we achieved efficient treatment of laboratory waste, contributing positively to environmental protection and sustainable development.

New efficient and intelligent RTO system

## 4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

| Indicator | 2023 | 2024 | Unit |
|---|---|---|---|
| **Industrial waste gas emissions** | | | |
| Volatile organic compounds (VOCs) | 5.71 | **8.19** | tons |
| Sulfur oxides ($SO_x$) | 0.52 | **0.92** | tons |
| Nitrogen oxides ($NO_x$) | 3.34 | **7.10** | tons |
| **Vehicle air pollutant emissions**[7] | | | |
| Carbon monoxide (CO) | 683.54 | **889.82** | kg |
| Hydrocarbons (HC) | 36.09 | **56.97** | kg |
| Nitrogen oxides ($NO_x$) | 1,465.22 | **1,478.38** | kg |
| Inhalable particulate matter ($PM_{10}$) | 45.08 | **47.77** | kg |
| Fine particulate matter ($PM_{2.5}$) | 40.66 | **43.17** | kg |
| Sulfur oxides ($SO_x$) | 1.25 | **1.91** | kg |

[7] The vehicle air pollutant emissions were calculated with reference to the Technical Guide for Compilation of Emission Inventory for Air Pollutants from Road Motor Vehicles (Trial) issued by the Ministry of Ecology and Environment of the People's Republic of China.

### 4.3.2 Wastewater Management

The Group's wastewater is mainly derived from the drug production process. In order to ensure that the wastewater is properly treated, we have formulated and strictly complied with policies such as the Wastewater Management Procedures, the Operational Procedures for Wastewater Treatment and the Wastewater Treatment Facilities Management System. We strictly follow the national standards for wastewater discharge, collect and treat all kinds of wastewater in a centralized manner to ensure up-to-standard discharge, thus minimizing the impact on surrounding water bodies. In addition, we carry out regular monitoring to eliminate any non-compliant discharge.

In the CRO segment, we collect production wastewater and engage qualified treatment companies to ensure professional and proper treatment of wastewater. In the collection process, we use closed funnels to effectively prevent waste liquid from escaping, so as to further enhance the safety of wastewater management. In addition, domestic wastewater is also treated in septic tanks before being discharged into the pipeline network. Wastewater outlets are equipped with an online chemical oxygen demand (COD) monitoring system, which promptly sends alarm messages to the management personnel to check and adjust the relevant outlets in case that the parameters exceed the limits. These measures allow us to achieve comprehensive monitoring and efficient treatment of wastewater, ensuring compliance with discharge regulations and environmental safety.

In the CDMO segment, we adopt different methods for transportation, collection and treatment of different types of wastewater, including high-concentration wastewater from workshops, low-concentration wastewater such as floor cleaning wastewater, domestic sewage, etc. For workshops, we have introduced new equipment and technologies including wastewater collection tanks and pumps for efficient treatment of workshop wastewater in a centralized manner, to ensure that wastewater is effectively collected and pumped through dedicated pipelines to wastewater treatment facilities for treatment.

*CDMO wastewater treatment process*

| | |
|---|---|
| **Separation of rainwater and wastewater** | By separating rainwater and wastewater to avoid the dilution of wastewater concentration by rainwater, we ensure stability of the biochemical system at wastewater treatment plant, and significantly reduce the risk of polluted natural water due to overflows during rainy seasons. |
| **Separation of clean water and wastewater** | By separating clean water and wastewater, we realize direct reuse of clean water for production or greening, and reduce the wastewater treatment volume. |
| **Separation of wastewater** | By separating high-pollution wastewater and low-pollution wastewater, we can treat them respectively based on the concentration of pollutants (such as high COD wastewater and general wastewater), by adopting advanced oxidation or biological treatment processes to improve treatment efficiency and reduce chemical consumption. |

| Indicator | 2023 | 2024 | Unit |
|---|---|---|---|
| **Wastewater discharge** | | | |
| Industrial wastewater | 168,336.30 | **161,560.66** | tons |
| – COD | 13.75 | **5.21** | tons |
| Ammonia nitrogen | 0.36 | **0.13** | tons |
| Domestic sewage | 50,558.40 | **34,275.80** | tons |

## 4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

### 4.3.3 Hazardous Waste Management

The Group strictly follows the management principles of "unified collection, classified disposal, centralized incineration and elimination of hidden dangers" to systematically advance towards the goal of reduction, recycling and harmless treatment of hazardous wastes. We seek to reduce the amount of hazardous waste generated from the source by optimizing production process and introducing advanced treatment technologies. Under the Hazardous Waste Management Measures and the Procedures for Solid Waste Management, we implement full-process closed-loop control, supported by the Safe and Standard Operating Procedures for Waste Liquid Incineration Plant and process flow chart to ensure that the incineration disposal process meets environmental requirements. Keeping our management system in alignment with the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, the National Catalogue of Hazardous Wastes and other regulations and standards, we strictly follow the hazardous waste transfer manifest system, and refer to the Technical Specifications for the Application and Issuance of Pollutant Discharge Permits to improves our monitoring system. Through specialized classified storage, standard transfer and disposal and regular environmental risk assessments, we can effectively prevent and control pollution risks, and protect ecological environment safety and health of personnel effectually.

In the CRO segment, we engage qualified third-party companies for professional disposal of solutions and other hazardous wastes generated in our chemical laboratories. Wastes are classified and collected at the source of generation in laboratories, and we engage a qualified disposal service provider for onsite cleanup and transportation on a weekly basis, to ensure that the wastes are disposed of in a safe and compliant manner. We strictly separate hazardous wastes from general wastes and strictly prohibit the disposal of uncontaminated general wastes as hazardous wastes to avoid unnecessary risks and wastage. To ensure standard management, we have defined the work responsibilities of relevant departments and staff in key positions, and strictly manage personnel in the process of inspection, warehousing, storage, collection and transportation of hazardous wastes to prevent any possible negligence. Hazardous wastes are inspected and weighed as necessary prior to storage to ensure consistency with the wastes intended to be received, and compliant labels are affixed to the packaging containers. We develop a hazardous waste management plan at the beginning of each year to estimate annual amount of hazardous waste generated for each category, and prepare internal management methods and destinations in advance to ensure accuracy and safety of the treatment process.

In the CDMO segment, Langhua Pharmaceutical is an early mover in introducing an intelligent hazardous waste supervision system, which helps to comprehensively improve safety and efficiency of waste treatment. To improve solvent recovery efficiency, we replaced the outdated condenser equipment, which not only effectively reduced solvent loss but also significantly lowered VOC emission. We have set up a waste liquid and wastewater incineration system with a daily treatment capacity of 60 tons and an ancillary flue gas purification device to effectively treat waste liquids generated from solvents, thus significantly reducing the amount of solvent waste. In addition, we have formulated the Safe and Standard Operating Procedures for Waste Liquid Incineration Plant, to ensure safe equipment operation and minimize the risk of hazardous waste leakage through standardized management.

Waste liquid and wastewater incineration system and ancillary flue gas purification device

## 4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

During the Reporting Period, the main types of hazardous wastes generated by the CRO segment included waste fuels and chemicals from chemical laboratories; and the hazardous wastes generated by the CDMO segment were mainly waste residue, waste activated carbon, waste solvent, high-boiling residue, waste salt, waste samples, waste packaging materials, wastewater treatment sludge, waste mineral oil, etc. Relevant figures are set out as follows:

| Indicator | 2023 | 2024 | Unit |
|---|---|---|---|
| **Hazardous waste**[8] | | | |
| Waste fuel and chemicals[9] | 3,112.10 | **2,851.13** | tons |
| Organic waste liquid | 314.15 | **393.49** | tons |
| Laboratory solid waste and glass | 113.32 | **92.75** | tons |
| High-boiling residue | 1,992.36 | **1,164.51** | tons |
| Waste salt | 2,267.71 | **1,840.50** | tons |
| Sludge | 351.67 | **288.78** | tons |
| Other hazardous waste[10] | 1,132.44 | **1,167.18** | tons |
| Total amount of hazardous waste | 9283.74 | **7,798.34** | tons |
| Hazardous waste intensity | 4.31 | **3.93** | tons per RMB million of revenue |

8 Due to adjustments made to our hazardous waste classification, we have restated the hazardous waste data for the 2023 fiscal year.

9 Waste fuel and chemicals include waste acid, waste alkali, waste organic solvent, etc.

10 Other hazardous waste includes waste residue, waste activated carbon, waste packaging barrels, waste packaging bags, waste mineral oil, waste samples, fly ash, slag, etc.

### 4.3.4 Non-hazardous Waste Management

The Group has established a standardized management system in accordance with the Procedures for Solid Waste Management, implementing full-process control over collection, classification and disposal of solid waste to ensure compliance with national regulatory requirements. During the Year, we completed the amendment to the Procedures for Solid Waste Management in accordance with regulatory updates. Accordingly, we adjusted the identification system including "hazardous waste labels", "storage zone signs" and "storage facility signs". We also updated formats of the Hazardous Waste Transfer Manifest and the General Industrial Solid Waste Transfer Manifest, and further improved the industrial solid waste management ledger to improve management efficiency.

In the process of waste disposal, we strictly follow the principle of classification, categorizing solid wastes into recyclable general solid wastes, non-recyclable general solid wastes, recyclable hazardous solid wastes and non-recyclable hazardous solid wastes. In particular, we effectively separate recyclable packaging materials, such as cardboard, plastics and metals, from other wastes in order to maximize the use of resources and reduce the environmental impact. We are committed to achieving efficient waste management and sustainable development goals through scientific management and continuous optimization.

| Type | Solid waste | Storage and disposal method |
|---|---|---|
| Recyclable general solid wastes | **Waste paper:** office paper, old books, old newspapers, carton boxes, etc.<br>**Plastics:** packaging plastic wrap, waste rubber, waste plastic drums, etc.<br>**Metals:** steel, copper, waste metallic equipment and auxiliary parts, waste tools, etc. | A small amount of waste can be placed in the "recyclable solid waste" bin, while a large amount of recyclable general solid waste shall be sent directly to the Company's temporary waste storage site.<br>Waste cartons, scrap metal and other valuable garbage will be handed over to qualified waste collectors for disposal, and the remaining harmless garbage with no value will be handed over to sanitation companies for disposal. |
| | Leftover food from restaurants, etc. | Collect in food buckets and send to the park facility for food waste disposal |
| Non-recyclable general solid wastes | Other domestic waste | Place in "non-recyclable solid waste" bin and send to qualified parties for disposal |

## 4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

During the Reporting Period, the non-hazardous waste generated by Viva Biotech mainly included general solid waste and domestic waste generated from daily office operations and production. Relevant figures are set out as follows:

| Indicator | 2023 | 2024 | Unit |
|---|---|---|---|
| **Non-hazardous waste** | | | |
| Waste paper | 27.15 | **26.42** | tons |
| Waste glass | 1.06 | **0** | tons |
| Waste plastic | 8.11 | **13.78** | tons |
| Scrap metal | 320.22 | **371.15** | tons |
| Fly-waste and waste cotton | 58.45 | **117.33**[11] | tons |
| Waste packaging | 42.51 | **41.68** | tons |
| Kitchen waste | 72.37 | **69.27** | tons |
| Other waste | 141.01 | **193.71** | tons |
| Total amount of non-hazardous waste | 670.88 | **833.55** | tons |
| Non-hazardous waste intensity | 0.31 | **0.42** | tons per RMB million of revenue |

### Comprehensive Measures to Build a "Zero-Waste Factory"

The Group's CDMO business is committed to building "waste-free factories". To this end, we strictly abide by regulations and standards to reduce generation and emissions of wastes, drawing upon scientific management to underpin our ecological protection goals and fulfilling our green development responsibilities. During the Reporting Period, we carried out key tasks as follows:

- Waste packaging in general industrial solid waste is reused to package solid waste in hazardous waste;
- The optimized expansion joint of the waste gas mains reduces the risk of waste gas leakage;
- The expansion of the solvent tank area and the pipeline transportation of materials reduce the emission of waste gas in material transfer;
- Developed a reagent procurement plan from the source of usage, and carried out procurement according to project needs;
- Optimized solvent recovery facilities, improved solvent recovery rates, and reduced solvent losses;
- Increased efforts in promoting the construction of waste-free factories.

[11] Due to an FDA inspection conducted during the Reporting Period, which led to an increase in maintenance activities, the processing volume of fly-waste and waste cotton also saw a corresponding rise.

## 4.4. Resource Management

### 4.4.1 Water Resource Management

The Group fully recognizes the finite and invaluable nature of water resources. Consequently, we are committed to upholding the principle of water conservation throughout our business activities, and have formulated the Energy and Resource Management Procedures to define the principles and implementation plan for water conservation, in order to achieve rational utilization of water resources and effective control on water consumption. During the Reporting Period, we did not encounter any problems or difficulties in sourcing water that is fit for purpose.

We require all departments and workshops to strengthen the reuse of cooling water and steam condensate in order to improve the utilization efficiency of water resources. Meanwhile, for water-flushing toilets, we have installed water-saving valves to eliminate the wastefulness of long running water. In addition, toilets are equipped with automatic sensor water-saving switches to further reduce water consumption.

By implementing these measures, we have not only significantly reduced the consumption of water resources, but also made a positive contribution to sustainable development. Looking ahead, we will continue to promote the concept of water conservation, optimize our water resource management system, and make continuous efforts to achieve the goal of green production.

During the Reporting Period, our water consumption is as follows:

| Indicator | 2023 | 2024 | Unit |
|---|---|---|---|
| **Use of water resources** | | | |
| Water consumption | 215,026.00 | **209,846.00** | tons |
| Water use intensity | 99.75 | **105.63** | tons per RMB million of revenue |

### 4.4.2 Packaging Materials Management

The Group has adopted a series of effective measures in the management of packaging materials. We mainly use packaging materials such as cartons, paper barrels and packaging bags, and attach great importance to the categorization and disposal of waste packaging. Waste outer packaging, such as wooden boxes and cartons, are collected daily by dedicated personnel to designated yards to ensure neat stacking and disposed of by third-party entities. In addition, waste inner packaging such as inner bags and packaging barrels are treated as hazardous waste.

We continue to optimize packaging design, reduce material usage, increase recycling rate and actively explore the use of biodegradable packaging materials. In addition, we actively promote the recycling of packaging materials through education and incentives, and encourage our employees and customers to join us in contributing to environmental protection.

During the Reporting Period, our consumption of packaging materials is as follows:

| Indicator | 2023 | 2024 | Unit |
|---|---|---|---|
| **Consumption of packaging materials** | | | |
| Total consumption of packaging materials | 183.49 | **99.46** | tons |
| Packaging material consumption intensity | 0.09 | **0.05** | tons per RMB million of revenue |

# 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

Staying true to its "people-oriented" commitment, Viva Biotech is dedicated to fostering a diverse and inclusive corporate culture that respects and unleashes the potential of its employees. We prioritize the well-being and safety of our staff, empowering them to pursue career and individual growth and achieve personal fulfillment. While generating economic value, we aim at more meaningful contribution to society in light of kindness and compassion, to ultimately achieve mutually beneficial growth for both the Group and its employees.

Corresponding UNSDGs:


## 5.1. Employment Compliance and Employee Benefits

### 5.1.1 Employment Management

In human resource management, we consistently adhere to the core values of fairness, diversity and non-discrimination, ensuring that justice and inclusiveness are reflected in all aspects of our labor practices. From recruitment, remuneration and benefits, promotion, training to termination, we treat every employee with fairness and impartiality. We strictly abide by the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China and relevant laws and regulations, and have established internal policies such as the Salary Management Procedures, the Working Time Management Procedures and the Anti-discrimination Management Procedures to standardize recruitment and employment management procedures. We firmly oppose any form of discrimination and do not allow gender, disability, marital status, sexual orientation, age, political views, religious beliefs, race or nationality factors to affect employment decisions. We are committed to creating an equal and fair workplace for employees, allowing them to fully unleash their potential.

## 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

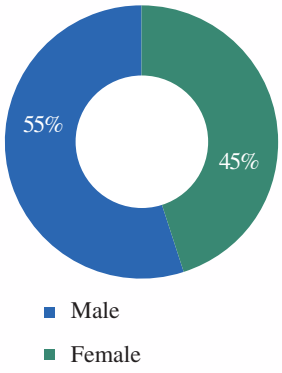
We maintain a zero-tolerance stance towards child labor and forced labor. In strict compliance with the Provisions on Prohibition of Child Labor issued by the State Council and the Law of the People's Republic of China on the Protection of Minors, we have developed corresponding policies and remedial measures to eliminate illegal employment of child labor and forced labor. During the recruitment process, the Human Resources Department rigorously verifies the identities of candidates, and we require all cooperative contractors and suppliers to adhere to these regulations as well. If any violation is identified, we will immediately terminate the contracts and handle the matter in accordance with relevant laws.

In terms of employee remuneration management, we have established sound salary management procedures. The procedures aim to clarify the salary calculation methods, improve the transparency of labor remuneration, subsidies and benefits and the form and time of salary payment, and ensure openness and fairness of relevant policies. In terms of working time management, we strictly comply with national regulations, and have set clear rules on overtime, working hour calculation, attendance and various leaves and holidays. For special occupations, we determine the working hour system legally based on actual conditions, and flexibly adopt a system with comprehensive calculation of working hours or a system with irregular working hours, to fully protect employees' rights and interests.

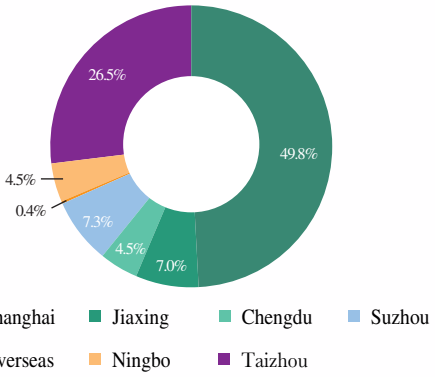
Alongside the adjustments and improvements to its organizational structure, the Company comprehensively upgraded its human resources service system during the Year, in order to achieve integrated personnel management. The human resources workflows such as leave and attendance management, onboarding and departure related matters, and in-service certification have been integrated into one personnel management system to further improve management efficiency. The system upgrade brought significant benefits, including timely updates of employee information, process automation, and the maximized operational efficiency of the Human Resources Department and employees. Meanwhile, a qualitative leap was achieved in visualization of various personnel reports and the timeliness of data, which further improved work efficiency and the timeliness and effectiveness of personnel data, thus providing stronger support for corporate management.

As of the end of the Reporting Period, the Group had a total of 2,063 employees, all of whom were full-time contractual staff. Additionally, we also have 14 part-time employees. In terms of age distribution, our workforce is predominantly under 30, accounting for a significant 56%, reflecting the youthful vitality of our team. Functionally, R&D personnel constitute the majority at 63%, underscoring the Group's strong emphasis on innovation and research. Regarding workforce diversity, we have achieved positive outcomes: the gender ratio is balanced, with male employees representing 55% and female employees 45%, fostering an equitable and inclusive work environment. Furthermore, our employees are geographically diverse, spreading across multiple locations including Shanghai, Jiaxing, Chengdu, Ningbo, Taizhou, Suzhou, Hong Kong, and various overseas regions, which not only enhances our business coverage capabilities but also provides our employees with ample opportunities for broadened personal development.

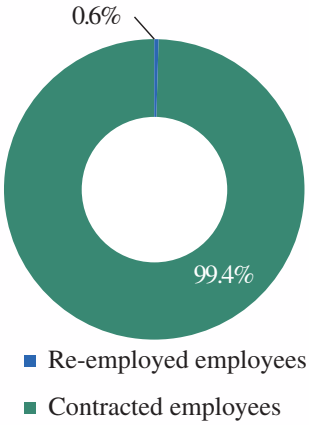
**Total number of employees by gender**



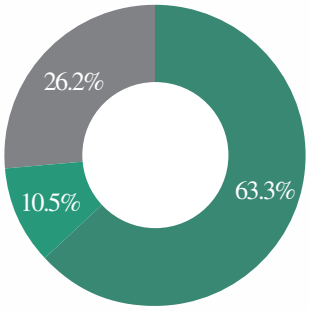

**Total number of employees by geographical region**



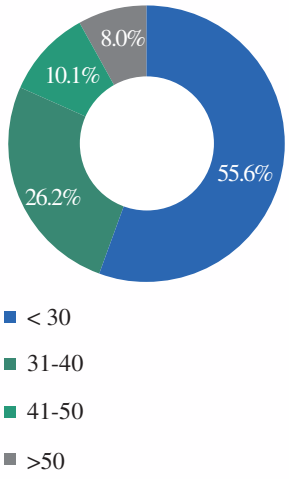

**Total number of employees by type**




**Total number of employees by nature**




**Total number of employees by age groups**



## 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

| Indicator | | 2023 | 2024 |
|---|---|---|---|
| **Total number of employees** | | 2,077 | **2,063**[15] |
| Number of employees by gender | Male | 1,123 | **1,130** |
| | Female | 954 | **933** |
| Number of employees by age | Aged under 30 | 1,149 | **1,148** |
| | Aged 31-40 | 531 | **541** |
| | Aged 41-50 | 242 | **209** |
| | Aged over 50 | 155 | **165** |
| Number of employees by region | Shanghai | 1,036 | **1,028** |
| | Jiaxing | 143 | **145** |
| | Chengdu | 106 | **92** |
| | Ningbo | 100 | **93** |
| | Taizhou | 506 | **547** |
| | Suzhou | 158 | **150** |
| | Hong Kong | 19 | **0**[16] |
| | Overseas[12] | 9 | **8** |
| **Total employee turnover rate**[13] | | 28% | **14%** |
| Employee turnover rate by gender | Male | 29% | **15%** |
| | Female | 28% | **14%** |
| Employee turnover rate by age | Aged under 30 | 33% | **16%** |
| | Aged 31-40 | 24% | **14%** |
| | Aged 41-50 | 20% | **13%** |
| | Aged over 50 | 16% | **7%** |
| Employee turnover rate by region | Shanghai | 23% | **13%** |
| | Jiaxing | 39% | **4%** |
| | Chengdu | 58% | **13%** |
| | Ningbo | 7% | **11%** |
| | Taizhou | 24% | **20%** |
| | Suzhou | 40% | **11%** |
| | Hong Kong | 14% | **26%** |
| | Overseas[12] | 10% | **0%**[14] |

[12] Our overseas regions include North America, Australia and the United Kingdom.

[13] Due to the revision to calculation method, data in 2023 were restated. The employee turnover rate for a specific category during the Reporting Period is calculated as the number of departures in the specific category during the Reporting Period divided by (headcount in the specific category as at the end of the Reporting Period + number of departures in the specific category during the Reporting Period).

[14] During the Year, there were no resignations, with one overseas office employee relocated back to the mainland office.

[15] To align with the reporting scope of the annual report, the employee headcount in the Reporting Period includes full-time employees only.

[16] During the Reporting Period, all 14 employees in Hong Kong were part-time staff, with no full-time personnel employed.

### 5.1.2 Employee Benefits and Care

The Group has always adhered to the principle of putting people first and demonstrates profound care for our employees from various perspectives. We aspire to deliver all employees with comprehensive support and care, in order to enhance their sense of happiness and belonging. To this end, we have established a sound employee welfare and care system, covering various aspects such as statutory benefits, living allowance, health care, and team building, to ensure that employees can be properly taken care of both at work and in life.

With regard to statutory benefits, we strictly follow national regulations to provide employees with basic guarantees such as five insurance plans and a housing provident fund, commercial insurance, annual leave, parental leave, etc. In addition, we provide our employees with a wide range of subsidies and assistances, including monthly lunch allowances, transportation allowances, as well as subsidies for travel activities and high-temperature working conditions, to effectively meet the diverse needs of employees in daily life.

With a focus on physical and mental health of our employees, we arrange regular comprehensive medical examinations for all employees and provide welfare benefits during holidays and birthdays, to make our employees feel the warmth and care from the Group. To facilitate the commuting and daily life of our employees, we provide shuttle bus services and offer staff dormitories for recent graduates, interns, or staff who are unable to find suitable housing in the short term. For expatriate employees, we have introduced an expatriate allowance system to ensure that every employee receives appropriate care and support.

With regard to team building, we allocate funds for departmental team-building activities, and encourage communication and cooperation among employees. During the Year, the team-building funds were mainly used for the Spring Festival annual gala, Chinese New Year gifts and various team-building activities. According to employee needs, department heads may arrange group trips, sports activities and shared meals, both within and across departments, to foster a sense of unity and enjoyment. In addition, we organize group events such as dinner parties, tours, commendation ceremonies for outstanding employees, and incentive skill competitions to promote friendship and collaboration among employees.

To enhance the flexibility and practicality of welfare, we have launched the “CareLink” benefit platform, which provides monthly meal allowances, birthday benefits, gift packages for excellent department, small Thanksgiving gifts and service fee waivers at participating merchants, enabling employees to choose from a wider range of consumption scenarios based on their needs. During the Chinese New Year, each department and project team takes special care to prepare Chinese New Year gift packages, offering festive blessings and care to our employees.

## 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

We believe that these benefit measures will not only boost employees' motivation and satisfaction in their work but also foster stronger bonds and a greater sense of belonging among them, allowing employees to feel the warmth and care within our corporate family. In the future, we will continue to improve our welfare system, striving to provide a better working and living environment and conditions for our employees.

Selected welfare and team-building activities in the Year:


**Group trip for outstanding employees**

**Departmental team-building gathering**


**Thanksgiving gift packages**


**Chemistry knowledge and skill competition**

### 5.1.3 Employee Communication

We are always committed to creating an open and transparent communication atmosphere, to ensure that employees' opinions can be heard and effectively conveyed in a timely manner. To this end, we have established diverse communication channels and mechanisms covering aspects such as daily communication, problem feedback and onboarding support, to ensure comprehensive communication with employees.

Each department has a Human Resources Business Partner (HRBP) who is an experienced human resources specialist. These HRBPs are responsible for collecting employees' queries and feedback, reporting them to the management in time, and providing improvement suggestions and solutions in line with the Company's policies and regulations, to ensure that employees' voices are properly addressed. In addition, we organize regular work meetings every month, not only to communicate work-related matters but also actively collect employees' feedback, ensuring that each employee's opinions are valued and addressed.

To improve communication efficiency, we have established a virtual work group to facilitate two-way communication among employees, enabling instant information sharing and prompt responses. Meanwhile, the upgraded human resources management system also provides an integrated and convenient communication channel for employees. This platform facilitates various aspects of work communication such as business discussions, task approvals and important inquiries. By leveraging this platform, employees can efficiently complete their tasks, thereby significantly improving both work efficiency and communication effectiveness.

For newly recruited employees, we provide comprehensive onboarding guidance to help them quickly adapt to the working environment and integrate into the Company's culture. The Human Resources Department, IT Department and respective business departments offer necessary support and assistance to ensure a smooth integration into the team and the commencement of work.

To further broaden the communication channels, we have established a general manager's mailbox where employees can submit their feedback or suggestions in written form. The Administration Department is responsible for regularly checking the mailbox every week, collecting and summarizing the relevant feedback, and forwarding the same to the respective departments on the same day. The concerned departments investigate and address the issues raised and provide a written response within 5 days in the form of an Employee Complaints and Response Record, ensuring that every employee's voice is promptly and attentively heard and addressed.

## 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

In addition, the management regularly participates in corporate culture related group activities with employees, such as team-building events and sports competitions, enhancing their mutual understanding and trust and allowing the management to get closer to employees. Through these diverse communication methods, we not only enhance employees' sense of engagement and belonging, but also lay a solid communication foundation for sustainable development of the Company.

### The Sailing Program

The Sailing Program for the Year aims to help every new colleague rediscover and position themselves, complete role transitions, and quickly integrate themselves into the team. The program also strengthened communication and understanding among colleagues, cultivated their teamwork spirit, and enabled new colleagues to understand and embrace our corporate culture through the activities.

## 5.2. Diversity and Inclusiveness

Based on a diverse and inclusive workplace culture, Viva Biotech is committed to providing support and assistance to employees across all their career stages, thus creating an equal and fair workplace and enabling our employees to fully unlock their potential. We take precise actions in terms of organizational structure, staff training, women's welfare, freedom of association and anti-discrimination, aiming to create an open and inclusive working atmosphere.

In terms of employment composition, we actively pursue diversity in various dimensions such as gender, age, race, language, cultural background and educational background, in order to gather talents in different fields and jointly contribute to the development of the Company. We clearly state in the Anti-discrimination Management Procedures that we will not tolerate any employment discrimination or bias due to disabilities, and actively provide employment opportunities for handicapped individuals. In 2024, the proportion of handicapped employees reached approximately 10%. We arranged basic administrative work for them, demonstrating our profound care and respect for handicapped individuals.

We also attach great importance to the rights and benefits of female employees, providing a lactation room for women during the breastfeeding period to support them smoothly return to work. On the International Women's Day, we presented beautiful flower bouquets and sincere blessings to female employees and distributed gift boxes with women's products, demonstrating our care and respect for female employees.

Through these measures, we not only create a fair and inclusive working environment for our employees, but also inject diverse vitality and creativity into the enterprise to promote its sustainable development. In the future, we will step up our efforts in diversity and inclusiveness, providing every employee with broader development opportunities.

**Women's Day activity**

On the occasion of Women's Day, we paid high tribute to the diligent female employees and extended our sincere care and gratitude to them.

## 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

### Female scientists shining in Viva Biotech

Dr. Qian Yue, executive director of Viva Biotech's Computational Chemistry and AI Platform, has broken industry stereotypes through her outstanding academic contributions and leadership. Recently, Dr. Qian published an article in the Journal of Chemical Information and Modeling (JCIM), a publication of the American Chemical Society (ACS), delving into the critical role of computational chemistry and artificial intelligence in drug discovery. She particularly highlighted the remarkable contributions of female scientists in this field. Drawing from her own experiences, she shared insights on how women can enhance their influence through professional expertise and leadership, inspiring more young women to pursue careers in science.

Under Dr. Qian's leadership, a diverse and multidisciplinary team comprising professionals from various backgrounds has successfully developed an AI-powered platform for early-stage drug discovery, achieving significant results in practical applications. Such accomplishment not only demonstrates the team's technical prowess but also reflects the Company's inclusive and diversity-driven culture. At the Company, as long as employees possess passion, exceptional performance and potential, regardless of age, background or gender, we provide them with greater opportunities to shine, more platforms for discussion and learning, and broader career advancement prospects, empowering every individual to realize their full potential.

## 5.3. Occupational Health and Safety

As a responsible modern enterprise, we always place occupational health and production safety at the center of our business operations. By establishing a scientific and standardized long-effect mechanism for safety management, we fully implement the Production Safety Law of the People's Republic of China, the Labor Law of the People's Republic of China, the Law of the People's Republic of China on Prevention and Control of Occupational Diseases and other national laws and regulations on labor protection, to continuously improve our occupational health support system.

The Group's R&D and manufacturing sites strictly implement the ISO 45001 international standard certification system, and has systematically established a safety management network covering risk assessment, process control and emergency response. We have established a three-year document review mechanism to dynamically optimize our EHS management system documentation in accordance with the latest regulatory requirements. Especially in terms of change management, we focused on improving the EHS Change Management Procedures during the Year. By refining risk rank assessment standards and implementing a monitoring process, we effectively strengthened full-cycle safety management over various change matters.

The Group has set various objectives related to occupational health and safety to create a safer and healthier working environment for its employees:

CRO safety goals:

| | |
|---|---|
| **0**<br>fatality, serious injury, fire, explosion, poisoning, environmental pollution and safety accident | **0**<br>hazardous chemical (including hazardous waste) leakage accident or culpable traffic accident |
| **100%**<br>timely report of information on identification of hidden dangers | **99%**<br>of the hidden dangers are timely rectified |
| **95%**<br>of safety facilities in good condition | **100%**<br>timely report of safety accidents |
| **100%**<br>participation rate and passing rate of safety training | **100%**<br>timely occupational health examinations |

## 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

CDMO safety goals:

| | |
|---|---|
| **0** fatality, serious injury, fire, explosion, poisoning, environmental pollution and safety accident | **0** hazardous chemical (including hazardous waste) leakage accident or culpable traffic accident |
| **100%** timely report of information on identification of hidden dangers | **100%** of the hidden dangers are timely rectified |
| **98%** of safety facilities in good condition | **100%** timely report of safety accidents |
| **100%** participation rate and passing rate of safety training | **100%** timely occupational health examinations |

During the Reporting Period, the Group was not aware of any serious violation of laws relating to occupational health and safety. In addition, there were no cases of work-related fatalities in the last three years including the Reporting Period.

### 5.3.1 Safety Inspection

The Group has established a hierarchical EHS control system, introducing a model combining an intelligent inspection system with manual inspections to achieve dynamic monitoring of production and experimental sites. Addressing special risk characteristics of laboratories, we have developed a specialized safety manual, and implemented a strict system for scoring and tracking violations in laboratory inspections. Every week, our EHS personnel work alongside the laboratory safety officers to conduct inspections. The safety conditions of laboratories are evaluated quarterly, using a deduction-based scoring system. The evaluation criteria encompass various aspects, including waste disposal, compliance with employee operating procedures, compliance of laboratory facilities with relevant standards, and storage management. Thanks to these stringent measures, we achieved excellent results in maintaining a hygienic and safe environment in our laboratories during the Year. Moving forward, we will continue to strengthen our safety inspection efforts to ensure the laboratories operate smoothly, providing reliable support for our scientific research.

### 5.3.2 Occupational Disease Prevention and Management

In order to comprehensively and effectively manage occupational disease prevention, we have established a series of related management systems, including the Occupational Disease Hazard Detection and Evaluation Management System, the Occupational Disease Hazard Warning and Notification System, the Occupational Disease Prevention and Control Promotion, Education and Training System and the Occupational Disease Prevention and Control Responsibility System. These rules provide clear guidance and standards for us to carry out occupational disease prevention work, ensuring effective implementation of our various measures.

With regard to organizational infrastructure, we have established a leading group for occupational health management, with the main responsible individuals taking overall charge of occupational disease prevention and control. The EHS Department is responsible for overseeing the implementation of occupational disease prevention and control measures, as well as executing specific tasks related to occupational health management and occupational hazard prevention. Furthermore, we collaborate with a third-party testing agency to conduct occupational disease hazard risk factor assessment once every three years. During the Year, our Zhoupu Laboratory in Shanghai successfully completed a hazard factor assessment. The assessment results indicated up-to-standard performance for all positions, providing us with a scientific basis for further optimizing our protective measures.

## 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

In terms of occupational disease prevention measures, we have installed the designated warning signs in prominent locations throughout the workplace to remind employees of occupational disease hazards. Additionally, we regularly distribute personal protective equipment and conduct inspections to ensure proper usage by employees. To enhance employees' awareness and emphasis on occupational disease prevention, we stepped up our promotion and education efforts through seminars, training sessions and other activities to publicize occupational disease prevention knowledge.

In terms of occupational health examinations, we adopt an on-the-job occupational health examination system to ensure that our employees receive comprehensive occupational health examination once a year. The scope of examination depends on an employee's years of exposure to chemicals, major hazards in exposure, etc., to ensure rationality and effectiveness of health examination. In addition, new employees are required to undergo pre-employment occupational health checkups when joining the Company, and departing employees receive an exit occupational health examination before they leave the Company. During the Year, we did not detect any employees with occupational contraindications or suspected occupational diseases. Employees with suspected occupational diseases will undergo follow-up examinations; and employees diagnosed with occupational diseases will be provided with proactive therapeutic arrangements. Employees returning from maternity leave will be temporarily reassigned from their original high-risk positions and will only be transferred back to their former roles upon confirmation of their physical readiness.

To protect employees' right to information and health, we require them to regularly sign an Occupational Hazard Information Notice, which provides truthful and comprehensive information about potential occupational disease hazards, their consequences, as well as the protective measures and benefits available. This not only safeguards employees' rights but also serves as an important means to raise their awareness of occupational disease prevention and control.

### 5.3.3 Industrial Equipment and Hygiene Management

The Group attaches great importance to industrial hygiene and equipment management, and has formulated a series of strict management rules, including the Production Facility Safety Management System, the Carcinogen Management Procedures, the Process Safety Management (PSM) Procedures, and the Process Hazard Analysis (PHA) Management System, to ensure that equipment and operational processes meet safety standards. These rules provide clear guidance and standards for us to carry out occupational disease prevention work, ensuring effective implementation of our various measures.

In terms of equipment management, we build production facilities in strict accordance with national laws, regulations and relevant technical standards to ensure that the performance of safety facilities meets the requirements. Noise control, ventilation, toxicity and ionizing radiation protection equipment in the laboratories are designed in accordance with industrial enterprise design and hygiene standards in order to guarantee protective performance of the equipment and ensure that the occupational health protective facilities meet the national standards. In addition, we have formulated the Interim Measures for the Supervision and Management of Occupational Health "Three Simultaneous" in Construction Projects. When the Group constructs, renovates or expands capital construction projects, technological renovation projects or imported technology projects, a qualified third party shall be engaged to carry out occupational disease hazard factor assessment. For a construction project that may cause occupational disease hazards, the construction unit shall conduct a pre-assessment on occupational disease hazards during the feasibility study stage and prepare a pre-assessment report.

The EHS Department also carries out regular equipment inspections, and once faulty equipment is found, it will immediately notify the engineering team or third-party maintenance companies to carry out maintenance to ensure that the equipment remains in good condition. In terms of hygiene management, we identify and evaluate the safety levels of different biological laboratories and potential sources of exposure in production. For laboratories and production processes with higher hazard levels, we implement effective engineering control measures to ensure that their exposure levels are within acceptable occupational exposure limits, thus protecting employees from chemical, physical or biological exposure hazards and diseases.

We require employees to wear adequate protective equipment and undergo sufficient training before entering or using relevant areas, to control the risks of transmission and exposure of microbiological agents. Additionally, we regularly clean and disinfect the laboratories to ensure hygiene and safety in the laboratory environment.

### 5.3.4 Occupational Health and Safety Training

Comprehensive training is an important means to enhance employees' awareness of occupational health and safety, and to prevent and control accidents. To this end, the Group has formulated the Management Measures for Safety Education and Training of Viva Biotech, and ensures that our employees fully understand and comply with the relevant safety and health policies by organizing work safety and occupational health training for them from time to time.

For all employees who may come into contact with biological agents and face potential exposure risks, we place special emphasis on the need for training and require them to regularly attend relevant training courses. The training materials are designed according to characteristics and needs of different positions, covering various aspects such as identifying potential hazards in laboratories and work processes, selecting appropriate personal protective equipment, proper wearing techniques, and equipment maintenance. To ensure that employees fully comprehend the training materials, we have established corresponding assessment and testing process to promptly evaluate their learning outcomes.

New or reassigned employees are required to receive special training to fully understand the potential risks and acquire the appropriate safety operating skills before taking up new tasks related to biological experiments. To maintain employees' safety awareness and skill levels, we conduct regular refresher training sessions and maintain detailed training records for a minimum of five years.

During the Year, our CDMO business organized five safety training sessions, covering accident cases, safety knowledge and emergency response process, to further enhance employees' safety awareness and emergency response capabilities. Through these measures, we are committed to providing comprehensive occupational health and safety protection for our employees, thus ensuring a safe and sound working environment. As of the end of the reporting year, our health and safety training had recorded a total of 6,405 participations, including 4,221 participations to safety training and 2,184 participations to fire drills, which effectively enhanced our employees' safety awareness and capabilities to respond to emergencies.

### 5.3.5 Emergency Response to Accidents

Viva Biotech has formulated a comprehensive set of emergency response plans to ensure rapid activation and effective response in case of safety and environmental emergencies. This set of plans not only covers a variety of possible internal emergencies, but also connects effectively with the external emergency response system to ensure that we are able to notify and collaborate with neighboring companies in the event of a major or significant environmental emergency.

To ensure smooth implementation of the emergency plans, we have established a dedicated emergency response organization responsible for organizing and coordinating the handling of unforeseen environmental incidents. Additionally, we regularly conduct various emergency drills to enhance employees' emergency response capabilities and safety awareness. These drills include nighttime exercises for preventing theft or robbery involving toxic chemicals, comprehensive drills for production safety accidents, environmental emergency drills, and on-site disposal exercises in workshop.

During the Year, the work-related injuries were mainly attributable to Langhua Pharmaceutical, which were unexpected accidents and did not cause serious consequences. We have properly handled the accidents and made related arrangements in accordance with the relevant provisions of the Group's Work-related Injury Insurance Regulations, and lived up to our commitment to employee health and safety by constantly improving the system and process and strengthening safety training.

| Indicator | 2023 | 2024 | Unit |
|---|---|---|---|
| Lost working days due to work injury | 104 | **121.5** | day |
| Number of work-related fatalities | 0 | **0** | person |

## 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

### 5.4. Human Capital Development

#### 5.4.1 Talent Attraction and Retention

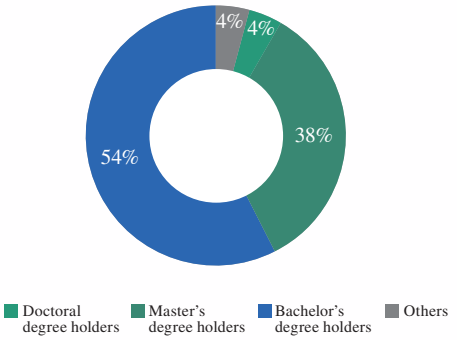
Employees are the most valuable asset of a company, and attracting and cultivating talents is the key to prosperity of the Group. Accordingly, we actively carry out campus recruitment and social recruiting activities, and develop strategies tailored for different talent groups to attract and retain outstanding people.

For key R&D positions in the Computational Chemistry Department, the Biology Department and the Chemistry Department, we mainly adopt online campus recruitment to attract outstanding graduates with the advantages of competitive remuneration packages and a comprehensive salary and promotion system. Based on the basic situation of the Company and taking into account external market conditions, we strive to provide comprehensive and competitive remuneration packages for various talents. In addition, we also provide subsidies and benefits, innovation grants, multiple option incentives, talent apartments and other daily life services, in order to attract more technological innovation talents, highly skilled personnel and university graduates to apply for talent programs and various talent projects.

We assist overseas talents to apply for work visas and Chinese permanent residency, and provide them with commercial insurance plan, paid leave for family visits and relevant benefits and subsidies, so that they can work and enjoy their lives with peace of mind. For high-level talents returning from overseas, we develop targeted strategies and measures according to their different conditions, such as domestic resettlement arrangements, overseas family visit arrangements, and provision of guarantee to support their application for talent allowances in accordance with government talent policies. Through the diverse measures above, we not only provide a sound career development platform for talents, but also create an attractive working and living environment for them, enabling the Group to continuously attract and retain outstanding talents and promote our long-term growth.

Percentage of high-level talents in our CRO business:

**Breakdown of educational backgrounds of our CRO employees in 2024**




### 5.4.2 Talent Retention

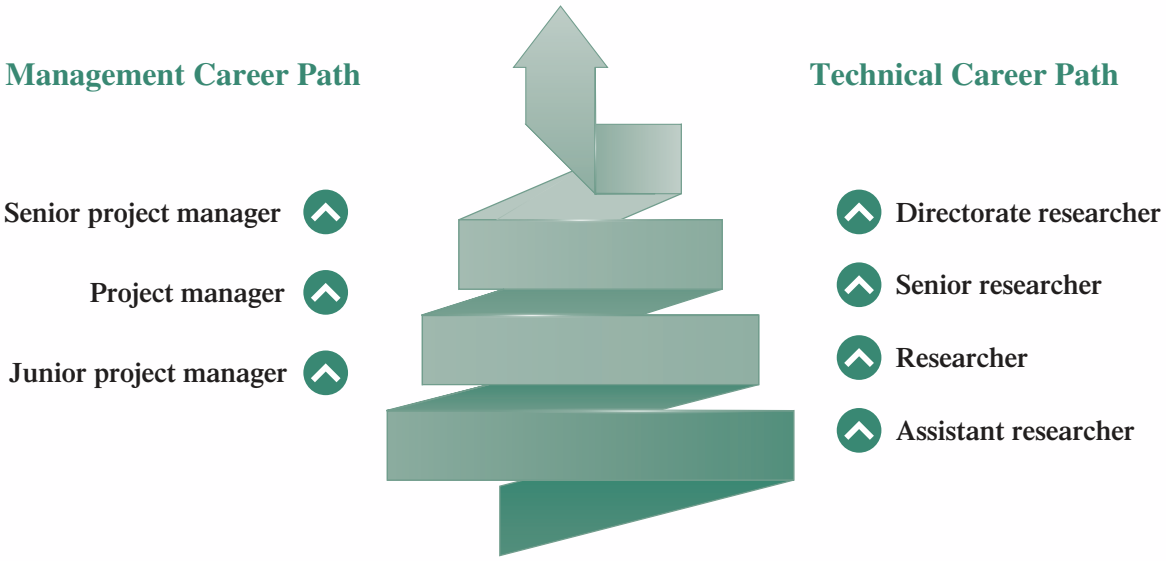
To ensure that outstanding people can contribute value to the Group in the long run, we have put in place a series of well-designed mechanisms to provide employees with clear career paths and fair promotion opportunities.

We have established two different models of promotion ladder, namely "management career path" and "technical career path", allowing employees to choose appropriate development direction based on their interests and expertise. In April and October each year, we offer promotion opportunities to employees with outstanding performance or special contributions, which fully demonstrate our recognition and appreciation of talents. The promotion process follows the principles of fairness, impartiality and openness, taking into full consideration the candidates' integrity, competency and potential to ensure that the best talents are selected.

## 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

At the end of each year, an all-employee performance appraisal is organized by the Human Resources Department. As the considerations may vary slightly by promotion path, each business department is responsible for developing the performance appraisal indicators for their employees to ensure that the appraisal process is professional and accurate. The appraisal results are not only linked to the promotion and elimination mechanism of employees, but also directly affect the annual salary adjustment, so as to motivate employees to continuously improve themselves.

**Illustrative promotion ladders**




In addition, we recognize the hard work of our employees both in physical and spiritual ways by providing them with year-end performance bonuses and annual commendations for outstanding employees. The Group has launched a "Long-term Service Bonus Plan" for employees who have served for at least three years and have outstanding performance, with the aim of encouraging employees to serve for a long period of time and create more value together. Through the signing of five-year service contracts and the payment of bonuses in proportion to salary every year, we aim to attract and retain a loyal and efficient workforce.

### 5.4.3 Talent Motivation

We actively explore effective employee motivation policies, aiming to encourage our employees to be self-driven and realize their social and self-worth. Through the signing of long-term service contracts and the payment of bonuses in proportion to salary every year, we have attracted and retained a loyal and efficient workforce. We have set up a number of awards based on the performance of our employees, such as project bonuses, public safety awards and quarterly outstanding employee awards, in order to recognize employees with outstanding performance in key areas or segments. Outstanding employees also have the opportunity to receive group tours and other benefits, further enhancing their sense of belonging and accomplishment. For our stay-over employees, we also offer various subsidies and extra bonuses to express our care and recognition for them.

In addition, we recognize the hard work of our employees both in physical and spiritual ways by providing them with year-end performance bonuses and annual commendations for outstanding employees. We have launched a "Long-term Service Bonus Plan" for employees who have served for at least three years and have outstanding performance, with the aim of encouraging employees to serve for a long period of time and create more value together. Some outstanding departmental teams will also be encouraged and supported by bonuses or gifts, to further stimulate the spirit of teamwork. These incentives not only enhance employees' work enthusiasm, but also strengthen the Company's cohesion and competitiveness by fostering a healthy competitive atmosphere, thus promoting employees' appreciation of our corporate culture and ethos as a strong driver to our sustainable development.


**Commendation ceremony**

### 5.4.4 Training and Talent Development

The Group is committed to creating a studious workplace atmosphere, ensuring that employees can adapt to the rapidly changing market environment by continuously improving their expertise and professional competency. To this end, we have developed the Employee Training Management Regulations, based on which we prepare a meticulous annual training plan at the beginning of each year and coordinate the Group's staff training planning.

We develop distinctive training programs based on the characteristics and requirements of different departments. The training programs include basic business skills training for employees, management skills training for project managers (PM), GMP special training, safety related training, human resources (HR) skills improvement, and business ethics related training. For project managers, the focus is on enhancing their management skills to effectively lead teams and accomplish project tasks. For middle and senior management members, we place greater emphasis on developing their management abilities and leadership capabilities to enhance their strategic vision and decision-making skills. With regard to the training for new employees, we provide English language training, mentorship in business practices and specialized training, to impart proven skills and sound practices to new employees and help them quickly fit into the team.

Our training programs are provided mainly through external training and internal training. We emphasize a combination of theory and practice. The training primarily consists of classroom lectures and hands-on practical exercises. By providing practical experience alongside theoretical knowledge, we help employees deepen their understanding and application of the knowledge gained. Additionally, we have established a comprehensive system for tracking training effectiveness to strengthen training assessment and incentives, ensuring that the results of training can genuinely translate into better work performance of employees.

In terms of internal training, we actively cultivate internal trainers and refine our internal training curriculum, and invite outstanding seasoned employees from various departments to join the internal trainer team. Meanwhile, we provide external training o teaching skills for the internal trainer team. We utilize external training to drive internal training, in order to continuously improve the teaching skills and course quality of our internal trainers. At the end of training program, we conduct satisfaction surveys among participants to rank the performance of our trainers. Outstanding trainers are selected and rewarded accordingly on a regular basis. This not only acknowledges the hard work of our trainers but also motivates more employees to actively engage in training and learning.

Given the need for negotiation and communication with foreign companies in the course of business of the Group, English language training is particularly important. We leverage a combination of internal and external trainers to deliver targeted business English training, focusing on real-world workplace communication scenarios. This approach enables employees to practice and enhance their skills in practical work settings while boosting their motivation for learning. Moreover, we have established English language learning and assessment requirements to ensure that young talents can easily keep abreast of international information and broaden their global perspective. Through these diverse communication methods, we not only enhance employees' professional skills, but also cultivate a high-quality talent team for our sustainable development, enabling the Group to sustain its leadership in competition.

**PM management skills training**

**Basic skills training for laboratory personnel**

**Vocational skills training**

**Fire safety training**

## 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

Set out below is an overview of our training activities during the Reporting Period:

| Indicator | | 2023 | 2024 | Unit |
|---|---|---|---|---|
| **Total number of employees trained** | | 869 | **1,226** | person |
| Percentage of employees trained by gender[17] | Male | 67% | **59%** | / |
| | Female | 33% | **41%** | / |
| Percentage of employees trained by employee category[17] | R&D staff | 26% | **46%** | / |
| | Management staff | 4% | **4%** | / |
| | Other staff | 70% | **50%** | / |
| Average training hours by gender[18] | Male | 15 | **20** | hour |
| | Female | 11 | **8** | hour |
| Average training hours by employee category[18] | R&D staff | 6 | **5** | hour |
| | Management staff | 6 | **8** | hour |
| | Other staff | 39 | **40** | hour |

[17] According to the advice on data calculation set out in Appendix 3: Reporting Guidance on Social KPIs to How to prepare an ESG Report of the Hong Kong Stock Exchange, the percentage of employees trained is calculated by dividing the number of employees trained in the specified category by the total number of employees trained in the specified category.

[18] According to the advice on data calculation set out in Appendix 3: Reporting Guidance on Social KPIs to How to prepare an ESG Report of the Hong Kong Stock Exchange, the average training hours is calculated by dividing the total number of training hours for employees in the specified category by the total number of employees in the specified category.

## 5.5. Community Responsibility and Contribution

Viva Biotech always upholds the belief in giving back to society. Alongside our efforts in pursuing excellence, we actively fulfill our corporate social responsibility and are committed to delivering on our responsibilities and obligations to society through various public welfare and charity activities. Leveraging our industry strengths, we actively fulfill our social responsibilities, pay attention to the needs of the local communities where we operate, and support education, charity, and other public welfare causes through various means. We not only regularly donate materials and funds to various charitable organizations but also collaborate closely with multiple universities, injecting new vitality into the cause of education. Additionally, we actively organize employees to participate in public welfare activities to cultivate their awareness of public welfare and the spirit of dedication.

### Educational public welfare activities

Education plays an important role in promoting sustainable, inclusive and equitable economic growth and social development. We are committed to contributing to educational equality and ensuring that everyone can benefit from accessible, high-quality and affordable educational opportunities. Langhua Pharmaceutical has formed partnerships with several universities, including Shenyang Pharmaceutical University, Taizhou University, NingboTech University, Taizhou Technician College, and Heilongjiang Biotechnology Vocational and Technical School, and has established an internship and practical training base. The Group has allocated approximately 5,600 square meters of space as a dedicated internship and training base for college students, and offers over 20 internship positions each year. During the Reporting Period, around 650 students from various universities visited the base for educational purposes. Our internship and practical training base has been recognized as a member unit of the provincial industry-education cooperation demonstration base, and a cooperative enterprise of Toumen Port Modern Industrial College, providing a support for talent development in the industry.

## 5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY


Langhua Pharmaceutical's practical training bases across institutions

**Actively promoting academic exchanges to empower young students' growth**

In November 2024, Viva Biotech collaborated with the Fudan Undergraduate Research Opportunities Program (FDUROP) of Fudan University to hold an "Academic Afternoon Tea" event, aiming to empower young students' growth through university-enterprise cooperation. During the event, Viva Biotech invited over 20 undergraduate, graduate and doctoral students from Fudan University to visit its core technology platforms such as supercomputing laboratory, chemistry laboratory and crystallization laboratory, allowing the students to gain a deeper understanding of the cutting-edge technologies and innovative practices in the drug discovery field. After the visit, we also invited three outstanding Fudan alumni from Viva Biotech namely Dr. Qian Yue, Executive Officer of Computational Chemistry and Artificial Intelligence Platform, Dr. Li Le, a project manager, and an upperclassman representative, to share their insights in AI technology application in drug discovery and career planning, and provide practical and forward-looking guidance for the students. This event not only showcased Viva Biotech's corporate culture and innovation atmosphere, but also provided a valuable learning opportunity and career planning inspiration for the young students, injecting new vitality for future development of the industry.

| Indicator | 2023 | 2024 | Unit |
|---|---|---|---|
| Community charitable donations | / | 68,015 | RMB |

# APPENDIX: HKEX ESG REPORTING CODE CONTENT INDEX

| Aspect | Disclosure Requirements | Content Index |
|---|---|---|
| **A1** | **Emissions:**<br><br>General Disclosure<br>Information on:<br>(a) the policies; and<br>(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.<br><br>Note: Air emissions include NOx, SOx, and other pollutants regulated under national laws and regulations.<br><br>Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.<br><br>Hazardous wastes are those defined by national regulations. | 4.2. Energy Conservation and Emission Reduction Actions and Measures<br><br>4.3. Waste Management |
| **KPIA1.1** | The types of emissions and respective emissions data. | 4.3. Waste Management |
| **KPIA1.2** | 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). | 4.2. Energy Conservation and Emission Reduction Actions and Measures<br><br>4.3. Waste Management |
| **KPIA1.3** | Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). | 4.3. Waste Management |
| **KPIA1.4** | Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). | 4.3. Waste Management |
| **KPIA1.5** | Description of emissions target(s) set and steps taken to achieve them. | 4.2. Energy Conservation and Emission Reduction Actions and Measures<br><br>4.3. Waste Management |
| **KPIA1.6** | Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them. | 4.2. Energy Conservation and Emission Reduction Actions and Measures<br><br>4.3. Waste Management |

| Aspect | Disclosure Requirements | Content Index |
|---|---|---|
| **A2** | **Use of Resource:**<br><br>General Disclosure<br>Policies on the efficient use of resources, including energy, water and other raw materials.<br><br>Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc. | 4.2. Energy Conservation and Emission Reduction Actions and Measures<br><br>4.4. Resource Management |
| **KPIA2.1** | 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). | 4.2. Energy Conservation and Emission Reduction Actions and Measures |
| **KPIA2.2** | Water consumption in total and intensity (e.g. per unit of production volume, per facility). | 4.4. Resource Management |
| **KPIA2.3** | Description of energy use efficiency target(s) set and steps taken to achieve them. | 4.2. Energy Conservation and Emission Reduction Actions and Measures |
| **KPIA2.4** | 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. | 4.4. Resource Management |
| **KPIA2.5** | Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced. | 4.4. Resource Management |
| **A3** | **The Environment and Natural Resources:**<br><br>General Disclosure<br>Policies on minimising the issuer's significant impact on the environment and natural resources. | 4.2. Energy Conservation and Emission Reduction Actions and Measures<br><br>4.4. Resource Management |
| **KPIA3.1** | Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them. | 4.2. Energy Conservation and Emission Reduction Actions and Measures<br><br>4.4. Resource Management |

## APPENDIX: HKEX ESG REPORTING CODE CONTENT INDEX

| Aspect | Disclosure Requirements | Content Index |
|---|---|---|
| **A4** | **Climate Change:**<br><br>General Disclosure<br>Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer. | 4.1. Supporting the Climate Actions |
| **KPIA4.1** | Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them. | 4.1. Supporting the Climate Actions |
| **B1** | **Employment:**<br><br>General Disclosure<br>Information on:<br>(a) the policies; and<br>(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. | 5.1. Employment Compliance and Employee Benefits<br><br>5.2. Diversity and Inclusiveness |
| **KPIB1.1** | Total workforce by gender, employment type (for example, full– or part-time), age group and geographical region. | 5.1. Employment Compliance and Employee Benefits |
| **KPIB1.2** | Employee turnover rate by gender, age group and geographical region. | 5.1. Employment Compliance and Employee Benefits |
| **B2** | **Health and safety:**<br><br>General Disclosure<br>Information on:<br>(a) the policies; and<br>(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. | 5.3. Occupational Health and Safety |
| **KPIB2.1** | Number and rate of work-related fatalities occurred in each of the past three years including the reporting year. | 5.3. Occupational Health and Safety |
| **KPIB2.2** | Lost days due to work injury. | 5.3. Occupational Health and Safety |
| **KPIB2.3** | Description of occupational health and safety measures adopted, and how they are implemented and monitored. | 5.3. Occupational Health and Safety |

## APPENDIX: HKEX ESG REPORTING CODE CONTENT INDEX

| Aspect | Disclosure Requirements | Content Index |
|---|---|---|
| **B3** | **Development and training:**<br><br>General Disclosure<br>Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.<br><br>Note: Training refers to vocational training. It may include internal and external courses paid by the employer. | 5.4. Human Capital Development |
| **KPIB3.1** | The percentage of employees trained by gender and employee category (e.g. senior management, middle management). | 5.4. Human Capital Development |
| **KPIB3.2** | The average training hours completed per employee by gender and employee category. | 5.4. Human Capital Development |
| **B4** | **Labour Standards:**<br><br>General Disclosure<br>Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child or forced labour. | 5.1. Employment Compliance and Employee Benefits |
| **KPIB4.1** | Description of measures to review employment practices to avoid child and forced labour. | 5.1. Employment Compliance and Employee Benefits |
| **KPIB4.2** | Description of steps taken to eliminate such practices when discovered. | 5.1. Employment Compliance and Employee Benefits |

## APPENDIX: HKEX ESG REPORTING CODE CONTENT INDEX

| Aspect | Disclosure Requirements | Content Index |
|---|---|---|
| **B5** | **Supply Chain Management:**<br><br>General Disclosure<br>Policies on managing environmental and social risks of the supply chain. | 2.6 Sustainable Supply Chain |
| **KPIB5.1** | Number of suppliers by geographical region. | 2.6 Sustainable Supply Chain |
| **KPIB5.2** | Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored. | 2.6 Sustainable Supply Chain |
| **KPIB5.3** | Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored. | 2.6 Sustainable Supply Chain |
| **KPIB5.4** | Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored. | 2.6 Sustainable Supply Chain |
| **B6** | **Product Responsibility:**<br><br>Information on:<br>(a) the policies; and<br>(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. | 2.3 Quality Management<br><br>2.4 Animal Welfare and Rights<br><br>2.5 Protection of Clients' Rights and Interests |
| **KPIB6.1** | Percentage of total products sold or shipped subject to recalls for safety and health reasons. | 2.3 Quality Management |
| **KPIB6.2** | Number of products and service related complaints received and how they are dealt with. | 2.5 Protection of Clients' Rights and Interests |
| **KPIB6.3** | Description of practices relating to observing and protecting intellectual property rights. | 2.2 Intellectual Property Management |
| **KPIB6.4** | Description of quality assurance process and recall procedures. | 2.3 Quality Management |
| **KPIB6.5** | Description of consumer data protection and privacy policies, and how they are implemented and monitored. | 2.5 Protection of Clients' Rights and Interests |

## APPENDIX: HKEX ESG REPORTING CODE CONTENT INDEX

| Aspect | Disclosure Requirements | Content Index |
|---|---|---|
| **B7** | **Anti-corruption:**<br><br>General Disclosure<br>Information on:<br>(a) the policies; and<br>(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 Business Ethics and Anti-corruption |
| **KPIB7.1** | 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 Business Ethics and Anti-corruption |
| **KPIB7.2** | Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored. | 1.2 Business Ethics and Anti-corruption |
| **KPIB7.3** | Description of anti-corruption training provided to directors and staff. | 1.2 Business Ethics and Anti-corruption |
| **B8** | **Community Investment:**<br><br>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. | 5.5. Community Responsibility and Contribution |
| **KPIB8.1** | Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport). | 5.5. Community Responsibility and Contribution |
| **KPIB8.2** | Resources contributed (e.g. money or time) to the focus area. | 5.5. Community Responsibility and Contribution |