VIVA

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

2023

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 fifth 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 (the "**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, and a time span from January 1, 2023 to December 31, 2023 (the "**Reporting Period**" or the "**Year**").

Basis of Preparation

The Group prepared the Report in accordance with the Environmental, Social and Governance Reporting Guide (the "**Guide**") 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 Guide 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 ESG report to ensure comparability of information.

Release Channel

The Report is available on display 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 2023.

In the past year of 2023, the global biopharmaceutical industry faced challenges in terms of investment and financing due to the inevitable impact of US dollar interest rate hike and tightening liquidity. Despite these circumstances, Viva Biotech, as a global one-stop drug discovery and production platform, managed to deliver impressive overall performance. The Group demonstrated a strong commitment to ESG principles, showcasing a range of notable achievements and business successes in areas such as technology platform development, responsible investment practices, environmental protection, energy conservation, emission reduction, and social responsibility implementation.

I wish to look back on our operating results and ESG highlights achieved in 2023 together with you:

Business review:

- During the Reporting Period, the Group achieved revenue of RMB2,155.6 million and gross profit of RMB738.5 million for the Year, and the Group's net loss amounted to RMB99.8 million, representing a substantial improvement compared to the loss of RMB504.2 million for the same period last year; adjusted net profit amounted to RMB208.8 million, representing a substantial turnaround from the loss in the same period last year, which was mainly attributable to the stabilized valuation of certain portfolio companies of the Group and the profitability improvement as a result of the Group's cost reduction and efficiency enhancement initiatives.

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

Product research and development:

- During the Reporting Period, the Company has introduced several new platforms, including V-DEL technology platform, covalent compound library and molecular glue technology platform, and enhanced the peptide drug development platform. Furthermore, the Company has expanded the services offered by the antibody macromolecule development platform and made initial progress in establishing the XDC platform, that leading to a comprehensive development of drug R&D platform in a more effective way. In 2023, the Group invested nearly RMB128 million in R&D. In the future, Viva will provide more diversified and comprehensive R&D services with its first-class R&D team, high-end R&D laboratories and advanced technology platforms.

Responsible investment:

- The Group upholds the philosophy of responsible investment. With the support of the Group's professional post-investment management, a number of portfolio companies have achieved excellent progress and results. During the Reporting Period, the Group successfully incubated a fully integrated international radiopharmaceutical therapy company, the total number of pipeline projects increased to 222, of which 37 had entered the clinical stage. In addition, we realized investment exits or partial exits from six of our portfolio companies, and have seven potential exits for our portfolio companies in the next one to three years.

- In addition, the Group achieved breakthrough progress in overall financing and the introduction of strategic investors. We successfully introduced strategic investors such as Temasek, Highlight Capital, True Light Capital and Investment Corporation of Dubai with a total financing size of nearly US$225 million. The completion of the Group's financing endeavors and the successful introduction of strategic investors have propelled the Company towards a trajectory of smooth and rapid development.

Environmental:

- On the blueprint of emission reduction actions, the Group has set several specific short- and medium-term emission reduction targets in the CDMO segment, which have been achieved during the Year through the implementation of a number of highly effective green production measures. During the Reporting Period, the Group also added new short-term energy saving and waste reduction targets for the CRO segment to strengthen the Group's overall energy saving and emission reduction actions to meet the expectations of the industry and the society for green development. During the Reporting Period, in terms of energy saving and emission reduction, in addition to increasing the power generation of the photovoltaic system, the Group also strengthened the inspection and monitoring of the laboratories to ensure that equipment is promptly powered off when not in use. The Group has also increased its efforts in promoting the construction of waste-free factories, including optimizing solvent recovery facilities, expanding solvent tank areas, implementing material pipeline transportation, and enhancing solvent recovery rates.

Social:

- The Group always considers the health and safety of its employees as a top priority and strives to create a safe and stable workplace for its employees. During the Reporting Period, health and safety training has been provided to a total of 3,612 people. In particular, the Group conducted a total of 3,110 safety trainings and 54 fire drills, which effectively enhanced employees' safety awareness and ability to respond to emergencies. In addition, we have implemented an on-the-job occupational health check-up system to ensure that our employees receive a comprehensive occupational health check-up at least once a year. During the Reporting Period, we have not detected any employees with occupational contraindications or suspected occupational diseases.

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 fifth 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 23, 2024

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 has been considered and approved by the Board on April 23, 2024.

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 Chemical, Manufacturing, and Control (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, 2023, Viva Biotech has provided drug R&D and production services to 2,278 biotech and pharmaceutical clients around the world. We have invested and incubated 92 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.

2,278 biotech and pharmaceutical clients worldwide

2,077 employees worldwide

67 domestic and foreign patents

92 portfolio companies

Technology platforms

CRO Technology Platform

- Biophysical technology
- PROTAC/molecular glue technology platform
- Protein production, preparation and structure research
- Cryo-EM technology
- Membrane protein research technology
- Drug screening technology
- Bioassay
- CADD and AIDD
- Medicinal chemistry
- Pharmacokinetics
- Therapeutic antibody discovery technology
- XDC Technology Platform

CDMO Technology Platform

- API R&D platform
- Preparation R&D platform
- Production platform

ABOUT VIVA BIOTECH

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

Honors

Top 10 Most Influential CXO Companies

Top 100 Chinese Brands of Life Science Service Providers in 2023

Zhangjiang AI New Drug R&D Alliance

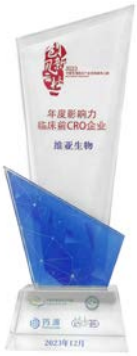
Influential Preclinical CRO Company of the Year

ABOUT VIVA BIOTECH

Top 20 Chinese Pharmaceutical CRO Companies in 2023

Top 20 Chinese Pharmaceutical CDMO Companies in 2023

Influential Preclinical CRO Company of the Year



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

PSCI PHARMACEUTICAL SUPPLY CHAIN INITIATIVE
Building responsible supply chains

SUSTAINABLE DEVELOPMENT STRATEGIES

ESG Strategies and Objectives

Sustainable development is fundamental to business growth and development. Viva Biotech upholds the principle of sustainable development to create long-term value for our employees, customers and shareholders. Taking into account the overall strategic development direction of the Group and our daily operations, we have formulated sustainable development strategies. In order to ensure that the Group's long-term vision and ESG mission are effectively and consistently implemented across the Group, we have developed a sustainability framework covering five aspects:

Communications with Stakeholders

Stakeholders' opinions are integral to sustainable corporate development. Viva Biotech has established a comprehensive and open communication channel, maintains effective communication and builds trust with all stakeholders in an open and transparent manner, listens to the stakeholders and actively responds to the common concerns of all parties in order to continuously improve and optimize its own sustainable development strategies and management methods, fulfill its corporate social responsibility, and create more value for its stakeholders.

During the Reporting Period, we reviewed and identified important stakeholders based on the two dimensions of "impact by the Group" and "impact on the Group", and ultimately confirmed the following seven types of stakeholders as the most important stakeholders of the Group. The following table sets forth the concerns of various stakeholders, as well as the communication channels and response of the Group.

SUSTAINABLE DEVELOPMENT STRATEGIES

Stakeholders	Focus issues	Communication channels and response of the Group
Government and regulators	• Compliance with laws and regulations • Promote employment • Drive local economic development • Address climate change	• Abide by laws and regulations and strictly implement the government's policy requirements • Actively participate in government-enterprise cooperation projects
Shareholders/investors	• Information disclosure • Financial performance • ESG governance	• Convene general meetings • Improve information disclosure and issue financial reports and other special reports • 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 • Privacy and security • Intellectual property protection • Efficient delivery • Increase R&D investment	• Improve the customer service mechanism • Conduct customer satisfaction surveys • Organize regular visits to customers • Regular teleconferences
Suppliers	• Fair trading • Win-win cooperation	• Improve the procurement and tender system • Strengthen supplier management and annual supplier evaluation
Business partners	• R&D platform and investment • Supply chain management	• Hold meetings for communication • Actively participate in industry cooperation and exchanges

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

Materiality Assessment

Materiality assessment can help Viva Biotech identify risks and opportunities related to sustainable development, understand where to make improvements, and enhance the transparency of the Report, so as to better share the progress of the Group's sustainable development with all stakeholders.

During the Reporting Period, we conducted a materiality assessment study with the assistance of third party consultants to review and report on our sustainability approach and reporting. The analysis reflected the material issues that the Group and its stakeholders considered to be significant and influential to the business, stakeholders and strategies. The process of materiality assessment is divided into four main steps: identification, ranking, confirmation and review.

SUSTAINABLE DEVELOPMENT STRATEGIES

Identification and update of material issues:

With reference to authoritative sustainability standards such as the ESG Reporting Guide of the Hong Kong Stock Exchange and the Global Reporting Initiative, as well as industry benchmarks and our current conditions, the Group made addition and consolidated based on the material issues previously identified. In the materiality assessment for the Year, the Group has changed the names of certain issues to align with those of international standards and rating agencies. In particular, we changed "Carbon emission management" to "Greenhouse gas emission and management"; "Employment compliance" to "Employee compliance, diversity and inclusiveness". In addition, we have analyzed "Use and management of resources" into "Energy use and management" and "Natural resource use and management", and also added a new topic of "Industry cooperation and co-construction of ecosystem" to address the industry benchmarks and our current conditions.

During the Year, a total of 21 material issues were identified and determined, including 5 environmental issues, 6 social issues, and 10 governance and operation issues.

Materiality ranking:

During the Year, we invited stakeholders and management of the Group to determine the materiality of the selected material issues by scoring. We prioritize issues that are likely to have a significant impact on our ability to operate and create sustainable ESG value based on their ratings in previous years and their significance in the Guide, ESG ratings and materiality mapping.

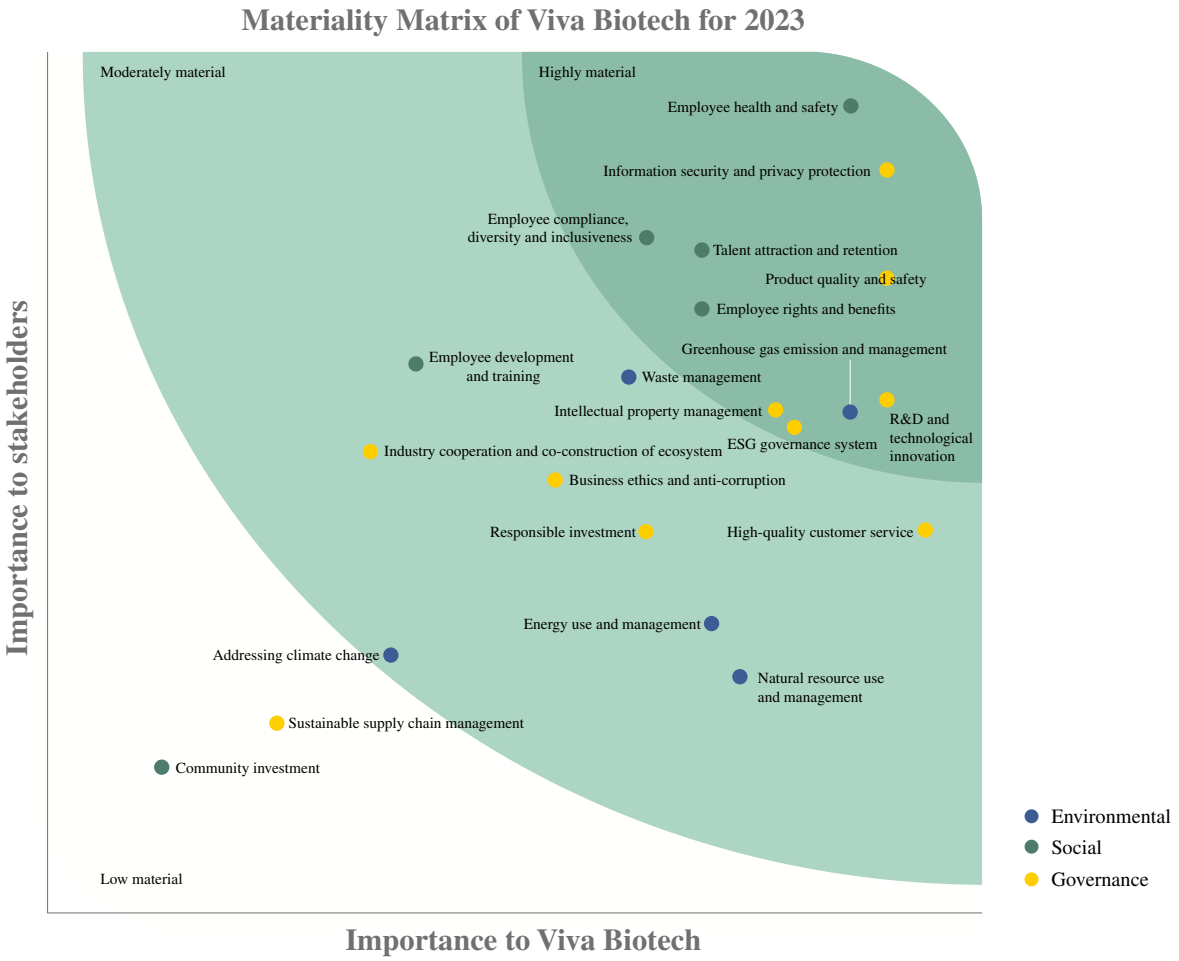
Issues are categorized into three groups, namely, high importance issues, moderate importance issues and low importance issues.

Confirmation and application:

We developed a materiality matrix from the two dimensions of “importance to Viva Biotech” and “importance to stakeholders”, and screened out highly material issues based on the scores of each issue. The results were submitted to the Group's management for discussion and review, to finalize the importance ranking of the material issues upon approval.

Review and approval by the Board:

The materiality matrix was submitted to the Board for review, to finalize the importance ranking of the material issues upon approval.



Based on the materiality matrix, during the Reporting Period, we identified a total of 10 high importance issues, 9 moderate importance issues and 2 low importance issues. The Report will respond to and disclose the material issues, particularly all the high importance issues.

SUSTAINABLE DEVELOPMENT STRATEGIES

Importance	Issues	Relevant sections	
High importance issues	Greenhouse gas emission and management	4.2.	Energy Conservation and Emission Reduction Actions and Measures
	Employee health and safety	5.3.	Occupational Health and Safety
	Employee compliance, diversity and inclusiveness	5.1. 5.2.	Employment Compliance and Employee Benefits Diversity and Inclusivity
	Talent attraction and retention	5.4.	Human Capital Development
	Employee rights and benefits	5.1.	Employment Compliance and Employee Benefits
	Information security and privacy protection	2.4.3	Privacy Protection and Information Security
	Product quality and safety	2.3	Quality Management
	R&D and technological innovation	2.1	Product R&D
	ESG governance system	1.2	ESG Governance
	Intellectual property management	2.2	Intellectual Property Management
Moderate importance issues	Natural resource use and management	4.4.	Resource Management
	Energy use and management	4.2.	Energy Conservation and Emission Reduction Actions and Measures
	Waste management	4.3.	Waste Management
	Addressing climate change	4.1.	Supporting the Climate Actions
	Employee development and training	5.4.	Human Capital Development
	High-quality customer service	2.4	Protection of Clients' Rights and Interests
	Industry cooperation and co-construction of ecosystem	3.2.	Promoting Industry Cooperation
	Responsible investment	3.1.	Responsible Investment
	Business ethics and anti-corruption	1.3	Business Ethics and Anti-corruption
Low importance issues	Community investment	5.5.	Community Responsibility and Contribution
	Sustainable supply chain management	2.5	Sustainable Supply Chain

Corresponding 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 United Nations Sustainable Development Goals ("**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 – Business ethics and anti-corruption	– Establish a robust and effective ESG governance system – Establish an anti-fraud working group to promote anti-corruption and honest practice
Innovation-driven approach to shared value creation		– R&D and technological innovation – Intellectual property management – Product quality and safety – High-quality customer service – Information security and privacy protection – Sustainable supply chain management	– Establish various pharmaceutical technology and R&D platforms to create a win-win ecosystem – Strengthen product quality management to ensure that drugs meet international safety standards
Industry leadership and multi-dimension empowerment		– Responsible investment – Industry cooperation and co-construction of ecosystem	– Implement due diligence to ensure that investments are made in a manner that is both economically beneficial and socially responsible
Environmental benefits and ecological protection		– Addressing climate change – Greenhouse gas emission and management – Energy use and management – Waste management – Natural resource use and management	– Develop various energy-saving and emission reduction measures to promote sustainable development – Adopt a series of measures to minimize emission of exhaust and pollutants and ensure proper treatment of the emissions
People-oriented and harmonious community		– Employee rights and benefits – Employee compliance, diversity and inclusiveness – Employee health and safety – Employee development and training – Talent attraction and retention – Community investment	– Committed to building a diversified and inclusive corporate culture and creating a fair and equal workplace – Develop various environmental hygiene management and safety management systems to protect the health and safety of employees

1. COMMITMENT TO RESPONSIBLE CORPORATE GOVERNANCE

Viva Biotech is committed to achieving a high standard of corporate governance in order to fully safeguard shareholders' rights and interests. The Board of the Company undertakes to strictly comply with the Corporate Governance Code, actively adopt effective corporate governance measures, and maintain steady operation of the Company with integrity as the cornerstone and following scientific and reasonable governance practices.

Corresponding UNSDG:

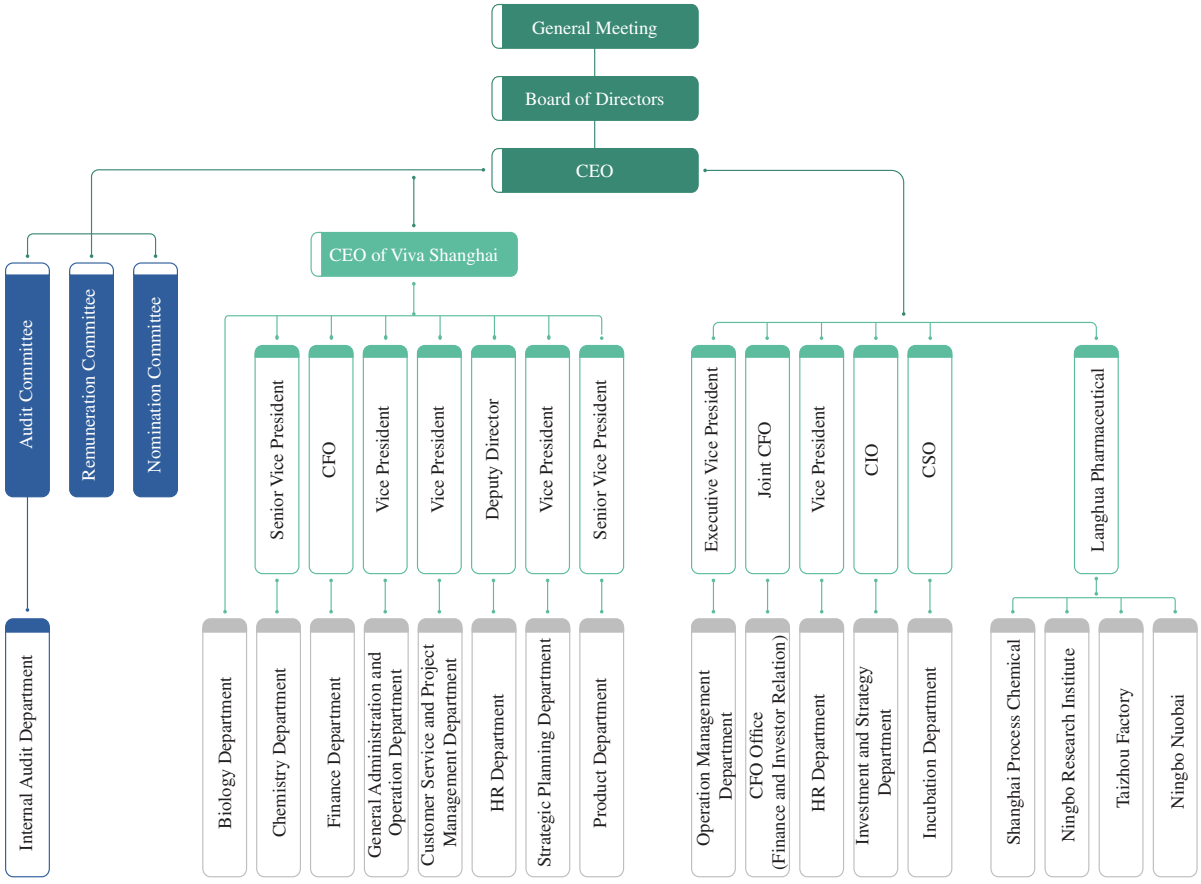
1.1 Corporate Governance

In order to effectively safeguard shareholders' interests, enhance corporate value, formulate effective business strategies and policies, and enhance transparency and accountability, the Group always adheres to and implements stringent corporate governance standards. 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. In June 2022, we adopted a special resolution to issue the second edition of the Articles of Association of Viva Biotech Holdings, as revised and restated (the "**Articles of Association**"). We have also formulated and implemented internal policies such as the Management Measures of the Audit Committee of the Board of Directors to ensure that the Group's business activities and decision-making procedures are properly and prudently supervised and its governance mechanism is constantly improving.

The Board of the Group has established the Nomination Committee, the Remuneration Committee and the Audit Committee, which provide direct and indirect guidance to the management. The Board formulates strategies and oversees their implementation and monitors the Company's operational and financial performance to ensure that sound internal control and risk management systems 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.

In the operation of the Board, we adopt and implement Board independence and diversity policies in strict accordance with the Articles of Association and other relevant regulations. When selecting the members of the Board, we will consider various factors, including professional experience, skills, knowledge, gender, age, cultural and educational background, ethnicity and term of office, to ensure that directors maintain an appropriate balance in diversity of skills, experience and perspectives, so as to enhance the effectiveness of the Board. In addition, we continue to strengthen the independence of the Board. The Audit Committee and the Remuneration Committee of the Group are chaired by independent non-executive directors. By improving governance capabilities of independent directors over the Group, we further enhanced the efficiency and quality of operations, promoted stable business development, and made contributions to employees, shareholders and society.

As at the end of the Reporting Period, the Board consisted of seven directors, including three executive directors, one non-executive director, and three independent non-executive directors; there was one female director. Looking ahead, the Board will continue to supervise the implementation of the diversity policy and review and adjust such policy as and when appropriate to ensure its continued effectiveness. We are convinced that the diversity of the Board will facilitate the Company's ESG performance and help achieve the Group's strategic objectives and sustainable development.



1. COMMITMENT TO RESPONSIBLE CORPORATE GOVERNANCE

1.2 ESG Governance

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 comprehensive governance structure covering four levels, namely the Board of Directors, the management, the ESG working group and the functional departments, and has formed an efficient work mechanism to implement the 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.

Board level	Board of Directors (Audit Committee)	• Being the highest responsible body for the top-down supervision of the Group's long-term ESG strategies and management policies • Provide leadership and oversight of the Company's overall strategies on ESG issues and ESG risk management • Approve ESG key issues and progress towards targets and ESG reports
Management level	Management team	• Assess the adequacy and effectiveness of the Group's ESG framework and provide risk analysis and decision making support to the Board of Directors • Oversee the implementation of the Company's medium and long term environmental objectives according to relevant plan • Participate in discussions on the determination of ESG material issues • Regularly review the effectiveness of the internal control system and continue to improve ESG management practices • Participate in the identification of potential climate-related risks and opportunities, and assess the impact of climate change through enterprise risk management reviews

ESG working group	ESG working group	• Identify key ESG and climate issues • Update and implement ESG and climate related management systems • Discuss and study the Company's medium and long term environmental objectives • Review ESG and climate related annual reports or related special reports and other ESG and climate management related duties
Functional departments	ESG-related functional departments	• Provide ESG related data and documents as requested by the ESG working group • Collaborate with the ESG working group in the implementation of ESG-related policies and objectives

Viva Biotech is committed to realizing the common value of all stakeholders. We have established an open and transparent communication mechanism with our stakeholders to identify, assess and manage ESG issues of key concern to our stakeholders through regular communication and receive regular reports from the relevant committees and the management. The Board of Directors receives and reviews the Group's ESG Report every year, and examines the progress of implementation against the established ESG-related objectives. The Board of Directors discusses on stakeholders' requests, identifies important ESG issues for the Company, reviews and evaluates the Company's own ESG performance, and continuously improves the sustainable development strategies and systems to enhance the performance of ESG governance.

1.3 Business Ethics and Anti-corruption

Viva Biotech always upholds business ethics and is committed to creating a fair, transparent and corruption-free business environment. We uphold the business ethics and act in strict accordance with relevant laws and regulations on corporate governance and the Corporate Governance Code. We observe the highest ethical and professional standards in our interactions with the Board members, employees, shareholders and investors, government and regulators, suppliers, clients, partners, communities and the public, and maintain a firm zero tolerance attitude towards any form of bribery, extortion, fraud and money laundering.

1. COMMITMENT TO RESPONSIBLE CORPORATE GOVERNANCE

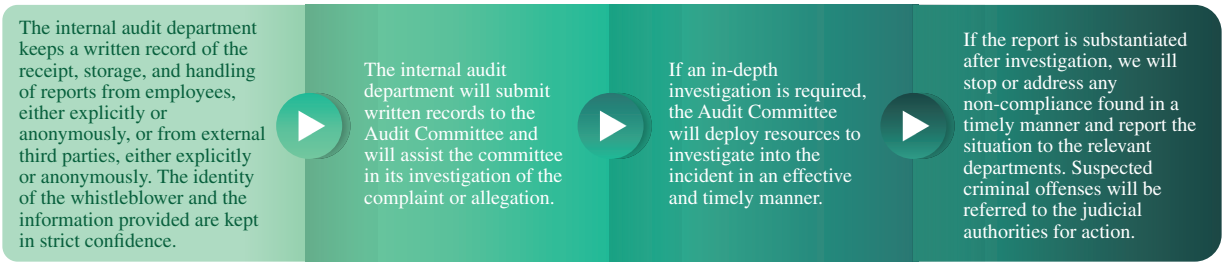
To effectively prevent and combat fraud, we have adopted a series of robust policies and measures and strictly comply with the laws and regulations of the countries or regions in which the Group operates, including but not limited to he Criminal Law of the People's Republic of China, the Company Law of the People's Republic of China and the Anti-unfair Competition Law of the People's Republic of China, to prevent social risks that may arise in day-to-day business operation. In addition, the Group has established an anti-fraud working group, and has formulated the Anti-money Laundering Management System and the Anti-fraud Management System which set out prohibited acts and corresponding penalties to promote the systematic and standardized management of anti-corruption activities.

To maintain a compliant and orderly business environment for the Company, the Group requires its employees to sign the Anti-bribery/Anti-corruption Commitment Letter upon joining the Group in order to eliminate any act of seeking undue benefits. Meanwhile, the management of the Company has set an example by taking the lead in complying with the rules and regulations of the Company through practical actions. During the Reporting Period, all relevant employees and the three executive directors have signed the commitment letter, which jointly maintains the positive business culture and image of the Company.

In addition, during the International Anti-Corruption Day in 2023, we held a series of anti-corruption and integrity trainings, covering anti-corruption related laws and regulations as well as a brief introduction to the Group's control procedures. These trainings helped our employees clarify the concept of corruption, define legal and illegal behaviors and ethical and unethical behaviors, so that they were fully aware of the consequences of being suspected of corruption and breach of business ethics. During the Reporting Period, a total of 1,478 employees and 3 directors participated in anti-corruption and integrity-related training.

Whistleblowing Mechanism

In order to collaborate with stakeholders in and out of the Group to supervise its responsibility fulfillment in respect of compliance requirements and business ethics, Viva Biotech has developed and advocated transparent and open whistleblowing procedures, and set up a number of whistleblowing channels including e-mail and others. Through such channels, employees at all levels and stakeholders who have direct or indirect economic relations with the Group may report cases or suspected cases of violation of professional ethics or fraud by employees of the Group. The telephone hotline also receives complaints about accounting, internal control or auditing matters. 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

1.4 Risk Management

The Group attaches great importance to information security and customer privacy protection. In order to strengthen information security management and safeguard data security and privacy, we have identified potential risks and formulated and implemented a series of information security management policies and measures, while continuously improving our information security management system and structure.

In addition to complying with the Company Law of the People's Republic of China, the Articles of Association and other internal policy requirements, we have formulated a series of internal control policies and procedures such as the Basic Standards for Internal Control of the Company, the Risk Management System and the Business Continuity Management, and carry out ongoing risk-oriented internal audit to timely identify and control the existing and new risk exposures.

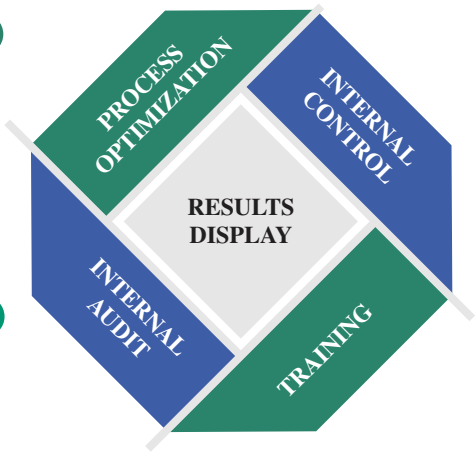
In terms of internal control, we further improved our internal control management system in accordance with the Anti-unfair Competition Law of the People's Republic of China, the Foreign Corrupt Practices Act (FCPA) of the United States and other laws and regulations. We also conducted fraud risk audit within the scope of annual audit to effectively prevent and manage compliance risks and support our sustainable development with honest and compliant practices.

In order to effectively manage and control risks, the Board of the Group is responsible for assessing and determining the nature and extent of risks that the Group is willing to take to achieve its strategic objectives, and establishing and implementing compliant and effective risk management measures and internal control systems. The Group's internal audit department works with the Audit Committee to strengthen the risk management and internal control system and is responsible for investigating into important matters relating to risk management and internal control. During the Reporting Period, we achieved positive results in process optimization, internal control, training and internal audit.

Continuous Optimization of Operation Processes

Improve efficiency by analyzing and optimizing the approval process of each business link of the company

Master the core control points, designate approvers to optimize repetitive and cumbersome approvals



Enhance Internal Control System

Continue to strengthen the overall internal control structure of the group and supervise the group's operating activities

Reduce risks and strengthen internal control and compliance

Tailored Internal Audit

Review and evaluate whether the internal controls and risk management of the organization's business activities are carried out in accordance with the system and process

Promote organizational improvement and governance to increase the achievement of goals

Anti-corruption Training

Carry out relevant training for employees in accordance with Anti-fraud Management System and use the management system as a compliance programmatic document

Effectively strengthen the anti-fraud cultural environment through a series of training measures

1. COMMITMENT TO RESPONSIBLE CORPORATE GOVERNANCE

The Group is committed to maintaining a systematic, transparent, institutionalized and responsive risk management system, and has adjusted its specific risk control strategies accordingly in light of the significant changes in the market and industry conditions in recent years, 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 of Directors in a timely manner, and we will assess the risks and formulate response plans to ensure the stable and safe operation of the Group.

Board of Directors	It manages and monitors the risk management and internal control systems
Audit Committee	It guides risk avoidance, and supervises and verifies the implementation and effectiveness of risk management and internal control systems
Internal Audit Department	It leads the risk management and internal control of day-to-day operations and establishes 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	They monitor and manage daily operational processes and procedures, identify major risks, conduct self-inspection, and implement main monitoring processes

2. INNOVATION-DRIVEN APPROACH TO SHARED VALUE CREATION

Standing at the forefront of drug research and development, Viva Biotech has been providing clients with one-stop integrated services from early-stage structure-based drug discovery to commercial drug delivery. Remaining honest and diligent, we consistently ensure the quality of products and services, continuously improve customer communication and satisfaction, and proactively build an open, win-win ecosystem for cooperation of biopharmaceutical innovators around the world.

Corresponding UNSDG:

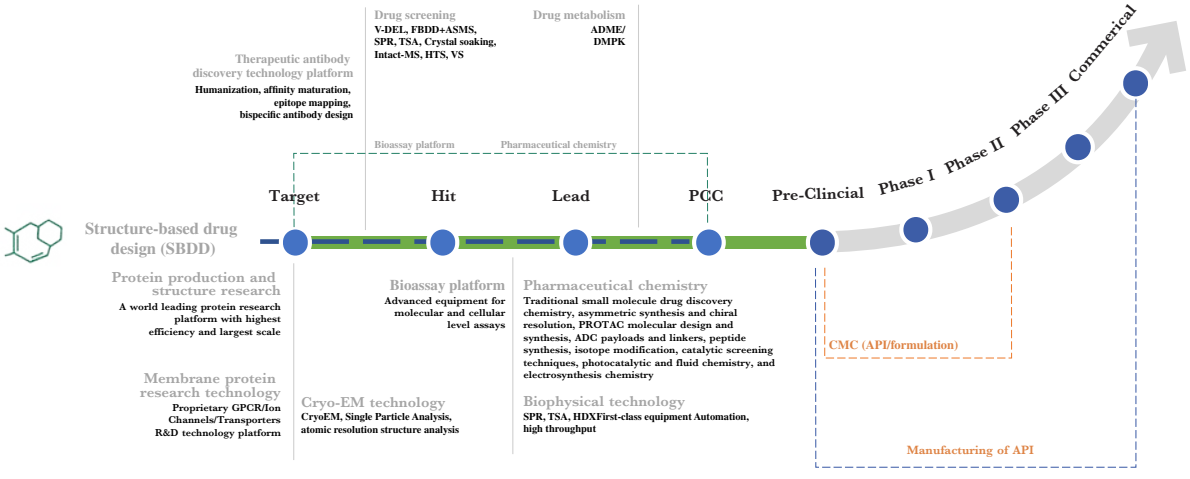
2.1 Product R&D

For CRO business, Viva Biotech proactively builds and strengthens capabilities in biophysical technology, protein research technology, medicinal chemistry, Cryo-EM technology, protein production, preparation and structure research, drug screening technology, pharmacokinetics, computer-aided drug design, etc. For CDMO business, the Group continuously presses ahead with automation transformation to further improve the level of production automation. We also continuously develop diversified pharmaceutical technology platforms including proteolysis targeting chimera ("**PROTAC**") technology platform, biological activity assay ("**Bioassay**") platform, therapeutic antibody discovery technology platform, API R&D platform, preparation R&D platform, production platform, etc.

With our first-class 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. Leveraging our unique strengths in SBDD, we will build up technical barriers, improve operational efficiency, and strengthen the construction of our one-stop drug R&D and production service platform. In addition, we will deepen the synergy between CRO and CDMO operations, and proactively build an open, win-win ecosystem for cooperation of biopharmaceutical innovators around the world, thereby contributing to the innovation and development of the biopharmaceutical industry.

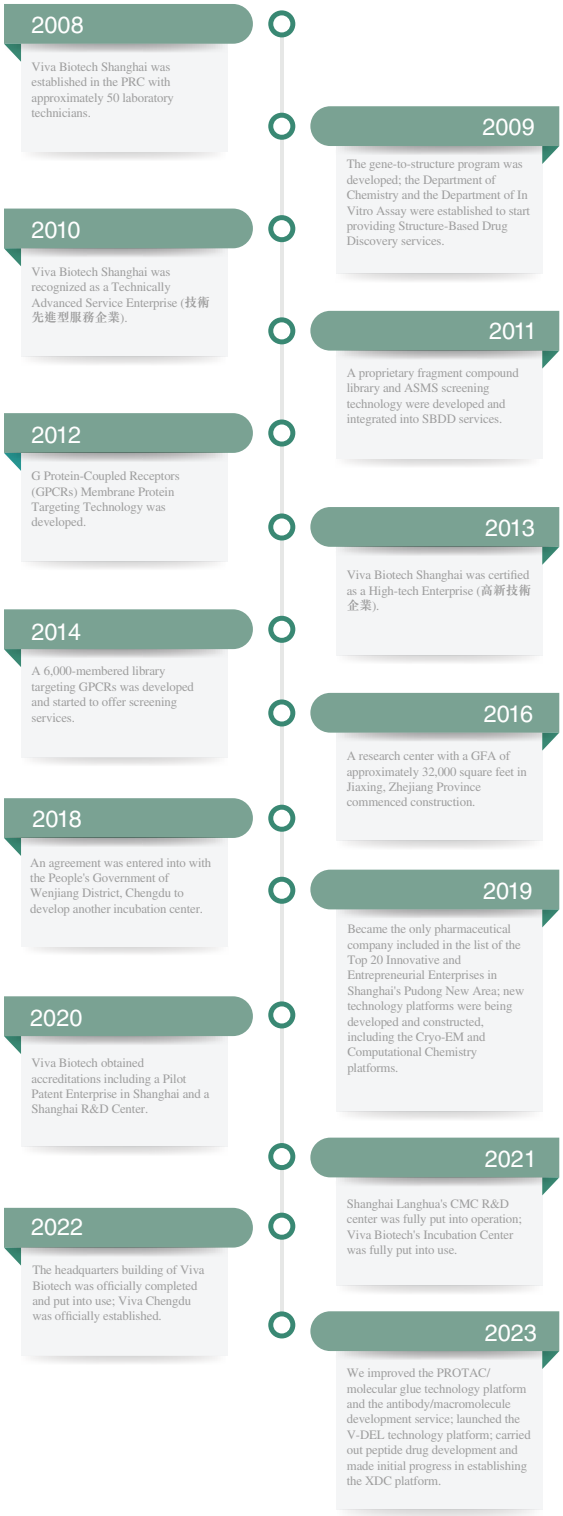
During the year under review, the Group established various pharmaceutical technology and R&D platforms and invested RMB128 million in R&D, including the following technology R&D projects:

PROTAC/molecular glue technology platform	Based on the existing PROTAC technology platform, we have further expanded the technology and methods for degradant research
Covalent compound screening platform	A screening platform with a library of 1,000 covalent compounds designed and synthesized in-house is available to external parties
V-DEL technology platform	Platform services cover DEL library custom synthesis, DEL screening, on-DNA hit compound expansion, multi-target selection recommendation and many other technologies
Antibody/macromolecule development service platform	Successfully established a rabbit monoclonal antibody platform and started to provide external services The platform screens antibodies and peptides using phage display technology; based on the dual-antibody technology platform, Viva Biotech formed significant technology cooperation with renowned international biopharmaceutical companies
Peptide drug development	A new peptide library based on phage display technology has been established and a cyclic peptide library based on V-DEL technology is under construction



2. INNOVATION-DRIVEN APPROACH TO SHARED VALUE CREATION

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 fully implemented the intellectual property management system and infringement accountability system in promoting a series of innovation-oriented business activities aiming for win-win cooperation. We strive to apply the industry's best practices in intellectual property protection 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, and 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/T 29490-2013), the Group has established a dedicated intellectual property department, and obtained the enterprise intellectual property management system certification during the Year. The intellectual property department, equipped with professional staff, undertakes the responsibilities of formulating intellectual property development plans, establishing a performance evaluation system for intellectual property management, supervising and evaluating other relevant management bodies, and managing the Company's intellectual property rights.

In addition, the Group has developed intellectual property control procedures covering the management of resources (including human resources, infrastructure, financial resources and information resources), basic management (covering aspects of 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 improvement). These measures are designed to fulfill the responsibility for intellectual property protection and ensure active and effective management of intellectual property rights at all stages, thereby protecting intellectual property rights from internal and external infringements.

Patent achievements in 2023

3	67	67
Patents granted during the Year	Total patents granted	Authorised

2. INNOVATION-DRIVEN APPROACH TO SHARED VALUE CREATION

2.3 Quality Management

2.3.1 Quality Management System

The Group adheres to the principle of "providing high-quality products with high standards", and persistently 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 special requirements for product health and safety in the pharmaceutical industry, we pay special attention to and comply with the Drug Administration Law of the People's Republic of China and its implementation rules, the Drug Production Quality Management Measures, 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 responsibility 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 regulate the risk assessment of genotoxic impurities in APIs in terms of raw materials, intermediates, reaction by-products, degradation products, product packaging materials as well as shared equipment and facilities, analyze whether genotoxic impurities are likely to be present in the product, entrust third parties to develop and validate the methods of detecting relevant impurities, 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 to specify the sample storage and management procedures, prevent the pollution or cross-pollution of samples in circulation which will affect the 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 intention 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. INNOVATION-DRIVEN APPROACH TO SHARED VALUE CREATION

2.4 Protection of Clients' Rights and Interests

2.4.1 Customer Services

The Group recognizes the importance of customer feedback as the key to enhancing service quality and is committed to providing excellent customer experience. In our marketing activities, we always 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 other local legal requirements and industry standards. To further optimize customer experience, we have developed comprehensive service processes, such as the Brand Strategy Management System and the Anti-unfair Competition and Fair Marketing Procedures, which stipulate that all marketing materials and forms shall be reviewed by the Company to ensure they are compliant, authentic, scientific and accurate. We strictly prohibit the release of deceptive or misleading promotional information and materials, so as to protect the legitimate rights and interests of customers. During the Reporting Period, the Group was not involved in any legal proceedings related to false marketing.

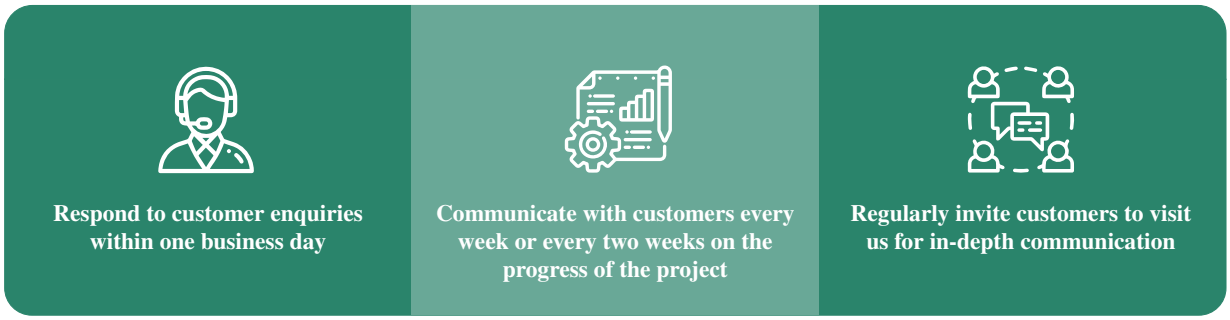
For business development, the Group always standardizes and improves its services with the highest standards in the industry. We have established a profound business foothold in CRO drug R&D services and CDMO R&D and production services through the years of accumulation and development. We have also built a well-established customer service system from drug R&D to production delivery. In order to ensure smooth communication with our customers, we have established diversified communication channels and mechanisms, including hotlines, mailboxes and complaints to the customer service department or the research and development department, so as to identify and rectify problems in customer service in a timely manner. In accordance with the Customer Questionnaire Management Process, we also conduct customer satisfaction surveys on a regular basis to objectively and comprehensively understand the customer's satisfaction with the Group's service quality, and to learn about the needs of the service recipients as well as their opinions and suggestions. The questionnaires mainly investigate the satisfaction of key and new clients with regard to service quality, response speed, intellectual property protection, service charges, solution design and project report to enable quick internal response, analysis and rectification. During the Reporting Period, we achieved a score of 97.6 in our customer satisfaction survey, reflecting our focus on customers and the achievements we have made in improving our customer service quality.

2.4.2 Customer Response Mechanism

Viva Biotech always adheres to the principle of customer first, and is committed to providing 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, the Group has formulated the Operational Procedures for Handling Customer Complaints and the Complaint Management Regulations to clarify the complaint handling process and feedback mechanism. Once we receive a customer complaint, we will quickly organize in-depth discussions with relevant department heads, project managers, internal control department and customer service department to analyze the cause of the complaint and formulate a practical 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 standard of our customer services. We recognize that only through continuous improvement and innovation 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 by us, ensuring a timely handling rate of 100%. This figure not only reflects our high efficiency and effectiveness in handling customer complaints, but also highlights our high priority and strong commitment to customer service quality.



2.4.3 Privacy Protection and Information Security

The Group always places the highest priority on information security and privacy of our stakeholders. To achieve this, we strictly comply with a series of laws and regulations on information security and privacy protection, such as the Cybersecurity Law of the People's Republic of China, the Data Security Law of the People's Republic of China and the Personal Information Protection Law of the People's Republic of China. 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, which aim to regulate the practices of employees in all aspects of 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, and actively preventing the risk of data breach and continuously optimizing and improving information security processes.

To further protect the privacy of our customers, we have formulated the Regulations on Confidentiality of Customer Information, which requires us to make every effort to ensure the safety and privacy of our patients 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 an informed and voluntary decision to participate on this basis. In this process, we always ensure 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 patient are fully respected and protected. During the Reporting Period, the Group was not aware of any complaints regarding infringement of customer privacy or loss of customer data.

2.5 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 Tenders and Bids. 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 access, selection, classification, acceptance inspection, evaluation and management.

2.5.1 Supplier Approval

For supplier management, the Group has formulated supplier admission specifications to specify the selection, admission, classification, acceptance inspection, evaluation and management of suppliers in order to ensure the stability and efficiency of the supply chain. After initial screening of the selected suppliers, the procurement department collects information from the target suppliers in order to further understand their capabilities and credibility. Based on the technical requirements of the materials to be procured, we provide samples or standards to the candidate suppliers and request them to make product sampling and quotation. The procurement staff will summarize the information and shortlist the suitable candidates. We categorize our suppliers into long-term suppliers, general suppliers and blacklisted suppliers based on their performance and evaluation results. In order to enhance the stability and consistency of our supply chain, we strive to select two to three reliable producers for each item of raw and auxiliary materials and packaging materials, and establish long-term and stable cooperation relationships with them. We strive to minimize the changes in suppliers to ensure long-term stable supply and minimize potential supply risks.

We resolutely combat unfair competition and are committed to maintaining a fair and equal partnership. According to the Law of the People's Republic of China on Bidding and Tendering, we have established the Bidding and Tendering Management System, maintain an equitable and fair attitude of cooperation, standardize the mode of operation and management of unified procurement, regulate the process of business cooperation, and establish 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 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	• The products supplied by the supplier must meet the requirements of human and environmental friendliness and the relevant EHS regulations • The products do not consume more energy or generate more waste during use • The supplier's packaging shall be simple, reasonable and biodegradable • The suppliers shall have certificates of ISO 9001 (Quality Management System), ISO 14001 (Environmental Management System) and ISO 45001 (Occupational Health and Safety Management System)
Green Logistics	We cooperate with logistic service providers to: • realize automation with the goal of improving the environmental friendliness of logistic services • achieve effective management of toxic and hazardous materials • 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.

2.5.2 Supplier Evaluation

The Group attaches importance to supplier management and regularly reviews the performance of its suppliers and implements an annual performance evaluation system with the aim of minimizing supply chain risks. The Group attaches importance to supplier management and regularly reviews the performance of its suppliers and implements an annual performance evaluation system with the aim of minimizing supply chain risks. For recurrent suppliers, we conduct rigorous annual evaluation to assess the overall performance of the suppliers in terms of quality, procurement and after-sales service, warehousing and production utilization, and based on the overall scores, we classify the supplier as a primary procurement supplier, a candidate procurement supplier, or a reduced procurement supplier. If a supplier has major problems, we will conduct reviews at any time and suspend cooperation with the supplier until the rectification is completed. For suppliers with whom we no longer cooperate, we will implement a suspension procedure. For suppliers with severe violations, we will permanently refuse to collaborate with them in order to uphold the reputation and interests of the Group. Through this evaluation system, we continuously optimize our supplier team to ensure the stability and efficiency of the supply chain.

2. INNOVATION-DRIVEN APPROACH TO SHARED VALUE CREATION

We improve the awareness and overall performance of suppliers in environmental protection and corporate social responsibility through multiple measures such as social responsibility questionnaires for suppliers and on-site audits. Our on-site social responsibility audit aims to conduct comprehensive assessment on the performance and measures of suppliers in the aspects of child labor, forced labor, working hours, salaries and benefits, health and safety, and environmental protection, and confirms whether suppliers in relevant aspects are in line with the Supplier Management Procedures and the Group's core values of green supply chain. Our procurement department, marketing department and quality department are jointly responsible for the supplier social responsibility review. We require all suppliers to observe the standards of business ethics, strictly control the quality standards in the process of delivering products and services, respect the rights and interests of employees, protect the equal pay and other employment rights, and strive to improve occupational safety and health of employees.

During the Reporting Period, we had a total of 2,565 cooperative suppliers, mainly for raw materials. The suppliers are mainly based in mainland China, totaling 2,348 suppliers, of which approximately 82% are in East China, 6% in Central China, 7% in North China and 5% in South China and Northeast China. All suppliers are subject to the Group's supplier engagement and management regulations.

Indicator	2022	2023
Total number of suppliers	2,309	**2,565**
Mainland China	2,262	**2,348**
– East China	1,930	**1,916**
– Central China	213	**148**
– North China	92	**159**
– South China and Northeast China	27	**125**
Overseas	47	**32**

3. INDUSTRY LEADERSHIP AND MULTI-DIMENSION EMPOWERMENT

For years, Viva Biotech has been committed to investment and incubation business with a focus on global biopharmaceutical innovation to contribute to the improvement of human health and well-being. The Company upholds the philosophy of responsible investment and accelerates the development and commercialization of new drugs with focus on our dual drivers – cash-for-service ("**CFS**") business and equity-for-service ("**EFS**") business. Meanwhile, Viva Biotech actively participates in industry exchanges and cooperation, establishes industry ecosystems, promotes domestic and international technology exchanges and cooperation, and jointly promotes the healthy and sustainable development of the biopharmaceutical industry.

Corresponding UNSDG:

3.1. Responsible Investment

Viva Biotech upholds the philosophy of responsible investment and is committed to meeting the pharmaceutical needs of patients around the world. We have integrated this philosophy into our dual drivers – CFS business and EFS business, with Viva Bio Innovator (VBI) as the core division to build a global incubation and growth platform for innovative biopharmaceutical companies. In our pre-investment and post-investment management processes, we conduct rigorous due diligence, participate in the decision-making of our portfolio companies, and systematically analyze ESG factors. Our investigative analysis focuses 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 and well-being of patients around the world.

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 always the key to long-term development of the Company. VBI focuses on identifying, investing in, and serving innovative biopharmaceutical concepts with medical value around the world. Leveraging on Viva Biotech's profound experience and technological advantages in the field of new drug R&D, VBI not only provides financial support, but also strives to optimize a series of post-investment value-added services. These services include R&D guidance, site and logistic support, industry partnership, and investment and financing, aiming at facilitating the "zero-to-one" transformation of new drug R&D and contributing to the success of commercialization. Through comprehensive post-investment management support, we facilitate the continuous growth of biopharmaceutical companies, contributing to the development of healthcare industry.

Capital	Provide subsequent fundraising and financial support
Industrial connectivity	Assist in utilizing internal or external resources (VC, MNC, CDMO) Early warning of market dynamic changes
Operation	Laboratories and offices in Shanghai, Jiaxing, Chengdu, Suzhou and other cities 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 Our scientific consultants provide professional advice on scientific research and drug development expertise

3. INDUSTRY LEADERSHIP AND MULTI-DIMENSION EMPOWERMENT

Portfolio company added in the Year

No.	Company Name	Type	Indications/Primary Technology/Business
1	Full-Life Technologies	Stock-for-stock	A fully integrated international radiopharmaceutical therapy company with cancer as its primary pipeline indication

Phenomic AI enters into strategic partnership with two major pharmaceutical companies for joint research collaboration on cancer therapy

PHENOMIC.AI

In November 2023, Phenomic announced a strategic collaboration with Boehringer Ingelheim to discover new targets for cancer therapy. Boehringer Ingelheim will be responsible for target introduction, non-clinical and clinical development, and commercialization, while Phenomic will receive an upfront payment of approximately US$9.0 million and will be eligible to receive an additional payment of over US$500 million. In addition, Phenomic has formed a strategic research collaboration with Astellas, through its subsidiary Xyphos, to jointly explore antibodies developed by Phenomic to enhance the therapeutic efficacy of cellular therapies for solid tumors. This collaboration will drive further breakthroughs for Phenomic in the field of cancer therapy.

3. INDUSTRY LEADERSHIP AND MULTI-DIMENSION EMPOWERMENT

Latest clinical results of Arthrosi's globally innovative gout drug AR882 for dissolving tophus presented at the American College of Rheumatology Convergence 2023

The latest clinical results of AR882, a globally innovative gout drug developed by Arthrosi Therapeutics, a portfolio company of Viva Biotech, were presented at the recent American College of Rheumatology Convergence. The study showed that AR882 demonstrated significant safety and efficacy in treating gout patients by lowering uric acid levels, reducing tophus, lessening the burden of uric acid crystals, and decreasing the incidence of acute gout attacks. Compared to existing therapies, AR882 is more efficacious. The release included an oral presentation and poster presentations of R&D results, highlighting the clinical breakthroughs of AR882 and creating new potentials in gout treatment.

CDE clinical trial approval for Q-1801 project of QureBio

QureBio, a portfolio company of Viva Biotech, announced that its independently developed Q-1801 project received the notice of approval for clinical trials in China from the CDE on January 11, 2023, following the approval for clinical trials from the FDA. Q-1801, developed by QureBio utilizing its antibody engineering technology platform, is the world's first bispecific antibody targeting both SIRP α and PD-L1.

Genhouse Bio's SHP2 inhibitor GH21 combined with EGFR inhibitor osimertinib approved for clinical trial

In November 2023, Genhouse Bio, a portfolio company of Viva Biotech dedicated to developing the next generation of global anti-tumor small molecule drugs using a combination technology platform, announced that its novel protein tyrosine phosphatase SHP2 allosteric inhibitor GH21, in combination with the orally administered epidermal growth factor receptor (EGFR) tyrosine kinase inhibitor osimertinib, has received approval for clinical trial in China. Based on in vitro and in vivo pre-clinical studies, GH21, when used as a monotherapy and/or in combination with other anti-tumor drugs, is effective against various solid tumors. Currently, GH21 is undergoing Phase I/II clinical trials in both China and the United States, with the clinical trials in the United States led by strategic partner HuYa Bio-International. GH21 has demonstrated favorable pharmacokinetics and safety profiles, and has shown efficacy even at low doses.

3.2. Promoting Industry Cooperation

Viva Biotech is committed to building a one-stop platform for drug discovery, production and cooperation through in-depth exploration in technology, model and cooperation. To this end, we proactively organize and hold relevant forums, aiming to build a bridge for efficient communication and exchange in the industry. At the same time, we actively conduct in-depth discussions with industry experts on new trends and standards in the industry, and strive to build a sound industry ecosystem, thereby promoting the in-depth integration of domestic and international cooperation and exchanges.

2023 Annual Conference of SAPA-China

At the Annual Conference of SAPA-China held in November 2023, Viva Biotech's executive team actively participated in the event and shared the Company's latest developments in small molecule drug discovery and biopharmaceutical investments. Dr. Cai Jianhua, our senior vice president, gave an in-depth discussion on Viva's efforts in addressing the challenges of small molecule drug discovery and development and its future trends in the roundtable forum. Dr. Dai Han, Chief Innovation Officer and Head of VBI, hosted a forum on biopharmaceutical investment to discuss with guests on investment opportunities and challenges under the new trend. At the conference, Viva showcased several advanced technologies, including the PROTAC/molecular glue technology platform, and received positive feedback from the attendees in a vibrant and energetic atmosphere. The annual conference demonstrated Viva's professional strength and foresight in new drug discovery and biopharmaceutical investment.

3. INDUSTRY LEADERSHIP AND MULTI-DIMENSION EMPOWERMENT

Viva Biotech and DP Technology join forces to advance RNA-targeted small molecule drug discovery based on AI4S

In May 2023, the Group and DP Technology Co., Ltd. announced that they have entered into a strategic partnership to fully integrate advantageous resources and work closely together to advance RNA-targeted small molecule drug discovery based on AI4S, given the synergies and complementarities of their respective businesses and technologies.

3.3. Empowering Industry Development

Viva Biotech has always been committed to its original 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 at home and abroad. During the Reporting Period, we realized full or partial exits from six of our portfolio companies, and part of the cash and investment income received from the exits will be used to facilitate the Company's better development in the future. Through these efforts, we aim to help the companies realize sustainable development and contribute more to the health of the people.

Viva Biotech successfully introduces strategic investors with a total financing size of US$225 million

During the Reporting Period, the Group achieved breakthrough progress in overall financing and the introduction of strategic investors. We successfully introduced strategic investors such as Temasek, Highlight Capital, True Light Capital and Investment Corporation of Dubai with a total financing size of nearly US$225 million. This will bring renewed vigor to the Company and support its pursuit of streamlined operations and sustainable growth.

Viva remains committed to innovation as its core, enhancing cutting-edge technology platforms and unleashing the value of its globally leading drug discovery service platform. In the future, Viva will continue to provide comprehensive drug discovery and production services, and leverage its first-in-class drug development expertise and experienced team of scientists to offer differentiated and customized end-to-end services to global biotechnology and pharmaceutical companies.

4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

As an active player in the global biopharmaceutical industry, Viva Biotech always regards environmental benefits as a core element in creating business value. We remain highly vigilant, focus on the impact of our operational activities on the ecological environment, and proactively take measures to meet the industry and society's expectations for green development. In addition, the Group closely monitors the environmental impact of its operations, strictly adheres to all applicable environmental laws and regulations, and actively responds to the calls and standards of the industry and society for sustainable growth.

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. Countries worldwide have set carbon neutrality targets, such as China's "3060" goal, demonstrating their determination to address climate change. As a socially responsible entity, the Company plays an increasingly vital role in addressing climate change. We closely monitor climate change trends, identify legal and policy transition risks in our business development, as well as physical risks associated with rising temperatures and extreme weather events, and have initiated preliminary assessments of potential financial impacts and risk mitigation costs. Following the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), we disclose climate risks and opportunities, and took active actions in 2023 to contribute towards building a climate-friendly society.

4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

Risks	Aspect	Risk description	Potential financial 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 – Increase in employee insurance and subsidies – Decrease in revenue	The administrative department closely monitors extreme weather conditions and promptly issues relevant emergency responses. In the event of severe thunderstorms or strong winds, we remind employees to take safety precautions and make adjustments to office arrangements to effectively safeguard employees' lives and properties
	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) Sustained high temperatures may also cause problems with the quality of drugs	– Increase in operating costs	Continuously improve the Company's equipment to increase the energy efficiency of the cooling and storage equipment Regularly review the process and condition of drug storage to ensure that the temperature does not affect the quality of the drugs

Risks	Aspect	Risk description	Potential financial impact	Our actions
Transition 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	Regularly monitor the development trend of laws and regulations to ensure compliant operation
	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 – Decrease in revenue	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
	Reputation	Failure of the Company to fulfill 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 – Reduced investment	Enhance communication with stakeholders, disclose relevant information in a timely manner, and ensure that stakeholders have the right to information on the status of the Company 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	Risk description	Potential financial 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	The Group actively identifies and nurtures promising drug research and development companies through the dual drivers of CFS and EFS, with a view to jointly exploring the market and sustainable development of the biopharmaceutical industry

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, we 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.

4.2. Energy Conservation and Emission Reduction Actions and Measures

4.2.1 Blueprint for Emission Reduction Actions

The primary source of carbon emissions for Viva Biotech is from our CDMO operations, specifically the drug production processes of Langhua Pharmaceutical. To demonstrate our commitment to creating a sustainable environment, Langhua Pharmaceutical has established several specific short-term emission reduction targets, taking into account the methodology of the Science Based Targets initiative (SBTi). These targets focus on greenhouse gas emissions reduction, water conservation, and waste reduction. To achieve these targets, we are implementing a comprehensive set of measures aimed at promoting green production, operations, and development across different time frames.

Type	Target	Target year	2023 progress
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 47% 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 59% 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 65% 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
Energy	Reduce electricity consumption and expect to save electricity of approximately 115 MWh
Solid waste	Reduce disposal of spent reagents by 20 kg

4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

4.2.2 Environmental Management Approach

Viva Biotech is committed to maximizing environmental benefits while ensuring its stable economic development, in an effort to reduce the adverse environmental impact of its development. The Group strictly abides by the Environmental Protection Law of the People's Republic of China, the Law of the People's Republic of China on Environmental Impact Assessment, the Water Pollution Prevention and Control Law of the People's Republic of China, the Atmospheric Pollution Prevention and Control Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, the Law of the People's Republic of China on the Prevention and Control of Noise Pollution, the Law of the People's Republic of China on the Prevention and Control of Soil Pollution, the Regulations on the Management of Medical Waste and other environmental laws, regulations and industry standards to ensure that the Company's operations are in harmony with environmental protection as it pursues a path of sustainable development. During the Reporting Period, the Group was not aware of any severe violations of laws and regulations in relation to environmental protection.

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 and proper handling of environmental management issues in production and operations processes. The rules regulate in detail the specific operating procedures in our operations and provide strong guidance for the execution of environmental management work. In order to strengthen environmental management during production and operation, we have set up a dedicated environment, health and safety ("**EHS**") department. This department is responsible for emissions management, resource utilization management, and pollution prevention to ensure that all environmental indicators meet the required standards. In addition, we encourage our companies to actively promote the certification process of environment-related systems, so as to jointly reduce environmental impacts and maintain environmental quality.

With regard to the identification and evaluation of environmental factors, we have formulated the Procedures for Identification and Evaluation of Environmental Factors. The procedures adopt a standardized process for identifying, evaluating and managing environmental factors to ensure that the Company is able to control important environmental factors in a timely manner and promote the development and implementation of corresponding improvement plans. This helps us identify potential environmental risks more accurately and take effective measures to address them.

In terms of daily office management, we have issued the Energy Conservation and Emission Reduction Initiative and Green Office Initiative to our staff to promote a series of green office measures. We encourage our staff to take the lead in promoting energy and resource conservation and creating a greener and more environmentally friendly office environment. We also actively carry out environmental protection training and promotion through various channels and forms.

In terms of environmental management system construction, during the Year, Langhua Pharmaceutical achieved ISO 14001 system certification and obtained a low-risk rating in the audit of the ES 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.

4.2.3 Green Production

Viva Biotech has taken proactive measures to address climate change and reduce greenhouse gas emissions by reducing energy consumption in the production process 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.

4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

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, and provide effective data for Carbon Disclosure Project (CDP) statements.

Renewable Energy

Photovoltaic system is an important part of the Group's sustainable development. Based on the existing rooftop photovoltaic infrastructure, we have further expanded the use of solar power. Factory photovoltaic facilities of 10,000 square meters were completed and successfully put into operation in the Year, which significantly increased the amount of solar power generation. During the Year, solar power generation amounted to 101,863 kWh, an increase of 68% compared to last year. Looking forward, we will continue to promote the development of solar power generation by installing more rooftop photovoltaic panels and adopting solar-powered street lamps in order to make unremitting efforts to realize the green and low-carbon goal.

Equipment Optimization

We prioritize the use of energy-saving fluorescent tubes and install an intelligent lighting control system to ensure that the lights are only activated when needed, thus effectively saving energy. We strongly promote the use of new energy vehicles, including forklifts, commercial vehicles, and group shuttles, all of which are powered by new energy sources to further reduce carbon emissions. In the laboratory, we have installed new ventilation storage cabinets that can save 40% of electricity compared to traditional equipment, equivalent to saving 240,000 kWh of energy consumption, significantly reducing the laboratory's energy consumption.

In order to further optimize energy utilization and enhance environmental benefits, we adopt an intermittent operation strategy for the waste liquid incinerator. It operates efficiently when there is a need to treat waste liquids and remains turned off when not required, effectively reducing unnecessary energy consumption. Additionally, we have replaced the steam main regulating valves throughout the plant to reduce safety valve leaks caused by excessive pressure in the main pipes. This not only improves production safety but also reduces energy waste. Furthermore, we have implemented material pipeline transportation to reduce exhaust emissions during material transfer, thus achieving the goal of emission reduction. We have also introduced a new type of regenerative thermal oxidizer (RTO) emission reduction equipment, which reduces fuel consumption through waste heat recovery, further enhancing the comprehensive benefits of energy saving and emission reduction.

New energy shuttle bus

New energy forklift

4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

Energy Saving Actions

We have developed a series of policies to encourage energy-saving and environmentally friendly behaviors. For air conditioning usage, we have implemented 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. Additionally, we promote power-off during idle times and set appropriate air conditioning temperatures. Through real-time electricity monitoring software, we can monitor the factory's electricity usage and load conditions in real-time. We also encourage employees to choose public transportation for commuting, aiming to reduce gasoline consumption. Furthermore, we have strengthened 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.

4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

During the Year, we found during our environmental inspection that the heating function of the rotary evaporator in the laboratory was not switched off when not in use, resulting in an energy consumption of up to 1,000 kWh per day. In response, we have notified the staff concerned and requested them to turn off the heating immediately after use to save energy. At the same time, we have included this item in our regular weekly inspection to ensure that energy-saving measures are effectively implemented.

During the Reporting Period, the types of energy used by Viva Biotech in production and laboratories were mainly purchased electricity and heat. We use diesel in self-power generation and regenerative thermal oxidizers, and some of our own vehicles use petrol.

4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

Indicator	2022	2023	Unit
Greenhouse gas emissions			
Direct emissions from energy use (Scope 1)[1]	1,404.35	**1,466.05**	tCO_2e
Indirect emissions from energy use (Scope 2)[2]	45,376.87[(5)]	**45,285.23**	tCO_2e
Forestry emission reduction	1.73	**1.47**	tCO_2e
Total greenhouse gas emissions[3]	46,779.49[(5)]	**46,731.28**	tCO_2e
Greenhouse gas emission intensity	19.66[(5)]	**21.68**	tCO_2e per RMB million of revenue
Energy consumption			
Petrol consumption	28,128.00	**31,937.00**	liter
Diesel consumption	496,110.00	**497,017.00**	liter
Renewable energy[4]	62.99	**101.86**	MWh
Total direct energy consumption	5,453.78	**5392.37**	MWh
Direct energy consumption intensity	2.29	**2.50**	MWh per RMB million of revenue
Consumption of purchased electricity	47,659.52	**45,442.40**	MWh
Consumption of purchased heat	45,951.17[(5)]	**48,912.73**	MWh
Total indirect energy consumption	53,820.95	**94,355.13**	MWh
Indirect energy consumption intensity	22.62	**43.77**	MWh per RMB million of revenue
Total energy consumption	59,274.73	**99,747.50**	MWh
Energy consumption intensity	24.91	**46.27**	MWh per RMB million of revenue

1 The greenhouse gas emissions (Scope 1) were calculated with reference to the Accounting Methods and Reporting Guidelines for Greenhouse Gas Emissions from Enterprises in Other Industries (Trial) issued by the National Development and Reform Commission.

2 Among the greenhouse gas emissions (Scope 2), the electricity emissions from production were calculated with reference to the Notice on the Preparation of the Management of Corporate Greenhouse Gas Emissions Reporting from 2023 to 2025 issued by the Ministry of Ecological Environment of the People's Republic of China in 2022; the electricity emissions from non-production areas were calculated with reference to the Average Carbon Dioxide Emission Factors for 2011 and 2012 of Regional Power Grids in China published by the State and the Notice on the Adjustment of the Relevant Emission Factor Values of the City's Greenhouse Gas Emissions Accounting Guidelines issued by Shanghai Municipal Bureau of Ecology and Environment in 2022. The thermal emission data was calculated based on the default value of carbon dioxide emission factor for thermal power in the accounting guidelines of various industries published by the National Development and Reform Commission.

3 Due to the limitation of the calculation method, the indirect emissions from energy use (Scope 2) represented by the data include only carbon dioxide emissions and exclude other types of greenhouse gas emissions.

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

5 We have restated the scope 2 greenhouse gas emission data for 2022 due to the change in the statistic record for the purchased heat.

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 management systems. Through policies such as the Waste Gas Management Procedures, the Operating Procedures for Waste Gas Treatment and the Waste Gas Absorption Management System, we specify the treatment methods for various types of waste gases, and strive to achieve recycling and harmless treatment of waste gases, thereby effectively reducing the emission of waste gases. In addition, we have newly developed operating rules for three-chamber RTOs and the procedures for resin-based adsorption of halogen waste gas, to ensure stable, effective and safe operation of relevant facilities and process systems for up-to-standard waste gas emissions. These initiatives not only help to protect the environment, but also lay a solid foundation for sustainable business development.

We have taken a series of effective measures to reduce waste gas emissions. The waste gases from the drug production process are first treated with a three-chamber RTO, which not only significantly improves the Volatile Organic Compounds (VOC) purification efficiency, but also drastically reduces the exhaust temperature of the purified gases. We have optimized the expansion joints of the waste gas mains to effectively reduce the risk of waste gas leakage. In addition, the waste gas vents are equipped with a VOC online monitoring system, which immediately sends an alarm message to the management personnel once the monitored parameters exceed the limit values. In the CRO process, laboratory waste gases are collected and treated with activated carbon before discharge to ensure that the waste gases meet the emission standards. We also have an annual environmental monitoring program to ensure that the waste gas emissions continue to meet environmental requirements.

Three-chamber RTO facility

4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

Indicator	2022	2023	Unit
Waste gas emissions			
VOCs	8,264.15	**5,713.81**	kg
Sulfur oxides (SO_x)	264.95	**517.7**	kg
Nitrogen oxides (NO_x)	1,028.00	**3,346**	kg
Vehicle air pollutant emissions[5]			
Carbon monoxide (CO)	857.22	**683.54**	kg
Hydrocarbons (HC)	43.44	**36.09**	kg
Nitrogen oxides (NO_x)	1,665.50	**1,465.22**	kg
Inhalable particulate matter (PM_{10})	54.24	**40.66**	kg
Fine particulate matter ($PM_{2.5}$)	48.88	**45.08**	kg
Sulfur oxides (SO_x)	1.19	**1.25**	kg

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, Operational Procedures for Wastewater Treatment and Wastewater Treatment Facilities Management System. We strictly implement the national standards for wastewater discharge, collect and treat all kinds of wastewater to ensure up-to-standard discharge, thus effectively controlling water pollution and reducing the impact on surrounding water bodies. In addition, we discharge wastewater into the municipal pipeline network after appropriate treatment in accordance with the requirements of the local government and carry out regular monitoring to eliminate any non-compliant discharge.

5 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. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

In the CRO segment, we collect production wastewater and engage qualified treatment companies to ensure proper treatment of wastewater. In addition, domestic wastewater is also treated in septic tanks before being discharged into the pipeline network. Wastewater outlets are also equipped with an online Chemical Oxygen Demand (COD) monitoring system, which sends alarm messages to the management personnel to check the relevant outlets in case the parameters exceed the limits. Moreover, our new wastewater treatment facility in Chengdu plant has been put into operation during the Year, with a treatment capacity of 400 tons per day, further enhancing the wastewater treatment capacity.

In the CDMO segment, we adopt appropriate 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. Workshops are equipped with wastewater collection tanks and pumps to ensure that wastewater is effectively collected and pumped through dedicated pipelines to wastewater treatment facilities for treatment. In addition, we have implemented measures to separate rainwater and wastewater, clean water and wastewater, and high-pollution wastewater and low-pollution wastewater, further enhancing the efficiency and quality of wastewater treatment.

Indicator	2022	2023	Unit
Wastewater discharge			
Industrial wastewater	165,087.16	**168,336.30**	tons
– COD	10.86	**13.75**	tons
Ammonia nitrogen	0.16	**0.36**[6]	tons
Domestic sewage	81,306.91	**50,558.40**	tons

6 In 2023, testing devices for ammonia nitrogen were installed in the Zhoupu plant, resulting in an increase in the data for the Year.

4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

4.3.3 Hazardous Waste Management

We attach great importance to the management of hazardous waste and have established a series of strict policies and procedures in this regard. We follow the management principles of "unified collection, classified disposal, centralized incineration and elimination of hidden dangers" to effectively manage hazardous waste. We strive to achieve the goal of "reduction, recycling and harmless treatment" of hazardous wastes, minimize the hazardous wastes generated and turn them into renewable resources through scientific methods and advanced technology, while ensuring that the treatment process is environmentally friendly. We have formulated the the Hazardous Waste Management Measures and the Procedures for Solid Waste Management with the aim of strengthening hazardous waste management and protecting the ecological environment and human health. In our operations, we strictly abide by 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, the Technical Guidelines for the Formulation of Hazardous Waste Management Plans and Management Records, the Management Measures for the Transfer of Hazardous Wastes, the Technical Specifications for the Application and Issuance of Pollutant Discharge Permits – Industrial Solid Wastes (Trial), and other relevant laws and regulations to ensure legal and compliant disposal.

In the CRO segment, we engage qualified third-party companies for professional disposal of solutions and other hazardous wastes generated in our chemical laboratories to ensure that the wastes are disposed of in a safe and compliant manner. In addition, we have defined the work responsibilities of relevant departments and staff in key positions, and strictly control the management of personnel in the process of inspection, warehousing, storage, collection and transportation of hazardous wastes to prevent any possible negligence. To ensure the accuracy and safety of the disposal process, 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. For the small amount of hazardous waste in domestic waste, we follow the domestic waste management regulations of the places where we operate to classify and dispose of such waste as harmful waste. 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.

In addition, in order to reduce the generation of waste reagents, we have set up a dedicated reagent recycling bank during the Year to recycle and reuse reagents with reusable value. This initiative not only helped to reduce the generation of waste, but also facilitated the reasonable use and conservation of resources.

In the CDMO segment, Langhua Pharmaceutical actively implements intelligent supervision over hazardous waste to ensure safe and efficient waste treatment. In order to improve solvent recovery rate, the Company replaced the aged condenser, which not only reduced solvent loss, but also 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 wastewater and 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 that the plant operates in compliance with safety standards and to minimize the risk of hazardous waste leakage.

New condenser

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	2022	2023	Unit
hazardous waste			
Waste fuel and chemicals[7]	5,289.22	**3,120.50**	tons
Organic waste liquid	338.04	**400.88**	tons
Laboratory solid waste and glass	127.05	**97.80**	tons
High-boiling residue	2,265.65	**0**	tons
Waste salt	2,394.95	**0**	tons
Sludge	543.33	**351.67**	tons
Other hazardous waste[8]	1,323.19	**5,414.26**	tons
Total amount of hazardous waste	12,283.16	**9,350.40**	tons
Hazardous waste intensity	5.16	**4.34**	tons per RMB million of revenue

7 Waste fuel includes waste acid, waste alkali, waste organic solvent, etc.

8 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

We attach great importance to the management of non-hazardous waste and have formulated the Procedures for Solid Waste Management in this regard. The procedures regulate the collection, classification and disposal methods of various types of solid waste within the Group, ensuring that all operations comply with national laws and regulations. Solid wastes are categorized into recyclable general solid wastes, non-recyclable general solid wastes, recyclable hazardous solid wastes and non-recyclable hazardous solid wastes, and we handle them in strict accordance with the categorization.

Type	Solid waste	Storage and disposal method
Recyclable general solid wastes	**Waste paper:** office paper, old books, old newspapers, carton boxes, etc. **Plastics:** packaging plastic wrap, waste rubber, waste plastic drums, etc. **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. 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

Recycling bin

4. ENVIRONMENTAL BENEFITS AND ECOLOGICAL PROTECTION

Langhua Pharmaceutical initiated the "Waste-free Factory" project in 2021, aiming to reduce pollutant generation from the source through a series of measures including pollution prevention and control of industrial solid waste and domestic waste, energy conservation and emission reduction, improvement of organizational management, rules and regulations, and strengthening science education. Through these efforts, Langhua Pharmaceutical strives to achieve strict control over the entire production process and promote the comprehensive utilization of waste, making a positive contribution to sustainable development. During the Reporting Period, we carried out key tasks as follows:

1: The optimized expansion joint of the waste gas main reduces the risk of waste gas leakage;

2: The expansion of the solvent tank area and the pipeline transportation of materials reduce the emission of waste gas in material transfer;

3: Optimized solvent recovery facilities, improved solvent recovery rates, and reduced solvent losses. The losses will be emitted in form of waste gas or solid waste.

4: Increased efforts in promoting the construction of waste-free factories

In addition, we actively implement waste separation and recycling by enhancing a waste separation system that effectively separates 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. Through these measures, we are committed to promoting the continuous improvement of non-hazardous waste management and contributing to the building of a green and sustainable ecological environment.

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	2022	2023	Unit
Non-hazardous waste			
Waste paper	51.37	**27.15**	tons
Waste glass	1.18	**1.06**	tons
Waste plastic	36.13	**8.11**	tons
Scrap metal	102.32	**320.22**	tons
Fly-waste and waste cotton	46.93	**58.45**	tons
Waste packaging	67.54	**42.51**	tons
Kitchen waste	57.42	**72.37**	tons
Other waste	117.73	**141.01**	tons
Total amount of non-hazardous waste	480.62	**670.88**	tons
Non-hazardous waste intensity	0.20	**0.31**	tons per RMB million of revenue

4.4. Resource Management

4.4.1 Water Resource Management

The group fully recognizes the finite and invaluable nature of water resources, as well as their indispensable role in our production and operational processes. Consequently, we are committed to upholding the principle of water conservation throughout our business operations, and have formulated the Energy and Resource Management Procedures to clearly define a range of principles and strategies for saving water, thus ensuring the reasonable use of water resources and reducing water consumption. During the Reporting Period, we have not encountered 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 save water consumption.

By implementing these measures, we have not only effectively reduced the consumption of water resources, but also made a positive contribution to sustainable development. We will continue to strive to promote the concept of water conservation, constantly improve our water resource management system, and contribute to the realization of green production.

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

Indicator	2021	2022	Unit
Use of water resources			
Water consumption	249,148.99	**215,026.00**	tons
Water use intensity	104.70	**99.75**	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 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 waste inner bags and waste packaging barrels are treated as hazardous waste. In order to be more eco-friendly and sustainable, we strive to optimize packaging design, reduce material usage, increase recycling rate and 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.

New tank area for storage and transportation, greatly improving environmental benefits

In October 2023, the new tank area for storage and transportation commenced operation. Langhua Pharmaceutical adopted the confined pipeline transportation method, which effectively reduced the consumption of 2,500 (200 L) packaging barrels, which not only reduced the transportation cost, but also significantly enhanced the environmental protection benefits, marking a solid step forward for the green and sustainable development of the Company.

Our consumption of packaging materials during the Reporting Period is as follows:

Indicator	2022	2023	Unit
Consumption of packaging materials			
Total consumption of packaging materials	174.88	**184.49**	tons
Packaging material consumption intensity	0.07	**0.09**	tons per RMB million of revenue

4.5. Green Operation

Digital Transformation

Driven by the digital revolution, Viva Biotech firmly believes that digital transformation is not just a reflection of technological advancement, but also a crucial element in advancing our business and enhancing our competitive edge. Through the utilization of cutting-edge digital technologies and intelligent analytical systems, we have significantly improved the efficiency and transparency of environmental data processing. For example, the implementation of real-time electricity monitoring software, automated storage and transportation systems, and intelligent hazardous waste management solutions has empowered us with precise and real-time data, enabling us to better understand our operation conditions and optimize resource allocation.

In addition, digital transformation helps us reduce unnecessary waste of physical documents and improve office efficiency. In daily affairs management, we have further upgraded and optimized the office automation system, integrating a series of daily office and management processes including business management, personnel management, material requisition, process approval, etc. into the OA workbench so as to enable efficient information and resource circulation and greatly reduce unnecessary use of resources. In the future, we will continue to increase our investment in the construction of digital management systems and continue to explore new digital application scenarios to inject new momentum for our development. We believe that through digital transformation, we will be able to better tackle market challenges and achieve sustainable development.

5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

Viva Biotech upholds the "people-oriented" core development concept and 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 grow and thrive and achieve personal fulfillment. While generating economic value, we seek more profound and meaningful impact to society with kindness and compassion, and 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 our employment management, we consistently adhere to the principles of fairness, diversity, and non-discrimination, ensuring that all aspects of labor practices are characterized by justice and inclusiveness. From recruitment, determination of remuneration and benefits, promotion, training, to termination, we treat every employee with fairness and impartiality. We recognize the importance of complying with laws and regulations. Therefore, we strictly abide by relevant national and local laws and regulations such as the the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, the Employment Promotion Law and the Law of the People's Republic of China on the Protection of Women's Rights and Interests. Additionally, we have established regulations and procedures such as the Salary Management Procedures, the Working Time Management Procedures and the Anti-discrimination Management Procedure to standardize the measures and procedures of recruitment and employment management. We firmly oppose any form of discrimination and do not engage in employment discrimination based on factors such as gender, disability, family and marital status, sexual orientation, age, political and philosophical beliefs, religious beliefs, trade union activities, race, social, cultural or nationality factors. We are committed to creating an equal and fair workplace where every employee can fully unleash their potential.

5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

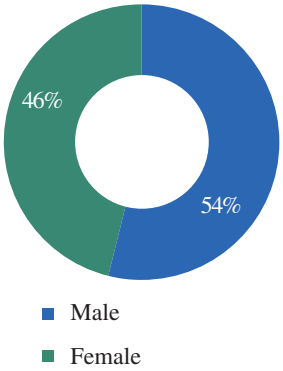
We maintain a strong zero-tolerance stance towards child labor and forced labor. In accordance with the Provisions on Prohibition of Child Labor issued by the State Council and the Law of the People's Republic of China on the Protection of Minors, we have developed corresponding policies, procedures, and remedial measures to prevent the employment of child labor. During the recruitment process, the human resources department rigorously verifies the identities of candidates to ensure that no child labor or forced labor is employed illegally. We require all cooperating contractors and suppliers to adhere to these regulations as well. If any violations are discovered, we will immediately terminate illegal labor contracts and handle the matter in accordance with relevant laws.

The Group has established comprehensive salary management procedures in terms of employee remuneration management. 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 the openness and fairness of relevant policies and systems. In terms of working time management, we strictly comply with national laws and regulations, and have set clear rules on overtime, working hour calculation, attendance, statutory leave, annual leave and statutory holidays. For special occupations, the Group will determine the working hour system in a legal and compliant manner based on actual conditions, and flexibly adopt a system with comprehensive calculation of working hours or a system with irregular working hours, ensuring that employees' rights and interests are fully protected.

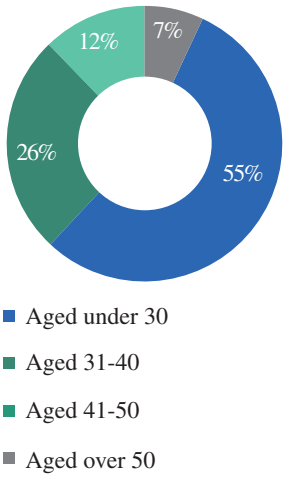
As of the end of the Reporting Period, the Group had a total of 2,077 employees, a decrease of 19% from the previous year, which was mainly due to the strategic personnel optimization initiative aimed at cost reduction and efficiency enhancement. In terms of age distribution, our workforce is predominantly composed of individuals below the age of 30, accounting for an impressive 55% of the total, showcasing the youthful and dynamic nature of our team. From a functional perspective, research and development personnel hold a prominent position, comprising 66% of our workforce, demonstrating the Group's strong emphasis on innovation and research activities. We have made significant progress in promoting employee diversity. The gender ratio remains balanced, with male employees accounting for 54% and female employees representing 46% of our workforce. This contributes to fostering an inclusive and equal work environment. Furthermore, our employees are geographically diverse, spread 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.

5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

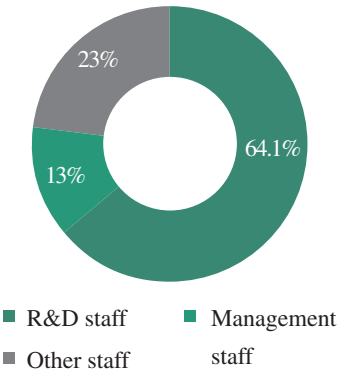
Number of employees by gender



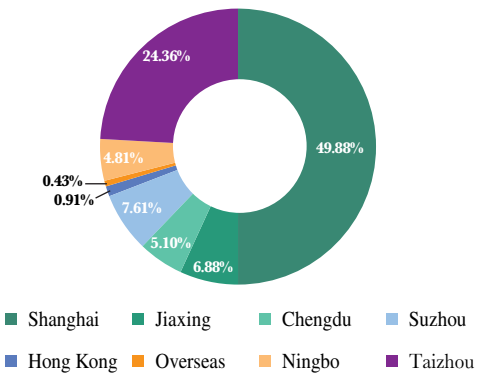
Number of employees by age



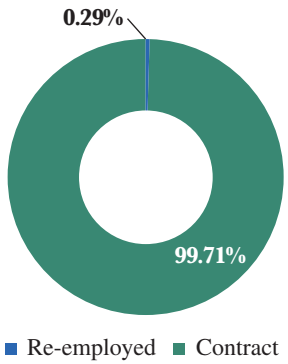
Number of employees by employee category



Number of employees by region



Number of employees by employment type



	Indicator	2022	2023
Total number of employees		2,601	**2,077**
Number of employees by gender	Male	1,430	**1,123**
	Female	1,171	**954**
Number of employees by age	Aged under 30	1,628	**1,149**
	Aged 31-40	560	**531**
	Aged 41-50	246	**242**
	Aged over 50	167	**155**
Number of employees by region	Shanghai	1,209	**1,036**
	Jiaxing	255	**143**
	Chengdu	237	**106**
	Ningbo	96	**100**
	Taizhou	533	**506**
	Suzhou	239	**158**
	Hong Kong	22	**19**
	Overseas[9]	10	**9**
Total employee turnover rate[10]		21%	**39%**
Employee turnover rate by gender	Male	21%	**40%**
	Female	22%	**38%**
Employee turnover rate by age	Aged under 30	23%	**49%**
	Aged 31-40	20%	**32%**
	Aged 41-50	17%	**25%**
	Aged over 50	11%	**19%**
Employee turnover rate by region	Shanghai	20%	**29%**
	Jiaxing	14%	**64%**
	Chengdu	28%	**137%**
	Ningbo	3%	**7%**
	Taizhou	23%	**32%**
	Suzhou	30%	**66%**
	Hong Kong	0%	**16%**
	Overseas[9]	0%	**11%**

9 Our overseas regions include North America, Australia and the United Kingdom.

10 The employee turnover rate is a percentage arrived at by dividing the number of employees in the specified category leaving employment during the Reporting Period by the sum of the number of employees in the specified category at the end of the Reporting Period and the number of employees in the specified category leaving employment during the Reporting Period.

5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

5.1.2 Employee Benefits

The Group has always adhered to the principle of putting people first and demonstrates a profound care for our employees from various perspectives. We have established a comprehensive system of employee benefits and care to provide all employees with comprehensive support, enhancing their sense of happiness and belonging.

In addition to the statutory benefits clearly stipulated in the employee handbook, such as five insurance plans and a housing provident fund, commercial insurance, annual leave, and parental leave, we also provide our employees with a wide range of subsidies and assistance. Every month, we offer lunch allowances, transportation allowances, as well as subsidies for travel activities and high-temperature working conditions, ensuring that our employees are well taken care of in various aspects. Furthermore, 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 Company. 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. Additionally, we allocate funds for departmental team-building activities, and encourage communication and cooperation among employees. Taking into account the practical needs of different employee groups, we have also introduced a system of allowances for expatriate employees, as well as transitional housing policies for recent graduates and interns, ensuring that every employee receives appropriate care and support.

During the Year, we made adjustments to our benefit platform by expanding its scale and including more consumption scenarios, thus providing employees with greater choices and convenience. Additionally, we have negotiated with the platform to waive the 3% service fee charged in the canteen, further alleviating the burden on employees.

We firmly 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. We will continue to strive to create a better work environment and conditions for our employees, ensuring that every employee feels the warmth and care within our corporate family.

5.1.3 Caring for Employees

The Group places great importance on caring for our employees, including interns, and provides them with abundant activity and funding benefits. Department heads are responsible for arranging team-building activities based on employee needs, fostering a sense of unity and enjoyment through diverse events such as group trips, sports activities, and shared meals, both within and across departments. Additionally, we organize group activities such as basketball and badminton to promote communication and friendship among employees. 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. Furthermore, starting from December, we have launched the "CareLink" benefit platform, which provides monthly meal allowances, birthday benefits, and service fee waivers at participating merchants, enabling employees to choose from a wider range of consumption scenarios based on their specific needs. We firmly believe that these initiatives will make our employees feel the warmth and care of the Company, injecting powerful motivation for the continuous development of the Company.

5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

Team Building Dragon Boat Race

The 17th "Zhangjiang Cup" Dragon Boat Race was held with great enthusiasm on the Lujiabang River in Zhangjiang Science City. As one of the participants, the Group showcased the spirit of teamwork and fierce determination among our employees. This event attracted a total of 41 teams from government agencies, enterprises, institutions and universities, presenting a splendid dragon boat race for the audience.

5.1.4 Employee Communication

The Company places great importance on employee communication and is committed to creating an open and transparent communication environment. We organize regular work meetings every month, not only to communicate work-related matters but also actively collect employees' feedback and suggestions, ensuring that each employee's opinions are heard and valued in a timely manner. Additionally, we have established a DingTalk work group to facilitate two-way communication among employees, enabling instant information sharing and prompt responses. To better serve our employees, each department has Human Resources Business Partners (HRBPs) who are experienced human resources specialists. These HRBPs are responsible for collecting employees' queries and feedback, reporting them to the management, and providing improvement suggestions and solutions in line with the Company's policies and regulations, ensuring that employees' voices are effectively communicated and properly addressed.

For newly recruited employees, we provide comprehensive onboarding guidance to help them quickly adapt to the work 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. Meanwhile, the Group is actively building a digital office platform aimed at providing employees with an integrated and convenient communication channel. 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.

We have also 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.

University Student Enrichment Program

The university student enrichment program expands beyond the confines of the classroom and ventures into the outdoors, aiming to help new students in self-discovery and role transition. The program not only fosters team integration and improves communication but also nurtures a sense of collaboration, allowing new colleagues to deeply understand and identify with the corporate culture during the activities, laying a solid foundation for their future work and life.

5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

5.2. Diversity and Inclusivity

The Group has always been committed to promoting the diversification and inclusivity of enterprises. 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 work environment. 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. Our office building is equipped with a lactation room to support women returning to work during the breastfeeding period. At the same time, we attach great importance to the rights and benefits of female employees. For example, on International Women's Day, Langhua Pharmaceutical presented beautiful flower bouquets and sincere blessings to all female employees, and Viva Biotech distributed gift boxes with women's products, demonstrating our care and respect for female employees. We believe that diversity and inclusivity are not only important cornerstones for sustainable corporate development but also an important force for building a harmonious society.

Women's Day Activity of Langhua Pharmaceutical

Women's Day Activity of Viva Biotech

The Group strongly opposes any form of discrimination and clearly states in the Anti-Discrimination Management Procedures that we will not tolerate any employment discrimination or bias based on disabilities. We actively provide employment opportunities for individuals with disabilities, and in 2023, the proportion of disabled employees reached approximately 2.3%. We provide working opportunities for them which demonstrates our profound care and respect for individuals with disabilities.

5.3. Occupational Health and Safety

The Group always regards the health and safety of our employees as a top priority and strives to create a safe and stable work environment for our employees. We strictly abide by 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 laws and regulations to ensure that every employee can work under the protection of the law.

Our R&D and production facilities have obtained ISO 45001 occupational health and safety management system certification, demonstrating our strong commitment to employee health and safety management. We have formulated strict factory hygiene management and safety management systems and continuously improve the stability and safety of our production processes to ensure that our employees are protected from injuries at work. We review the applicability of EHS documents every three years in accordance with the EHS document management system, and check the applicability of the documents based on changes in relevant laws and regulations. During the Year, we further optimized the EHS Change Management Procedures, improved the minor change assessment process, and refined the change implementation requirements to address various potential safety risks.

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

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	**99%** of the hidden dangers are timely rectified
95% of safety facilities in good condition	**100%** timely report of safety accidents
100% participation rate and passing rate of safety training	**99%** timely occupational health examinations

5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

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 EHS management departments of our facilities are always committed to their duties and regularly carry out safety inspections of daily production and laboratories. In order to ensure that the safety management of different types of laboratories can be accurately and precisely put in place, we have developed specific safety manuals, which provide clear guidance on safe operation of laboratories.

We have implemented a strict system for scoring and tracking violations in laboratory inspections. Each laboratory has been assigned a total score based on the number of fume hoods, and a detailed checklist of inspection items has been established. Every week, our EHS personnel personally lead the inspections, working alongside the laboratory safety officers. The safety conditions of the laboratories are evaluated quarterly, using a deduction-based scoring system. The evaluation criteria encompass various aspects, including waste disposal, adherence to safety regulations on employee operating procedures, compliance of laboratory facilities with relevant standards, and storage management. Thanks to these stringent measures, we have excelled in maintaining a hygienic and safe environment in our laboratories during the Year, earning us a commendable rating. Moving forward, we will continue to strengthen our safety inspection efforts to ensure the laboratories operate securely and smoothly, providing robust support for the progress of our scientific research. We firmly believe that this ongoing monitoring mechanism will drive continuous improvements in laboratory safety management.

5.3.2 Occupational Disease Prevention and Management

Due to the potential exposure of employees to various toxic or hazardous substances in their daily work, we are well aware of the importance of occupational disease prevention and control, and have dedicated significant efforts towards it. 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 systems provide clear guidance and standards for us to carry out occupational disease prevention work.

We have established a leading group for occupational health management, with the main responsible individuals taking overall charge of occupational disease prevention and control to strengthen the organizational leadership of occupational disease prevention and control efforts. The EHS department is responsible for overseeing the implementation of occupational disease prevention and control measures, as well as managing specific tasks related to occupational health management and occupational hazard prevention.

In addition, we conduct an annual identification of occupational disease risk factors to ensure a clear understanding of potential occupational hazards. Furthermore, every three years, we collaborate with third-party testing agencies to conduct occupational disease risk factor assessments in the workplace, ensuring a safe and healthy work environment for employees. 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 awareness of occupational disease prevention and control.

In terms of occupational disease prevention measures, we have installed 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. Furthermore, we have intensified the promotion and education of occupational disease prevention and control. Through seminars, training sessions, and other activities, we strive to increase employees' awareness and emphasize the importance of occupational disease prevention.

In terms of occupational health examinations, we have implemented an on-the-job occupational health examination system to ensure that our employees receive a comprehensive occupational health examination once a year. We arrange pre-employment occupational health checkups for new employees when they join the Company, and departing employees receive an exit occupational health examination before they leave the Company. In 2023, we did not detect any employees with occupational contraindications or suspected occupational diseases. In the future, we will arrange for employees with occupational contraindications to be transferred out of their original positions; employees with suspected occupational diseases will undergo follow-up examinations; and employees suffering from occupational diseases will be provided with proactive treatment arrangements.

5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

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 industrial equipment and hygiene management systems, 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. During the Year, we have also updated the Noise Assessment and Hearing Protection Procedures and the Respiratory Protection Management Regulations, aiming to strengthen the suitability inspection and record-keeping requirements for respiratory protective equipment, further improve industrial hygiene management and ensure the health and safety of employees.

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 the protective performance of the equipment. In addition, the EHS department 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 equipments remain 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. At the same time, 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

In order to safeguard the lives and health of our employees, we have formulated the Management Measures for Safety Education and Training of Viva Biotech, and ensure that our employees are able to 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. 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.

Furthermore, we offer specialized safety training tailored to the specific characteristics and needs of each position. The training covers 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 material, we have established corresponding assessment and testing environments to promptly evaluate the learning achievements of employees. 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.

As of the end of the report year, a total of 3,612 people had received our health and safety training. In particular, we have conducted a total of 3,110 safety trainings and 54 fire drills, which have effectively enhanced our employees' safety awareness and ability to respond to emergencies.

5.3.5 Emergency Response to Accidents

The Group 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 cover 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.

5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

To ensure the smooth implementation of 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 emergency exercises for prevention of theft or robbery involving toxic chemicals, comprehensive emergency drills for production safety accidents, environmental emergency drills, and on-site disposal exercises in the workshop.

In 2023, we formulated and filed a new comprehensive emergency plan to ensure that it is up to date and practical. In December 2023, we also conducted a hands-on firefighting drill to allow our employees to experience the use of fire extinguishers, which further enhanced their awareness of fire safety.

During the Year, the work-related injuries were mainly attributable to Langhua Pharmaceutical. The relevant accidents mainly occurred in workshops and during commuting time of employee, 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	2022	2023	Unit
Lost working days due to work injury	518.5	**104**	Day
Number of work-related fatalities	0	**0**	People

5.4. Human Capital Development

5.4.1 Talent Attraction and Retention

The Group attaches great importance to talent attraction and has actively carried out campus recruitment and social recruiting activities in 2023. For key R&D positions in computational chemistry department, biology department and chemistry department, we mainly adopt online campus recruitment to attract outstanding talents 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 the external market situation, we strive to provide competitive and relatively comprehensive remuneration packages for all kinds of 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 or other high-level talents to apply for work visas and Chinese green cards, 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. These initiatives not only reflect our attention and care for talents, but also lay a solid foundation for us to attract more outstanding talents.

In terms of talent retention, we have put in place a series of well-designed mechanisms to ensure that our outstanding employees can contribute value to the Group in the long run. In April and October each year, we offer promotion opportunities to employees with outstanding performance or special contributions, which fully demonstrates our recognition and appreciation of talents. The promotion process follows the principles of fairness, impartiality and openness, taking into full consideration the candidates' integrity, performance and potential to ensure that the best talents are selected. At the end of the year, we will also conduct an all-employee performance appraisal, with the human resources department taking the lead in coordinating and managing the process, and each business department being responsible for formulating the performance appraisal indicators for their employees to ensure that the appraisal process is professional and accurate. The results of the appraisal 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.

In addition, we also recognize the hard work of our employees in both physical and spiritual ways by providing them with year-end performance bonuses and annual commendations for outstanding employees. It is worth mentioning that 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.

Commendation ceremony

5.4.2 Talent Motivation

Talent motivation is an important driving force for the sustainable development of the Group. We actively explore positive and effective employee motivation policies, aiming to encourage our employees to be self-driven and realize their social and self-worth. 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. In addition, we motivate our employees to learn from role models through promotion performance incentives and annual commendations to create an atmosphere of healthy competition and enhance employee recognition of our corporate culture and philosophy. For our stay-over employees, we also offer various subsidies and extra bonuses to express our care and recognition for them. These incentives not only motivate employees to work with enthusiasm, but also enhance the cohesion and competitiveness of the Company.

5.4.3 Training and Talent Development

In order to ensure that our employees can continuously improve their abilities and adapt to the ever-changing market environment, we have developed the Employee Training Management Regulations, based on which we prepare meticulous annual training plan at the beginning of the year and coordinate the Group's staff training planning. We have developed distinctive training programs based on the characteristics and requirements of different departments. These programs cater to various levels of employees, ranging from new hires to middle and senior management members. The training methods and assessment approaches are flexible and diverse, aiming to meet the diverse learning needs of employees. The training content serves multiple purposes and has far-reaching implications. It includes enhancing the capabilities for key performance tasks in the coming year, strengthening environmental and safety awareness, skill improvement, knowledge updates, and improving behavioral attitudes. In terms of training formats, 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, employees can deepen their understanding and application of the knowledge gained. This training approach not only enhances the learning efficiency of employees but also strengthens their practical skills.

We provide training programs tailored to different departments and career stages of employees. 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. During the Year, we placed special emphasis on training for new employees, provided English language training, mentorship in business practices, and specialized training, and established English language learning and assessment requirements to ensure that young talents can easily integrate with international information and broaden their global perspective. Moreover, we have strengthened English language training for research and development personnel, and assisted certain managers and laboratory staff in enhancing their English proficiency, aiming to improve their professional skills.

To further enhance the effectiveness of our training programs, we actively cultivate internal trainers and refine our internal training curriculum. We utilize external training to drive internal training, and continuously improve the teaching skills and course quality of our internal trainers. 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 improved job performance for employees.

5. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

Every year, at the end of training program, we conduct satisfaction surveys among participants to rank the performance of our trainers. Outstanding trainers are recognized and rewarded accordingly. This not only acknowledges the hard work of our trainers but also motivates more employees to actively engage in training and learning.

In the future, we will continue to deepen our efforts in training and talent development, and continuously enhance the overall competence and professional skills of our employees, thereby injecting a constant stream of energy into the development of the Group.

Chemical inspector (intermediate) training

Organic synthesis worker (intermediate) training

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

Indicator		2022	2023	Unit
Total number of employees trained		1,145	**869**[11]	persons
Percentage of employees trained by gender[12]	Male	62%	**67%**	/
	Female	38%	**33%**	/
Percentage of employees trained by employee category[13]	R&D staff	43%	**26%**	/
	Management staff	3%	**4%**	/
	Other staff	55%	**70%**	/
Average training hours by gender[12]	Male	15	**15**	hours
	Female	10	**11**	hours
Average training hours by employee category[13]	R&D staff	6	**6**	hours
	Management staff	7	**6**	hours
	Other staff	40	**39**	hours

11 The decrease in total number of employees led to a corresponding decrease in total number of employees trained.

12 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 by gender is calculated by dividing the number of employees trained in the specified category by the total number of employees trained.

13 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 by gender 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. PEOPLE-ORIENTED AND HARMONIOUS COMMUNITY

5.5. Community Responsibility and Contribution

Viva Biotech understands that the growth of the Group relies on the strong support and rich resources from various sectors of society. Therefore, we always uphold the belief in giving back to society and strive to contribute to the well-being of our communities and society as a whole. Leveraging our industry advantages, we actively fulfill our social responsibilities, constantly pay attention to the needs of the local communities where we operate, and support the development of 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 field of education by leveraging our strengths. Additionally, we actively organize employees to participate in various public welfare activities to cultivate their enthusiasm for public welfare and a spirit of volunteerism.

Educational public welfare activities

Zhejiang 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. Through these collaborations to establish internship and practical training base. The Company 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 500 students from various universities visited the internship and training 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, contributing to the sustainable development of talent in the industry. In the recent two years, we have been recognized by the Linhai Municipal Government as the "Linhai University Graduates Internship Base" and the "Linhai Vocational Skill Level Assessment Base".

APPENDIX: HKEX ESG REPORTING GUIDE CONTENT INDEX

Aspect	Disclosure Requirements	Content Index
A1	**Emissions:** General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. Note: Air emissions include NO_X, SO_X, and other pollutants regulated under national laws and regulations. Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Hazardous wastes are those defined by national regulations.	4.2. Energy Conservation and Emission Reduction Actions and Measures 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
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 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.	4.3. Waste Management 4.5. Green Operation

APPENDIX: HKEX ESG REPORTING GUIDE CONTENT INDEX

Aspect	Disclosure Requirements	Content Index
A2	**Use of Resource:** General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials. Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.	4.2. Energy Conservation and Emission Reduction Actions and Measures 4.4. Resource Management
KPIA2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000 s) 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:** General Disclosure Policies on minimising the issuer's significant impact on the environment and natural resources.	4.2. Energy Conservation and Emission Reduction Actions and Measures 4.4. Resource Management 4.5. Green Operation
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 4.4. Resource Management 4.5. Green Operation

APPENDIX: HKEX ESG REPORTING GUIDE CONTENT INDEX

Aspect	Disclosure Requirements	Content Index
A4	**Climate Change:** General Disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	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:** General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	5.1. Employment Compliance and Employee Benefits 5.2. Diversity and Inclusivity
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:** General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	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 GUIDE CONTENT INDEX

Aspect	Disclosure Requirements	Content Index
B3	**Development and training:** General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. 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:** General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child 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

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Aspect	Disclosure Requirements	Content Index
B5	**Supply Chain Management:** General Disclosure Policies on managing environmental and social risks of the supply chain.	2.5 Sustainable Supply Chain
KPIB5.1	Number of suppliers by geographical region.	2.5 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.	2.5 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.	2.5 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.	2.5 Sustainable Supply Chain
B6	**Product Responsibility:** Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	2.3 Quality Management
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.	2.4 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.	2.4 Protection of Clients' Rights and Interests

APPENDIX: HKEX ESG REPORTING GUIDE CONTENT INDEX

Aspect	Disclosure Requirements	Content Index
B7	**Anti-corruption:** General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	1.3 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.	1.3 Business Ethics and Anti-corruption
KPIB7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	1.3 Business Ethics and Anti-corruption
KPIB7.3	Description of anti-corruption training provided to directors and staff.	1.3 Business Ethics and Anti-corruption
B8	**Community Investment:** 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