

维亚生物科技控股集团 **VIVA BIOTECH HOLDINGS**

Stock Code: 1873

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

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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 second Environmental, Social and Governance Report (the "**Report**") to society, in a bid to disclose 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 Viva Biotech (Shanghai) Ltd. (維亞生物科技(上海)有限公司), Jiaxing Viva Biotech Limited (嘉興維亞生物科技有限公司), Sichuan Viva Benyuan Biotech Limited (四川維亞本苑生物科技有限公司) and Zhejiang Langhua Pharmaceutical Co., Ltd. (浙江朗華製藥有限公司) ("Langhua Pharmaceutical"), and a time span from January 1, 2020 to December 31, 2020 (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 27 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" provision contained in the Guide and followed the four reporting principles of materiality, quantitative, balance and consistency included in the Report.

Source of Data and Reliability Statement

Data and cases contained in the Report are primarily derived from the statistical reports and relevant documents of Viva Biotech. The Report does not contain any false information, misleading statement or material omission. The directors of the Company jointly and severally accept responsibility for the truthfulness, accuracy and completeness of the information contained herein.

ABOUT THE REPORT

Confirmation and Approval

The Report, after being confirmed by the management of the Group, was approved by the board of directors on July 14, 2021.

Release Channel

The Report is available for inspection and downloading 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 progress. If you have any suggestions to the report or our revenant undertakings, please contact the Group via the following means:

I Address:334 Aidisheng Road, Zhangjiang Hi-tech Park, Pudong New District, ShanghaiI Telephone:+86(0)21 6089 3288I Fax:+86(0)21 6089 3290I Website:www.vivabiotech.comI Email:info@vivabiotech.com

CHAIRMAN'S STATEMENT

In 2020, the COVID-19 pandemic ravaged the whole world, taking a heavy toll on global economies and people's well-being. However, the boom in the pharmaceutical industry presented unprecedented opportunities amid concerted efforts worldwide to cope with the health crisis. Viva Biotech also grasped the opportunities to proactively address challenges and strive for progress.

During the Year, leveraging internal growth and external expansion, the Group recorded revenue of RMB697.0 million, representing a significant increase from RMB323.1 million for the corresponding period last year. The synergistic effects of the dual drivers of our cash-for-service (CFS) business and equity-for-service (EFS) business were further demonstrated. Meanwhile, we continued to deepen and consolidate cooperation with global innovative biotechnology companies. As of the end of 2020, we have provided services to over 543 biotechnology and pharmaceutical clients globally under the CFS

drug discovery business, delivered a total of 21,000 protein structures and conducted research into more than 1,500 independent drug targets. Our clients include those from the top ten global pharmaceutical enterprises. In addition, Viva Biotech completed strategic integration with Zhejiang Langhua Pharmaceutical Co., Ltd. as at the end of 2020 and achieved substantial progress in vertical integration and expansion along the industry chain to CDMO business.

> **Dr. Mao Chen Cheney** Chairman & CEO



CHAIRMAN'S STATEMENT

Along our aggressive pursuit of business development, we have been committed to aligning corporate economic benefits with environmental and social responsibilities and lived up to our responsibilities of offering services, contributing to social economic growth, enhancing people's livelihood and improving the environment. We dedicate ourselves to legal corporate governance, endeavor to boost corporate governance standard, optimize ESG governance structure and ensure compliance operation leveraging strict internal control process. Meanwhile, Viva Biotech has integrated cleaner production and green operation concepts into its daily business operations and capitalized upon multiple energy conservation and emission reduction measures to control waste and greenhouse gas emissions, striving to facilitate Chinese government to achieve the goal of "peak carbon emissions and carbon neutrality" and build a resource-saving and environmental-friendly society.

We recognize that the prosperity secured by Viva Biotech is indispensable from the trust and support of our employees, shareholders, clients, business partners and other stakeholders. We also reach out to our stakeholders to understand the sustainability issues of their concern and their expectations towards us. We proactively respond to the issues of concern to stakeholders through practical actions and aspire to join hands with various stakeholders for win-win. As the second ESG Report released by Viva Biotech, the Report not only concentrates our insight and performance in sustainable development fields, but also demonstrates our latest progress in ESG management. Going forward, Viva Biotech will continue to step up efforts in technological research and development ("**R&D**"), promote talent development, enhance operation efficiency and accelerate the construction of one-stop drug discovery and production service platforms from "0" to "1" and "N", aspiring to create more sustainable value returns to the society.

> Viva Biotech Holdings Dr. Mao Chen Cheney Chairman and Chief Executive Officer July 14, 2021

Business

Viva Biotech's mission is to become a cradle for promising biotechnology companies from around the world. The Company has developed a scalable business model combining the conventional cash-for-service (the "CFS") model and the unique equity-for-service (the "EFS") model, of which the CFS model is committed to providing one-stop R&D and production services for global innovative drug clients, while the EFS model focuses on identifying and investing in high-potential biopharmaceutical start-ups to solve unmet clinical medical needs.

Dedicated to the goal of establishing an integrated service platform for R&D and production of innovative drugs, the Company completed the strategic integration of Langhua Pharmaceutical in November 2020. As a comprehensive pharmaceutical R&D and manufacturing company, Langhua Pharmaceutical is primarily engaged in the production of small molecule APIs and intermediates and contract development manufacture organization ("CDMO") business. Viva Biotech will further strengthen the construction of existing foundation platforms for chemistry, manufacturing and control ("CMC") and CDMO, expand into formulations production and strengthen appeal to clients and diversified regional expansion, thereby optimizing the one-stop R&D and production services and forging a closed loop for drug pipeline demands.

As of the end of the Reporting Period, the Group has accumulatively provided drug R&D and production services to 1,252 biotechnology and pharmaceutical clients worldwide, conducted research into more than 1,500 independent drug targets, delivered over 21,000 protein structures to clients and invested in a total of 67 incubation portfolio companies.



Technology platforms

Culture

Corporate vision	To become a cradle for promising biotechnology companies from around the world.
Corporate goal	To become a world-renowned cooperative research and development enterprise with cutting-edge technologies in the biotechnology field.
Corporate values	Constant innovation, pursuing excellence, customer fulfillment, integrity and dedication, focusing on talents, team cooperation, rewarding society.

Honors

•	January 2020	Viva Biotech won the "Investors' Most Favorite New Stock Award (最受投資 者歡迎新股獎)" in the 4th Golden Hong Kong Stocks selection
•	February 2020	Viva Biotech was included in seven indexes, including Hang Seng Composite Index and Hang Seng Hong Kong Stock Connect
•	May 2020	Viva Biotech won the China Healthcare Industry Investment and Financing Honor List-Best Medical Service Listed Company Award (最佳醫療服務上市公司獎)
•	June 2020	Viva Biotech won the Golden Unicorn Hong Kong Stock Value List-Listed Company with the Most Investment Value (最具投資價值上市公司)
•	July 2020	Viva Biotech was honored as Top 20 2019 China CRO (including CDMO) Enterprises by Medicine Economic News (醫藥經濟報)
•	August 2020	Viva Biotech was recognized as a pilot patent enterprise in Shanghai
•	September 2020	Viva Biotech was recognized as the Shanghai R&D Center Shanghai Municipal Commission of Commerce (上海市商務委員會)
•	October 2020	Viva Biotech won the Best Under A Billion of Forbes Asia
•	October 2020	Viva Biotech was included in Hang Seng SmallCap (Investable) Index

Responsible Investment

Viva Biotech commits itself to better satisfying the medical needs of global patients through drug discovery services and investment, integrates the concept of responsible investment into the dual drivers of CFS and EFS models, and apply in the full management process before and after investment, including due diligence, participation in post-investment decision-making and systemic analysis of ESG factors and other processes. Leveraging prudent and responsible investment decisions, Viva Biotech aims to promote the growth of biotechnology start-ups and the sustainable development of the biopharmaceutical industry, and contribute to the realization of the "Good Health and Well-being" of the United Nations Sustainable Development Goals.

During the Reporting Period, the Group extensively explored business opportunities around the globe. It reviewed a total of over 834 projects globally, and introduced 21 startups to its portfolio companies, and made additional investment in 10 existing portfolio companies, covering various indications, modalities and locations.

No.	Company name	Туре	Indications/Primary Technology/ Business
1	Blue Oak Pharmaceuticals, Inc.	EFS	Discovering novel multi-target pathways to help patients with neurological disorders, focusing on systems neurobiology and brain circuitry.
2	Regenacy Pharmaceuticals, Inc.	Strategic investment	Developing innovative treatment of diabetic peripheral neuropathy and chemotherapy-induced peripheral neuropathy.
3	Elgia Therapeutics, Inc.	EFS	Focusing on the discovery and development of specific Caspase inhibitors for nonalcoholic fatty liver disease (NAFLD)/non-alcoholic steatohepatitis (NASH) therapy and other inflammatory conditions.
4	Phenomic AI Inc.	EFS	Developing therapeutic antibodies targeting colorectal cancer.
5	Vincere Biosciences, Inc.	EFS	Developing therapeutics targeting mitochondrial pathways for brain disorders particularly in neuro degenerative diseases.
6	NERIO Therapeutics, Inc.	Strategic investment	Developing allosteric/uncompetitive phosphatase inhibitors for several protein tyrosine phosphatase (PTP)s.
7	Sisu Pharma, Inc.	EFS	Focusing on the development of HSF1 inhibitor for the hormone treatment resistant prostate cancer.
8	Focus-X Therapeutics, Inc.	EFS	Focusing on the development of peptide receptor radionuclide therapy (PRRT).
9	Triumvira Immunologics Inc.	Strategic investment	Developing novel T cell therapies that are safer and more efficacious than current cancer treatments, including chimeric antigen receptor (CAR) and engineered T cell receptor (TCR) therapies.

New portfolio companies introduced during the Year

No.	Company name	Туре	Indications/Primary Technology/ Business
10	QurClear LLC	Strategic investment	QurClear is a legal entity for holding shares of EnClear Therapies, Inc. Enclear Therapies is developing an equipment to filter toxic protein accumulated in brain and spinal cord to cure amyotrophic lateral sclerosis (ALS) and progressive superanuclear palsy (PSP) patients with C9orf72 mutation.
11	Basking Biosciences, Inc.	Strategic investment	Developing the first reversible thrombolytic therapy for acute ischemic stroke (AIS).
12	I-Mab Biopharma (Hangzhou) Co., Ltd.	Strategic investment	Focusing on the R&D and production of biological antibody drugs in the field of tumor immunity and autoimmune disease treatment.
13	Telo Therapeutics, Inc.	EFS	Developing a novel, personalized medicine therapeutic to selectively inhibit cancer cell immortality.
14	Evecxia Therapeutics, Inc.	Strategic investment	Developing proprietary oral slow-release formulation of 5-HTP and low-dose carbidopa for anti-depression.
15	Haya Therapeutics SA	Strategic investment	Targeting IncRNA using oligonucleotide-based drugs to treat heart fibrosis.
16	Synthis Therapeutics, Inc.	EFS	Initial effort is an antibody-TGF β Antagonist-conjugate (ATAC) selectively blocking the TGF β -related immune suppressive signaling in the immune cells for cancer treatment.
17	f5 Therapeutics Incorporated	EFS	Protein degradation drug company, focusing on the development of "molecular glue" technology. Developing Neosubstrate Expression Modulators library and synthetic lethal screening to achieve targeted protein degradation by binding to Cereblon for certain therapeutic areas.

No.	Company name	Туре	Indications/Primary Technology/ Business
18	Iterion Therapeutics, Inc.	EFS	Developing a small molecule (Tegavivint) targeting TBL1, a novel downstream target in Wnt/ β -catenin signaling pathway.
19	Cybrexa Holding Company, LLC	Strategic investment	Developing next-generation tumor-targeted cancer therapies using its alphalex TM platform.
20	Grove Biopharma, Inc.	EFS	Discovering and developing a new class of peptide-based therapeutics for enhancing therapeutic peptide stability and avidity.
21	WMT AG	EFS	Targeting advanced cancers by combining tumor-autonomous approaches with immune stimulation.

Portfolio Highlight: QurAlis was included in the Fierce Biotech's 2020 Fierce 15 List

In September 2020, the industry renowned annual Fierce Biotech's 2020 Fierce 15 List was unveiled and QurAlis, one of Viva BioInnovator's portfolio companies, was included in the list. As a biotechnology company focusing on the precise treatment of amyotrophic lateral sclerosis (ALS) and other neurological diseases, QurAlis continues to promote the R&D of new therapies for ALS and genetically related frontotemporal dementia (FTD).

Portfolio Highlight: ABM Therapeutics announced first successful patient administration in the ABM-1310 phase I clinical trials in the United States

In June 2020, ABM Therapeutics, a biopharmaceutical innovation enterprise focusing on the R&D of APIs capable of breaking through the blood-brain barrier, announced that it enrolled and administrated the first patient in the phase I clinical trials for ABM-1310 in the United States. Being the first drug candidate of ABM Therapeutics, ABM-1310 is an oral API BRAF inhibitor with high selectivity, high water solubility and high blood-brain barrier permeability and has shown unique advantages in blood-brain barrier permeability in animal tests during preclinical research.

In-depth Industry Cooperation

Viva Biotech roots itself in the biotech industry, focuses on the vertical integration of new drug discovery, R&D and production platforms, accelerates strategic cooperation with quality contract manufacturing organization ("CMO") and CDMO companies in the industry, rapidly improves the comprehensive service of the Group and enhances the incubation capability of EFS business to secure more CFS customer traffic. Through holding or participating in seminars, forums and other industry exchanges, the Group has set up industry ecosystem and promoted exchanges and cooperation across the borders.

Case Highlight: Viva Biotech reached strategic cooperation with Schrödinger on joint R&D of brand-new target structure

In July 2020, Viva Biotech and Schrödinger, Inc ("Schrödinger") announced to establish strategic partnership on early-stage new drug discovery. Both parties will integrate their superior resources in the field of new drug R&D, and conduct research into the new crystal structure of high potential targets with a focus on structure-based drug discovery, so as to promote the R&D of first-in-class compound candidate. "Schrödinger has the world's top-notch computational chemistry platform, which empowers it with efficient and powerful scientific research capacity in chemical space. Backed by Viva Biotech's advantages in the field of crystal structure, we will work together to overcome the previously unresolved targets, and thereby develop the first-in-class therapy that benefits patients all over the world", said Dr. Ye Zhixiong, CSO of Viva Biotech.

Case Highlight: Viva Biotech joined forces with Biocytogen to accelerate the early-stage R&D of new drugs

In October 2020, Viva Biotech entered into the strategic cooperation agreement with Beijing Biocytogen Co., Ltd. ("**Biocytogen**"), pursuant to which, both parties will cooperate to accelerate the early stage R&D of bio-innovative drugs. The human antibody mouse platforms (including RenMabTM, RenLite®and RenNano®), for which Biocytogen claims independent intellectual property rights, will foster technical complement with Viva Biotech's global leading structure-based comprehensive new drug discovery platform, and achieves synergy with Viva Biotech's EFS business, thus jointly promoting the development of bio-innovative drugs.

Case Highlight: Viva Biotech and AlphaMa Biotech reached cooperation on iDEL screening technology

In December 2020, Viva Biotech and AlphaMa Biotech Co., Ltd. ("AlphaMa Biotech") entered into a new drug discovery technology cooperation agreement, pursuant to which, Viva Biotech will cooperate with AlphaMa Biotech on innovative drug discovery technology to provide clients with the new generation of AI-based DNA coding compound library (Intelligent DEL, iDEL) screening technology platform for screening tumors and lead compounds for a series of specific targets in the field of neurological, autoimmune and other diseases.

Case Highlight: Viva Biotech worked together with Shanghai Biopharmaceutical Fund to build a platform for transforming medical innovation achievements

In December 2020, the Shanghai Biopharmaceutical Industry Equity Investment Fund, which was approved by the Shanghai Municipal Government and initiated by Shanghai Industrial Investment (Holdings), embraced the launching ceremony in Shanghai. Viva Biotech attended the ceremony and entered into agreement to jointly build a platform for transforming biopharmaceutical innovation achievements in Shanghai. Riding upon the resource advantages of its partners in industrial collaboration and project operation, the platform will provide special support for the professional talents and R&D and transformation of innovation projects in universities and research institutes, incubate potential projects and promote the transformation of achievements, in a bid to facilitate Shanghai to establish an innovative R&D hub and realize industrial leap-forward development.



Corporate Governance

The Group is committed to maintaining high standards of corporate governance to protect shareholders' interests and enhance corporate value and accountability. The Board of Directors has adopted the principles and code provisions of the Corporate Governance Code contained in Appendix 14 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited and has also formulated internal policies such as the Articles of Association of Viva Biotech (Shanghai) Ltd. (the "Articles of Association") and 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 monitored and the governance mechanism is continuously improved.



Sustainable Development Governance

Sustainable development also plays a pivotal role in Viva Biotech's corporate governance. The Group optimized sustainable development governance structure to bring into play the management functions of organizations at different levels on sustainable development related issues, and constantly enhance the corporate sustainable development governance standards. On October 12, 2020, the Board of Directors of Viva Biotech approved the resolution in relation to establishment of an ESG working group. Members of the ESG working group are appointed by the CEO, and the initial members include the heads of Internal Audit Department, HR Department, EHS Department, Customer Service Department, Investor Relations and Public Relations Department, Information Services Department, Procurement Department, General Manager's Office and other departments.

The ESG working group is responsible for identifying material ESG issues that have an impact on the Group, updating and implementing ESG-related management systems, developing and overseeing ESG-related risks, monitoring the implementation of management measures in ESG field of the Group, reviewing ESG-related annual reports or related special reports, and fulfilling other ESG management-related responsibilities entrusted by the CEO.



Communication with Stakeholders

Viva Biotech regards stakeholders as indispensable partners for its long-term development, attaches importance to the opinions of stakeholders, and listens to their voices via building perfect and smooth communication channels and actively responds to issues of common concern.

During the Reporting Period, we re-visited and determined important stakeholders according to the two dimensions of "impact by the Group" and "impact on the Group" and ultimately selected the following seven categories 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.

Stakeholders	Concerns	Communication channels and response of the Group	
Government and regulators	 Compliance with laws and regulations Promote employment Drive local economic development Address climate change 	 Follow laws and regulations and strictly implement the government policy requirements Actively participate in government-enterprise cooperation projects 	
Shareholders/investors	Information disclosureFinancial performanceESG governance	 Convene general meetings Improve information disclosure and issue financial reports and other special reports Hold investor conferences, roadshows, publish newsletters or WeChat official account articles, and communicate online 	
Portfolio companies/ clients	 Product quality monitoring Privacy and security Intellectual property protection Efficient delivery Increase R&D investment 	 Improve the customer service mechanism Conduct customer satisfaction survey Organize regular customer visits Regular teleconference 	
Suppliers	Fair transactionWin-win cooperation	 Improve the procurement and bidding system Strengthen supplier management and annual evaluation 	

Stakeholders	Concerns	Communication channels and response of the Group
Business partners	 R&D platform and investment Supply chain management	Conduct meeting communicationActively participate in industry cooperation and discussion
Employees	 Salary and benefits Health and safety Legal and compliant employment Career development and growth 	 Legal employment, formulate and implement perfect employment policies Provide comprehensive and competitive salary and benefits Provide comprehensive employee safety protection and strictly implement epidemic prevention and control Conduct regular employee communication meetings Set up employee suggestion box Improve the training system and carry out training activities
Media	• Information publicity and transparency	 Convene press conference Attend media activities and accept media interviews

Materiality Evaluation

Materiality evaluation will facilitate Viva Biotech to identify risks and opportunities related to sustainable development, specify fields subject to improvement and improve the disclosure level of the Report to sharpen the insight of stakeholders into the sustainable development process of the Group. During the Reporting Period, leveraging the assistance of third-party consultants, we re-identified and adjusted material issues taking into comprehensive consideration of the domestic and international mainstream sustainable development industry guidelines and sustainable development trends.

Materiality evaluation steps:

Identification of material issues

With reference to the authoritative standards of sustainable development such as the Guide and Sustainable Development Report Guidelines of the Hong Kong Stock Exchange, we adjusted and updated the library of material issues in 2019, and ultimately included 20 issues in the library of material issues this year.

Materiality scoring

We invited stakeholders to determine the importance of the selected material issues by scoring, and concluded 9 highly material issues, 7 moderately material issues and 4 material issues. Confirmation and application

We constructed a materiality matrix from two dimensions of "importance to Viva Biotech" and "importance to stakeholders", and selected highly material issues according to the scores of each issue.

Materiality matrix:



Based on the materiality matrix, during the Reporting Period, nine issues were evaluated as highly material, including emissions and management, employee health and safety, labor standards, hazardous waste disposal and management, product quality and safety, R&D and technological innovation, intellectual property rights, information security management, and talent attraction and retention. The Report will focus on addressing such highly material issues.

Highly material issues	Relevant chapters
Emissions and management	Environmental-friendly – Aspiring for a Low-carbon Future: Environmental Management System, Cleaner Production
Employee health and safety	Talent-driven – People-Oriented Dedication: Employee Health and Safety
Labor standards	Talent-driven – People-Oriented Dedication: Employment and Protection of Employees' Rights and Interests
Hazardous waste disposal and management	Environmental-friendly – Aspiring for a Low-carbon Future: Environmental Management System, Cleaner Production
Product quality and safety	Product Responsibility – Striving for Sustainable Business Success: Product Quality and Safety
R&D and technological innovation	Product Responsibility – Striving for Sustainable Business Success: Technological Innovation and Intellectual Property Rights
Intellectual property rights	Product Responsibility – Striving for Sustainable Business Success: Technological Innovation and Intellectual Property Rights
Information security management	Product Responsibility – Striving for Sustainable Business Success: Information Security Management
Talent attraction and retention	Talent-driven – People-Oriented Dedication: Talent Attraction and Retention

Compliance and Business Ethics

Viva Biotech upholds the business ethics of honesty and trustworthiness, legal compliance, integrity and self-discipline, acts in strict accordance with relevant laws and regulations on corporate governance and the Corporate Governance Code, and demonstrates zero tolerance for bribery, extortion, fraud and money laundering. The Group strictly follows the Criminal Law of the People's Republic of China, Anti-Unfair Competition Law of the People's Republic of China and other relevant laws and regulations, established an anti-fraud working group, and formulated the Anti-Money Laundering Management System and Anti-Fraud Work Regulations, which specified prohibited acts and corresponding penalties to promote the systematic anti-corruption management.

With respect to professional ethics issues and fraud cases, the Group has set up telephone hotline, e-mail and other reporting channels, through which employees at all levels and stakeholders who have direct or indirect economic relations with the Group can submit and report cases or suspected cases of violation of professional ethics or fraud by employees of the Group. The telephone hotline is also open to complaints about accounting, internal control or auditing. The anti-fraud working group will keep a written record of the real-name or anonymous reporting lodged by employees or external suppliers, and file the concluded fraud cases after investigation. Where the report involves the senior management of the Group, the anti-fraud working group and the management of relevant departments of the Group will jointly form a special investigation team to conduct joint investigation with the approval from the Board of Directors and the Audit Committee. The Group will engage external experts to participate in the investigation where necessary when conducting relevant investigations, who will also evaluate the internal control of the business units involved and raise suggestions for improvement.

The Group integrated the awareness of business ethics in operations and daily management of employees, and incorporated the normative requirements of business ethics such as anti-money laundering, anti-fraud, business gifts and conflicts of interest into the Employee Handbook, endeavoring to further implement the daily management of employees in terms of business ethics. The Company also conducted anti-commercial bribery trainings for personnel who are the heads or above of the Procurement Department, Finance Department, General Management Department and HR Department, to systematically lecture the basic information, risk control and relevant cases of commercial bribery, which raised employees' awareness of preventing commercial bribery and received 30 participants.

During the Reporting Period, the Group did not receive any reports or judicial proceedings against the Group or its employees for corruption, bribery, extortion, fraud or money laundering.

Risk Management and Control

Sound and effective risk management and control system and risk response capacity guarantees the Group's stability and long-term success. In strict accordance with the Company Law of the People's Republic of China and the Articles of Association and other policy requirements, we formulated the Basic Standards for Internal Control of the Company and the Risk Management System, and gradually improved the internal audit supervision system and risk management system. In terms of internal control, during the Reporting Period, the Company reviewed 66 corporate systems, updated 21 related systems and processes, and carried out two internal audit projects. In terms of risk management, during the Year, we continued to evaluate the business development strategy and the internal and external risks of the Company, and paid continuous attention to and kept track of the major risks.

Risk management and internal control framework of Viva Biotech:

- Board of Directors: Managing and monitoring the risk management and internal control system
- Audit Committee: Guiding risk avoidance, supervising and verifying the implementation and effectiveness of risk management and internal control systems
- Internal Audit Department: Leading the risk management and internal control of daily operations and establishing a risk avoidance and internal control system to improve the Group's operation and management process and effectively solve and mitigate overall operational risks
- Various Departments: Monitoring and managing daily operation process and procedures, identifying major risks, conducting self-inspection and implementing major supervision processes

PRODUCT RESPONSIBILITY – STRIVING FOR SUSTAINABLE BUSINESS SUCCESS

Product Quality and Safety

Viva Biotech has always paid close attention to the effective improvement of service quality and is committed to providing world leading drug discovery service and developing high-quality and safe drugs catering for clients' needs. The Group strictly abides by relevant laws and regulations, such as the Product Quality Law of the People's Republic of China and Safety Production Law of the People's Republic of China and has obtained ISO 9001:2015 quality management system certification to continuously improve the quality control system. The Company regularly reviews, sorts out and revises internal regulatory documents, and constantly updates quality control standards on risk control, monitoring and measurement control, internal audit and error correction. We have also strengthened the quality concept through staff training and technology R&D, and continuously promoted the improvement of quality management level.

During CDMO business process, Langhua Pharmaceutical also established strict management systems in laboratory inspection process, finished product review and approval, and product recall, so as to ensure that the R&D, production and inspection of products meet the quality standards, relevant regulations and drug registration requirements, and timely and effectively recall drugs with potential quality issues where necessary, for the purpose of effectively protecting the interests of patients and public health. During the Reporting Period, the Group did not recall any products for health and safety reasons.

Technological Innovation and Intellectual Property Rights

Technological Innovation

During the Reporting Period, the Group's R&D investment amounted to RMB66.0 million, an increase of 46.7% over the same period of last year. R&D investment was mainly used to introduce new technology platforms, such as Cyro-EM and computational chemistry. In addition, the Group also proactively extended presence to the antibody macromolecule field and set up the chemistry, manufacturing and control ("CMC") process development team to actively expand and meet clients' R&D and production service needs at various stages.



R&D laboratory 1

R&D laboratory 2

PRODUCT RESPONSIBILITY - STRIVING FOR SUSTAINABLE BUSINESS SUCCESS

During the Reporting Period, the Group obtained 27 patents, including 14 invention patents and 13 utility model patents; and two software copyrights.

Case Highlight: Viva Biotech encouraged employees to engage in invention and innovation

In 2020, Lian Caixia, an employee from the Company, and the team members of the cell group, made major technological innovations in the production process of flag antibody to produce antibodies using the suspension stably transformed cell lines. Compared with the traditional ascites production method, the new approach can save millions of expenditures for the Company each year, greatly shorten the production cycle and lower the labor cost. The Company granted Lian Caixia Viva Biotech Technology Innovation Award and bonuses in recognition of her efforts, encouraging employees to follow Lian Caixia's example and strive to pioneer in innovations.

Protection of Intellectual Property Rights

Intellectual property rights constantly empower Viva Biotech's innovation and development. In order to better protect the intellectual property rights and patents of clients and the Group in R&D projects, strictly following the Patent Law of the People's Republic of China and the Trademark Law of the People's Republic of China, Viva Biotech formulated and strictly implemented the Intellectual Property Rights Protection Measures. Before the commencement of a project, we enter into confidentiality agreement with the customer, encrypt the relevant documents and reports, and transmit through the encrypted network disk. With respect to the intellectual property risks among projects, the Group will evaluate the intellectual property rights of the projects for which clients intend to carry out R&D within the Group during the project negotiation stage to ensure that there is no conflict of intellectual property rights.

PRODUCT RESPONSIBILITY - STRIVING FOR SUSTAINABLE BUSINESS SUCCESS

R&D milestones of Viva Biotech



Information Security Management

The Group attaches great importance to protection of customer information and trade secrets. In strict compliance with the relevant regulations on information security and privacy protection, the Group has established an information security team and a strict information management system to standardize the Regulations on Confidentiality of Customer Information, define the scope of confidential information of the Group and departments and methods for keeping confidentiality, and formulate methods for dealing with information leaks including written warnings, penalties and termination of labor contracts. The Information Security Team is accountable to the Group's Public Management Department and performs tasks including publishing information security-related documents, conducting information security training, preventing information divulging, and continuously improving the information security process.

In terms of computer information security management, the Group acts in strict accordance with laws and regulations and formulated the Standards for Computer Information Security Management, Computer Management System and other systems to specify the management requirements for computer use specifications, data management, information backup, user management, system security, virus prevention and computer information system security inspection, and ensure the stable operation of the Group's network and the security of information and materials.

Customer Service

Viva Biotech actively communicates with clients to understand their evaluation of our services and improve the service quality. In order to get an objective and comprehensive understanding of the customer satisfaction evaluation on the service quality of the Group and their needs and opinions and suggestions, the Group formulates the Customer Questionnaire Management Process and conducts customer satisfaction surveys on a regular basis to investigate the service quality, response speed, intellectual property protection and service fees for key and new clients, and to make corresponding internal analysis and rectification on the issues raised.

After years of accumulation and development, the Group has established a robust customer-oriented service system. We have always standardized and improved our service with reference to the highest standards in the industry. For example, clients' inquiry will be addressed within one business day; communication with clients on project progress will be conducted once in a week or two weeks; and clients will be invited for visit and in-depth communication on a regular basis. During the Year, the Group conducted a client satisfaction survey and secured a full score on the survey.

PRODUCT RESPONSIBILITY – STRIVING FOR SUSTAINABLE BUSINESS SUCCESS

In order to handle customer complaints in a timely and efficient manner, maintain the image and reputation of the Group, and promote the improvement of service quality, the Group has also formulated the operational procedures for handling customer complaints. The department head will discuss with the project head, the internal control department and the customer service department the reasons for complaint and propose specific solutions thereon. We also summarize and evaluate the customer complaint handling process from time to time, learn from experience and put forward suggestions for improvement, so as to continuously improve the operation management and business operation process, and improve the quality and level of customer service. During the Reporting Period, the Group received a total of 20 complaints from clients, primarily from Langhua Pharmaceutical, all of which had been properly addressed.

Compliance Advertising

In terms of advertisement, in strict compliance with the Advertising Law of the People's Republic of China and other laws, regulations and industry standards, the Group has formulated the Brand Strategy Management System to strictly evaluate, prohibit the legality, authenticity, scientificness and accuracy of publicly released information, the release of deceptive and misleading advertising information and materials, and effectively protect the legitimate rights and interests of clients.

Supply Chain Management

Responsible and sustainable supply chain is an integral component of Viva Biotech's business chain management. Pursuant to the Bidding Law of the People's Republic of China, the Group established the Bidding Management System, adopted the fair and impartial cooperation attitude, and followed the standardized operation model of unified planning, price inquiry and procurement, in a bid to regulate the business cooperation process, and actively communicated with suppliers to establish partnership featuring mutual trust and assistance. We resolutely prevent potential corruption and fraud along the supply chain, crack down on unfair competition, and maintain a fair and impartial cooperative relationship.

In terms of supplier management, the Group has formulated Supplier Access Regulations to clearly regulate supplier access, selection, classification, acceptance and evaluation management. The purchasing department compiles a list of required raw materials according to internal policies and procedures, evaluates major risks related to relevant raw materials and determines their specifications, carefully selects raw material suppliers and conducts background checks on candidate suppliers. The Group also introduced and implemented internal audit monitoring process to reduce supply chain risks and adopted the multi-party supervision mechanism for all procurement contracts to effectively avoid risks leveraging multi-department joint examination and approval. Payment to suppliers is also subject to multiple approvals prior to settlement. At the same time, we promote the performance evaluation system for suppliers, through which frequent suppliers are evaluated once a year, while qualified suppliers are reviewed once a year to effectively manage the potential risks in the supply chain. The full purchase process will be archived for internal records and customer review.

PRODUCT RESPONSIBILITY - STRIVING FOR SUSTAINABLE BUSINESS SUCCESS

We also attach importance to the environmental and social performance of suppliers. For example, for suppliers of controlled chemicals, the Company requires them to provide license for production, operation or transportation of hazardous chemical products. For suppliers who provide product-related services, we require them to provide relevant certificates such as ISO 9001 (Quality Management System), ISO 14001 (Environmental Management System) and ISO 45001 (Occupational Health and Safety Management System). In terms of encouraging the use of environmentally-friendly products, the Company also took the initiative to cooperate with suppliers to recycle packaging materials.

During the Reporting Period, the Group had a total of 1,404 suppliers in mainland China, including approximately 77% in East China, 5% in South China, 11% in North China and 7% in Central China, all of whom are subject to the Group's supplier employment and management regulations.



Number of suppliers by region¹

1

The number of suppliers recorded during the Year included those from Langhua Pharmaceutical, leading to an increase from 2019.

Environmental Management System

The Group strictly abides by the Environmental Protection Law of the People's Republic of China, Law of the People's Republic of China on Environmental Impact Assessment, Water Pollution Prevention and Control Law of the People's Republic of China, Law of the People's Republic of China, Law of the People's Republic of China on the Prevention, Control of Environment Pollution Caused by Solid Wastes, Law of the People's Republic of China on the Prevention and Control of Environmental Noise Pollution, Law of the People's Republic of China on the Prevention and Control of Soil Pollution, and Regulations on the Management of Medical Waste and other relevant laws and regulations. During the Reporting Period, the Group was not aware of any cases of violation of environmental protection laws and regulations.

In order to effectively control the discharge of waste water, waste gas, solid wastes ("**Three Wastes**") and sundries generated in the production and operation of the Group, Viva Biotech has formulated Environmental Protection Management Rules to clearly define the environmental protection responsibilities and specific management measures for each department. In particular, according to the national and local environmental assessment requirements, we focus on sewage, waste gas and solid waste treatment, and regularly inspect and maintain the treatment equipment to ensure smooth running. We also carry out annual emission tests and conduct strict inspection on Three Wastes generated from laboratories in various regions regularly each year. Meanwhile, the Group strictly follows the environmental protection "three simultaneities" requirements in project initiation, renovation and expansion, to ensure that the pollution prevention and control facilities of construction projects are designed, constructed and put into use simultaneously with the main body project.

Cleaner Production

Emission Management

During CDMO business processes, Langhua Pharmaceutical has formulated a management procedural system for waste gas and waste water discharge, to ensure up-to-standard discharge of waste gas and waste water and reduce the negative impact on the surrounding atmosphere and water environment. During the Reporting Period, Langhua Pharmaceutical carried out volatile organic compounds (VOCs) emission reduction projects, and completed a total of 50 VOCs remediation and upgrading projects. In addition, Langhua Pharmaceutical standardized the greenhouse gas inventory, strengthened the greenhouse gas information management and file recording, and responded to the carbon disclosure project (CDP) climate change questionnaire.



Regenerative thermal oxidizer (RTO) for waste gas treatment



Wastewater pretreatment workshop

The table below sets out the environmental performance of the Group² in terms of emissions during the Reporting Period:

Vehicle Air Pollutants Emissions³ of Viva Biotech (excluding Langhua Pharmaceutical)

Indicator	2019	2020	Unit
Emissions of nitrogen oxides (NO_x)	2.22	2.89	kg
Emissions of carbon monoxide (CO)	47.99	28.87	kg
Emissions of particulate matter (PM ₁₀)	0.32	0.28	kg
Emissions of particulate matter (PM _{2.5})	0.31	0.27	kg
Emissions of sulfur oxides (SO_x)	0.15	0.16	kg

Vehicle Air Pollutants Emissions of Langhua Pharmaceutical

Indicator	2020	Unit
Emissions of nitrogen oxides (NO _x)	1,405.13	kg
Emissions of carbon monoxide (CO)	718.34	kg
Emissions of particulate matter (PM_{10})	44.20	kg
Emissions of particulate matter (PM_{25})	39.83	kg
Emissions of sulfur oxides (SO_x)	0.81	kg

² As the environmental data of Langhua Pharmaceutical were included in ESG report for the first time during the Year, in order to facilitate the continuity and comparability of the data, the environmental data of Viva Biotech and Langhua Pharmaceutical were disclosed separately during the Year. In the future, the Group will disclose the environmental data on a consolidated basis.

³ The specific vehicle air pollutants emissions were calculated with reference to the Technical Guide for Compilation of Emission Inventory of Road Vehicles (Trial) issued by the Ministry of Ecology and Environment of the People's Republic of China.

Indicator	2019	2020	Unit
Vehicle emissions (scope 1) ⁴	22.40	24.02	tCO ₂ e
Emissions from indirect use of	2,083.12	2,812.33	tons of CO ₂
energy (scope 2) ⁵			-
Forestry emission reduction	0.35	0.39	tons of CO_2
Total greenhouse gas emissions ⁶	2,105.17	2,835.96	tCO ₂ e
Total greenhouse gas emission density ⁷	6.52	6.46	tCO ₂ e/million of
			revenue in RMB

Greenhouse Gas Emissions of Viva Biotech (excluding Langhua Pharmaceutical)

Greenhouse Gas Emissions of Langhua Pharmaceutical

Indicator	2020	Unit
Vehicle emissions (scope 1)	127.99	tCO ₂ e
Emissions from indirect use of energy (scope 2)	25,747.02	tons of CO ₂
Forestry emission reduction	0	tons of CO_2
Total greenhouse gas emissions	25,875.01	tCO ₂ e
Total greenhouse gas emission density ⁸	17.04	tCO ₂ e/million of
		revenue in RMB

Wastewater Discharge of Viva Biotech (excluding Langhua Pharmaceutical)

Indicator	2019	2020	Unit
Domestic sewage	/	23,209.50	ton
Industrial wastewater	/	0	ton

⁴ The greenhouse gas emissions (scope 1) were calculated with reference to the Guidelines for Calculation Methods and Reporting Greenhouse Gas Emissions from Enterprises in Other Industries (for Trial Implementation) issued by the National Development and Reform Commission of the People's Republic of China.

⁵ The electricity emissions out of the greenhouse gas (scope 2) emissions were calculated with reference to the Notice on 2018 Carbon Emission Report and Verification and Emission Monitoring Plan-2018 Model Carbon Emission Supplementary Data Accounting Report issued by the Ministry of Ecological Environment of the People's Republic of China in 2019. The thermal emission data was calculated based on the default value of carbon dioxide emission factor corresponding to thermal power in the accounting guidelines of various industries published by the National Development and Reform Commission.

⁶ Limited by the calculation method, the emissions from indirect energy use (scope 2) represented by the data only include carbon dioxide emissions, but not other types of greenhouse gas emissions.

⁷ During the Reporting Period, the revenue of Viva Biotech (excluding Langhua Pharmaceutical) was RMB439.0 million.

⁸ During the Year, Langhua Pharmaceutical's revenue was RMB1,518.1 million.

Wastewater Discharge of Langhua Pharmaceutical

Indicator	2020	Unit
Industrial wastewater	119,133.60	ton
Chemical oxygen demand (in wastewater)	20.03	ton
Ammonia nitrogen (in wastewater)	0.17	ton
Domestic sewage	29,681.89	ton

Use of Resources

During CDMO business processes, Langhua Pharmaceutical has established Energy Resource Management Procedure to regulate the use of energy and resources, reduce consumption and enhance utilization efficiency. In 2020, responding to the call of local government, Langhua Pharmaceutical carried out clean production audit, and achieved remarkable results in energy conservation, steam saving and water conservation through implementing 17 cleaner production measures, thereby realizing the coordinated development of economic benefits and environmental benefits.

Use of Resources of Viva Biotech (excluding Langhua Pharmaceutical)

Indicator	2019	2020	Unit
Water consumption ⁹	18,503.00	26,903.66	ton
Water consumption density	52.27	61.28	ton/million of
			revenue in RMB
Petrol consumption	9,710.00	9,920.00	liter
Diesel consumption	0	486.00	liter
Total direct energy consumption	99.09	97.07	MWh^{10}
Direct energy consumption density	0.31	0.22	MWh/million of
			revenue in RMB
Consumption of purchased electricity	3,414.39	4,609.62	MWh
Consumption of purchased heat	0	0	GJ
Total indirect energy consumption	3,414.39	4,609.62	MWh
Indirect energy consumption density	10.57	10.50	MWh/million of
			revenue in RMB

⁹ The Group's water resources are obtained from the municipal water network and did not encounter any issues related to sourcing water.

¹⁰ Compared with the disclosure in 2019, the energy consumption disclosure converts all energy units into 000' KWh, that is, MWh, according to the requirements of the Environmental, Social and Governance Reporting Guide, which came into effect on July 1, 2020. Domestic thermal emission factors was calculated based on the low calorific value in Guidelines for Calculation Methods and Reporting Greenhouse Gas Emissions from Enterprises in Other Industries (for Trial Implementation) published by the National Development and Reform Commission.

Use of Resources of Langhua Pharmaceutical

Indicator	2020	Unit
Water consumption	4,699,615.00	ton
Water consumption density	3,095.72	ton/million of
		revenue in RMB
Petrol consumption	29,531.59	liter
Diesel consumption	460,781.11	liter
Total direct energy consumption	4,822.44	MWh
Direct energy consumption density	3.18	MWh/million of
		revenue in RMB
Consumption of purchased electricity	16,875.52	MWh
Consumption of purchased heat	140,466.02	GJ
Total indirect energy consumption	55,893.86	MWh
Indirect energy consumption density	36.82	MWh/million of
		revenue in RMB

Achievement of Energy-conservation and Water-saving Targets of Langhua Pharmaceutical in 2020

Indicator	Target in 2020	Achievement in 2020
Water consumption per RMB0'000 of output Energy consumption per RMB0'000 of output	A 5.7% reduction from 2019 A 7.0% reduction from 2019	Reduced by 21.2% from 2019 Reduced by 8.9% from 2019

Future Energy-conservation and Water-saving Targets of Langhua Pharmaceutical

Indicator	Target in 2021	Target in 2022
Water consumption per RMB0'000 of output Energy consumption per RMB0'000 of output	A 2.7% reduction from 2020 A 7.0% reduction from 2020	A 2.7% reduction from 2021 A 7.0% reduction from 2021

Waste Management

The Group strictly abides by the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution caused by Solid Wastes and the National Hazardous Waste List and other relevant laws and regulations in dealing with hazardous wastes generated during operation. The major types of hazardous wastes generated by Viva Biotech include waste fuels, chemicals and glass from chemical laboratories, and the hazardous wastes generated by Langhua Pharmaceutical during CDMO processes are mainly waste residue, waste activated carbon, waste solvent, high-boiling residues, waste salt, waste samples, waste packaging materials, waste water treatment sludge and waste mineral oil, etc.

In terms of hazardous waste management, the Group adheres to the management principle of "unified collection, classified disposal, centralized incineration and elimination of hidden dangers", establishes and strictly implements the Hazardous Waste Management System and achieves the goal of "reduction, recycling and nutrification" of hazardous waste. We have made detailed regulations on the inspection, warehousing, storage, collection and transportation of hazardous wastes to ensure standardized management of each link of hazardous waste treatment. After centralized recycling, the hazardous wastes will be delivered to professional third parties for treatment and transportation, thus effectively reducing the negative impact on the environment.

In terms of non-hazardous waste generated during the operation of the Group, we also issue guidance instructions on the collection, storage and treatment of wastes according to the requirements of the local domestic garbage management regulations where we operate, and classify them into four types: recyclable, hazardous, wet and dry wastes for storage, recycling and unified treatment.



Solar photovoltaic panel

Indicator	2019	2020	Unit
Waste fuel and chemicals generated	121.00	223.03	ton
Laboratory solid hazardous waste generated	25.00	0.06	ton
Waste ink cartridge generated	0.03	0.04	ton
Waste fluorescent tubes generated	0.03	0.00	ton
Waste battery generated	0.00	0.00	ton
Total amount of hazardous waste generated	146.06	223.13	ton
Density of hazardous wastes generated	0.45	0.51	ton/million of
			revenue in RMB

Hazardous Waste generated by Viva Biotech (excluding Langhua Pharmaceutical)¹¹

Hazardous Waste generated by Langhua Pharmaceutical

Indicator	2020	Unit
Waste solvent generated	1,136.28	ton
High-boiling residues generated	902.22	ton
Waste salt generated	895.67	ton
Waste residue generated	306.77	ton
Waste activated carbon generated	125.86	ton
Waste packaging barrel generated	112.33	ton
Sludge generated	73.97	ton
Waste packaging generated	26.64	ton
Waste reagent bottle generated	2.49	ton
Waste mineral oil generated	0.70	ton
Laboratory waste liquid generated	0.41	ton
Waste sample generated	0.38	ton
Total amount of hazardous waste generated	3,583.71	ton
Density of hazardous wastes generated	2.36	ton/million of
		revenue in RMB

¹¹ Compared with 2019, data disclosure indicators were optimized during the Year by adopting the unit of ton for hazardous waste statistics, and uniformly calculating the total amount and density of hazardous waste.

Indicator	2019	2020	Unit
Waste paper generated	0.31	0.88	ton
Waste glass generated	/	0.02	ton
Waste plastic generated	/	0.00	ton
Scrap metal generated	/	0.00	ton
Fly-waste and waste cotton generated	/	0.00	ton
Waste packaging generated	/	0.00	ton
Kitchen waste generated	/	1.33	ton
Other waste generated	1.91	1.32	ton
Total amount of non-hazardous waste	2.23	3.56	ton
generated			
Density of non-hazardous waste generated	0.01	0.01	ton/million of
			revenue in RMB

Non-hazardous Waste generated by Viva Biotech (excluding Langhua Pharmaceutical)¹²

Non-hazardous Waste generated by Langhua Pharmaceutical

Indicator	2020	Unit
Waste paper generated	34.47	ton
Waste glass generated	43.15	ton
Waste plastic generated	86.43	ton
Scrap metal generated	219.99	ton
Fly-waste and waste cotton generated	83.56	ton
Waste packaging generated	79.00	ton
Kitchen waste generated	27.46	ton
Other waste generated	41.53	ton
Total amount of non-hazardous waste generated	615.60	ton
Density of non-hazardous waste generated	0.41	ton/million of
		revenue in RMB

¹² Compared with 2019, data disclosure indicators were optimized during the Year by adopting the unit of ton for non-hazardous waste statistics, and uniformly calculating the total amount and density of non-hazardous waste.
ENVIRONMENTAL-FRIENDLY – ASPIRING FOR A LOW-CARBON FUTURE

Case Highlight: Cleaner Production Practice of Langhua Pharmaceutical

Langhua Pharmaceutical generates piperazine hydrochloride in the production of ciprofloxacin hydrochloride. The recycling of piperazine requires addition of sodium hydroxide for neutralization reaction, which will generate hazardous waste salt (sodium chloride). In order to reduce hazardous waste, Langhua Pharmaceutical has adopted bipolar membrane electrodialysis system technology to convert piperazine hydrochloride into piperazine, and at the same time by-product hydrochloric acid is generated, thereby reducing the generation of waste salt (sodium chloride), the consumption of chemical agent (sodium hydroxide) and in turn the operation cost. Leveraging such technology, consumption of sodium hydroxide and generation of sodium chloride (30% water content) has been reduced by 350 tons and 665 tons, respectively.



Green Operation

The Group primarily consumes water, electricity, gasoline and paper during business operations. In order to ensure the rational use of resources and reduce operating costs and energy consumption, the Company issued the Proposal on Energy Conservation and Emission Reduction and the Proposal on Green Office to employees, promoting a series of green office measures, encouraging employees to engage in trivialities to press ahead with energy and resource conservation, creating a greener and more environmentally-friendly office environment and enhancing employees' awareness of sustainable development, striving to foster a good atmosphere of energy conservation and emission reduction in the Company.

ENVIRONMENTAL-FRIENDLY – ASPIRING FOR A LOW-CARBON FUTURE

Case Highlight: Environmental Protection Practices at Viva Biotech's operating premises on Faladi Road

Viva Biotech's operating premises, which cover three floors on Faladi Road, Pudong, Shanghai, with a total area of approximately 1,830 square meters, consist of synthetic laboratories and biological laboratories. The premises are equipped with fume hoods for exhaustion, which are distributed in a centralized manner and use traditional exhaust pipes to transport natural fresh air into the room, exhausting huge amount of air and supplying considerable fresh air to maintain indoor pressure in each laboratory. In order to reduce the energy consumed in operation of equipment, the Bernoulli ventilation cabinet was selected to replace the conventional ventilation cabinet through comparative study in the design stage of the office premises, which significantly reduced the equipment operation cost and lowered the future energy consumption of operating premises.

Case Highlight: Langhua Pharmaceutical formulated a green office management system

In response to the call for energy conservation and emission reduction, and to ensure the physical and mental health of employees, Langhua Pharmaceutical has formulated a green office management system, which specified employees' behaviors from six aspects comprising use of electric lights and electrical equipment, ventilation equipment and air conditioners, water conservation, waste reduction, recycling of office supplies and improvement of the workplace environment. In addition, it posted signs or slogans in the office to enhance employees' awareness of environmental protection and create a green and comfortable office environment.



Waste classification publicity

Employment and Protection of Employees' Rights and Interests

Viva Biotech has created a fair and smooth talent selection and appointment mechanism for employees, and provided comprehensive and complete protection for employee rights and interests. We strictly follow relevant labor laws and regulations such as Labor Law of the People's Republic of China, Labor Contract Law of the People's Republic of China and Social Insurance Law of the People's Republic of China, and formulated and revised management documents such as Employee Handbook, Recruitment Management System, Salary Management System and Promotion Management System, covering salary, recruitment, compensation, dismissal, promotion, performance appraisal, working hours, holidays and other related to salary, recruitment, compensation, dismissal, promotion, dismissal, promotion, performance appraisal, working hours or legal cases related to salary, recruitment, compensation, dismissal, promotion, dismissal, promotion, performance appraisal, working hours and holidays.

The Group also advocates equality and diversity, provides equal job opportunities for different job seekers, and eliminates discrimination towards employees due to factors such as race, gender, age, disability, family and marital status, sexual orientation, political and philosophical views, religious beliefs, trade union activities and nationality.

The Group strictly abides by relevant laws and regulations, resolutely prohibits child labor and forced labor, and will not allow prison labor. The recruitment system of the Group automatically excludes all applicants under the age of 18, and valid identity documents of applicants are reviewed during the whole process of employee recruitment, approval and registration to ensure the authenticity of information. During the Reporting Period, there were no incidents of child labor or forced labor within the Group.

During the Reporting Period, the Group made continuous efforts to step up talent recruitment and business expansion. As of the end of the Reporting Period, the Group had a total of 1,619 employees, including 643 newly consolidated from Langhua Pharmaceutical.



Total employees



Indicator		2020
Total employee turnover rate		19%
By gender	Male	22%
	Female	16%
By age	Under 30 (inclusive)	24%
	31 to 40	17%
	41 to 50	11%
	Above 50	7%
By geographical region	Shanghai	15%
	Jiaxing	26%
	Chengdu	10%
	Taizhou	28%
	Ningbo	10%
	Overseas	14%
	Hong Kong	0%

Employee Health and Safety

The Group acts in strict compliance with the laws and regulations related to occupational health and safety, such as the Law of the People's Republic of China on Production Safety, the Law of the People's Republic of China on Prevention and Control of Occupational Diseases, Regulations on Safety Management of Hazardous Chemicals, Fire Protection Law of the People's Republic of China, Labor Law of the People's Republic of China, Regulations on Safety Production License and other occupational health and safety related laws and regulations. During the Reporting Period, we were not aware of any cases of violation of the above laws and regulations.

Based on the specific conditions of the Group, we have clearly defined the safety responsibilities of the employees, applied the safety and health awareness to all aspects of operation, and committed ourselves to eliminating or reducing various factors endangering the health of employees. In planning the construction of laboratories, the Group will select qualified contractors and use construction materials that meet safety and quality standards to ensure the safe operation of the laboratories, minimize occupational health risks in the workplace, and create a safe, healthy and comfortable working environment for employees to protect their physical and mental health.



Safe and comfortable office environment

During the Reporting Period, Viva Biotech prepared and implemented the Comprehensive Emergency Plan for Production Accidents in Production Operation Units according to relevant regulatory requirements, analyzed the hazards and risks of the Company, and established prevention, early warning and emergency response mechanisms and procedures, providing standardized guidance for emergency rescue of production safety accidents, effectively preventing and resolving major accident hazards, and providing institutional guarantee for employees' personal safety.

In accordance with relevant regulatory requirements, Viva Biotech has formulated the Viva Chemical Laboratory Safety and Operation Specifications to clarify the rules and regulations of the Chemistry Department, common hazards and emergency response plans. Meanwhile, we actively identify occupational health and safety hazards in various activities within the Group, evaluate and determine major risks, so as to carry out effective control. The Group regularly conducts safety inspections, comprehensively examines potential safety hazards, and formulates and implements rectification plans to effectively promote risk prevention.

In order to improve the safety quality of employees, prevent safety accidents and reduce occupational hazards, the Group has formulated the Management System of Safety Education and Training of Viva Biotech, which stipulates that all employees should receive safety trainings and fire drills, and get familiar with relevant safety production rules and regulations and safety operation procedures, so as to master necessary safety production knowledge and safety operation skills required of their posts, and enhance the ability of accident prevention, occupational hazard control and emergency response. During the Reporting Period, Viva Biotech carried out several practical trainings on fire-fighting and chemical laboratory safety, with a total of 422 participants.



Fire safety drill training for fresh graduates 1

Fire safety drill training for fresh graduates 2

During the Reporting Period, the Group lost 48.5 days due to work-related injuries, which was primarily from Langhua Pharmaceutical, and did not record any work-related fatalities.

Talent Attraction and Retention

Sound and Competitive Salary and Benefits

The Group attaches great importance to employment of talents, provides generous and competitive salaries and benefits for talents, establishes a high-quality talent pool, and constantly improves team cohesion and employee loyalty. We have stipulated detailed provisions on the salary and promotion standards in the Human Resources Management Manual, and adjust salaries each year according to relevant national policies, operation status and personal performance to continuously improve and optimize the salary management system. We pay close attention to the changes in salaries in industries and regions and implement a structural salary system. The salary of employees includes basic salary, post salary, project bonus, subsidy, overtime payment and other items. In addition, during the Reporting Period, the Company granted share options to certain qualified participants to subscribe for an aggregate of 17,110,000 ordinary shares in the ordinary share capital of the Company at a price of HK\$7.61 per share.



According to the Social Insurance Law of the People's Republic of China and Regulation on the Administration of Housing Accumulation Funds, the Group pays social insurance and housing provident fund for employees on time, and provide a series of benefits such as lunch subsidies, communication subsidies, entertainment subsidies, etc. to enhance the sense of well-being and belonging of employees. In terms of holiday benefits, according to relevant regulations, in addition to statutory holidays, employees also enjoy paid holidays such as annual leave, sick leave, maternity leave, marriage leave and funeral leave.

For overseas or other high-caliber talents, the Group helps them to apply for work permits and work visas, purchases commercial insurance, facilitates those who meet the requirements to apply for green cards in China, provides paid leave for visiting relatives and related subsidies, and assists qualified employees to apply for various special talent subsidies such as national "Thousand Experts" and Zhejiang "Thousand Experts" schemes, and overseas talent programs.

Talent Training and Development

The Group has clarified the training management regulations in the Human Resources Manual and standardized the implementation process of the annual training plan, including the investigation of training requirements, the formulation of the annual training plan, the organization and implementation of the training and the evaluation of the training results. Through strict and standardized process management, the Group has improved the feasibility of the training plan, training organization and service level to ensure satisfactory training results, thus boosting the quality of the Group's employees and enhancing the adaptability and competitiveness of the Company. According to the Group's training demands, we provide appropriate trainings for different training targets, including induction training for new employees, safety training, chemical research and development training, biological research and development training and management training, etc. to meet the diverse training needs of employees and improve their professional skills.

During the Reporting Period, the Group strengthened internal training lecturing, improved the internal training curriculum system, attached equal importance to both theoretical and experimental operations, and provided more comprehensive and in-depth trainings to employees through centralized lectures and specific experimental operations. It enhanced external training efforts, promoted internal trainings with external trainings, focused on improving management skills for project manager candidates, and continuously improved the management capacity and leadership of middle and senior management staff. The Group optimized tracking of training effect, strengthened training assessment and incentive, established training feedback and effect evaluation mechanism, and refined training management and implementation system.

Indicator		2019	2020	Unit
Total number of employees trained		324	1,028	person
Percentage of employees trained by gender ¹³	Male	54%	65%	/
	Female	46%	35%	/
Percentage of employees trained by employee category ¹⁴	R&D staff	90%	44%	/
	Management			
	staff	0%	8%	/
	Other staff	10%	48%	/
Average training hours by gender	Male	/	19	hour
	Female	/	26	hour
Average training hours by employee category	R&D staff	/	30	hour
	Management			
	staff	/	5	hour
	Other staff	/	10	hour

¹³ According to the suggestions on the data calculation method in Appendix III: Guidelines for Reporting Social Key Performance Indicators in How to Prepare Environmental, Social and Governance Reports of the Hong Kong Stock Exchange, during the Year, the calculation method of the percentage of employees trained by gender was improved, and was arrived at by the number of employees trained in this category/total number of employees trained, which were traced back to 2019.

¹⁴ According to the suggestions on the data calculation method in the Guide of the Hong Kong Stock Exchange, during the Year, the calculation method of the percentage of employees trained by employee category was improved, and the percentage was arrived at by the number of employees trained in this category/total number of employees trained, which were traced back to 2019.



Induction training for fresh graduates 1



Induction training for fresh graduates 2



Professional skills training 1



Professional skills training 2

Care for Employees

Viva Biotech is concerned about the overall promotion of employees' well-being, and improves their working environment through diverse employee care activities, in an effort to build a warm harbor for employees' physical and mental growth. During the Reporting Period, in order to improve the living conditions of employees, the Group upgraded and renovated the employee apartments to comprehensively improve the living environment, safety and management level, and launched a shuttle bus route between the apartments and the Company to provide convenient transportation conditions for employees. To promote the mutual encouragement and mobilization of employees in the R&D Department, the Group introduced subsidies for clinical teachers and grants special benefits on holidays, such as Teachers' Day and Women's Day.



Employee apartments renovation 1



Employee apartments renovation 2



Public welfare haircut activities



Distributing mooncakes during Mid-Autumn Festival

GIVING BACK TO SOCIETY – CREATING SHARED VALUE

Joint Fight Against COVID-19

Given the severe challenges posed by the COVID-19 epidemic to business operations and the health of employees, Viva Biotech set up an epidemic task force on January 26, 2020 to urgently take charge of the work arrangement and administrative allocation during the epidemic. In strict accordance with the guiding requirements of local governments on pandemic prevention and control, the Group formulated the Pandemic Prevention and Control Measures of Viva Biotech, and implemented a series of strict health and safety regulations, including peak shift commuting, flexible attendance, office premise temperature check and daily health punch-in to ensure the safety and health of our employees and their families to the greatest extent, and made scientific and effective arrangements for follow-up tasks. Under the coordination of the task force, each R&D group of Viva Biotech has efficiently resumed production and returned to work in March 2020.



Thorough disinfection at office premises



Body temperature check for employees

Case Highlight: Langhua Pharmaceutical signed the public declaration of global generic drug manufacturers fighting against COVID-19

In November 2020, Langhua Pharmaceutical participated in and signed the public declaration of global generic drug manufacturers fighting against COVID-19. Langhua Pharmaceutical cooperated with the Medicines Patent Pool (MPP) and patented drug companies to provide the low-and middle-income countries worldwide with urgently needed anti-COVID-19 drugs, and responded to and supported the SUCCESS (Sustainable Universal access through Collaboration, Coordination, Emergency measures, Scale and Speed) scheme proposed by MPP.

GIVING BACK TO SOCIETY - CREATING SHARED VALUE

Community Welfare

Viva Biotech proactively shoulders the corporate social responsibilities, keeps abreast of the needs of local community, and takes the initiative to organize employees to launch welfare activities, striving to promote the corporate spirit of public welfare and cultivate the volunteer service mentality of employees to be passionate about welfare and willing to contribute. During the Reporting Period, the Group donated RMB208,196.72 to education, pension and charity organizations. In addition, the Group also participated in public welfare activities in Linhai New Residents Social Club. In 2020, a total of 50 employees participated in public welfare activities, benefiting approximately 500 people.



Employees from Langhua Pharmaceutical participated in public welfare activities

Employees from Langhua Pharmaceutical launched voluntary services

A. Environmental

General Disclosure and Key Performance Indicators	Descrip	otion	Relevant Chapters
Aspect A1: Emission	ns		
General Disclosure	(b) co ha ai w	tion on: ne policies; and compliance with relevant laws and regulations that ave a significant impact on the issuer relating to ar and greenhouse gas emissions, discharges into ater and land, and generation of hazardous and con-hazardous waste.	Environmental-friendly – Aspiring for a Low-carbon Future: Environmental Management System
Key Performance Indicators	A1.1	The types of emissions and respective emission data.	Environmental-friendly – Aspiring for a Low-carbon Future: Cleaner Production
	A1.2	Greenhouse gas emissions in total (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental-friendly – Aspiring for a Low-carbon Future: Cleaner Production
	A1.3	Total hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental-friendly – Aspiring for a Low-carbon Future: Cleaner Production
	A1.4	Total non-hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental-friendly – Aspiring for a Low-carbon Future: Cleaner Production
	A1.5	Description of measures to mitigate emissions and results achieved.	Environmental-friendly – Aspiring for a Low-carbon Future: Cleaner Production
	A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Environmental-friendly – Aspiring for a Low-carbon Future: Cleaner Production

General Disclosure and Key Performance Indicators	Descriptic	on	Relevant Chapters
Aspect A2: Use of R	lesources		
General Disclosure		n the efficient use of resources, including ter and other raw materials.	Environmental-friendly – Aspiring for a Low-carbon Future: Cleaner Production
Key Performance Indicators	A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Aspiring for a Low-carbon
	A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Environmental-friendly – Aspiring for a Low-carbon Future: Cleaner Production
	A2.3	Description of energy use efficiency initiatives and results achieved.	Environmental-friendly – Aspiring for a Low-carbon Future: Cleaner Production
	A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Environmental-friendly – Aspiring for a Low-carbon Future: Cleaner Production
	A2.5	Total packaging material used for finished products (in tons) and, if applicable, with reference to per unit produced.	Not applicable as the Group did not produce packaged finished products during business operations

General Disclosure and Key Performance Indicators	Description	Relevant Chapters
A3: The Environmer	t and Natural Resources	
General Disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	Environmental-friendly – Aspiring for a Low-carbon Future: Environmental Management System
Key Performance Indicators	A3.1 Description of the significant impacts of activities on the environment and natural resources and actions taken to manage them.	Environmental-friendly – Aspiring for a Low-carbon Future: Environmental Management System
B. Social		
Aspect B1: Employn	nent	
General Disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations with 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. 	Talent-driven – People-Oriented Dedication: Employment and Protection of Employees' Rights and Interests
Key Performance	B1.1 Total workforce by gender, employment type, age group and geographical region.	Talent-driven – People-Oriented Dedication: Employment and Protection of Employees' Rights and Interests
Indicators	B1.2 Employee turnover rate by gender, age group and geographical region.	Talent-driven – People-Oriented Dedication: Employment and Protection of Employees' Rights and Interests

General Disclosure and Key Performance Indicators	Descriptio	n	Relevant Chapters
Aspect B2: Health a	nd Safety		
General Disclosure	(b) comp have to p	on: olicies; and oliance with relevant laws and regulations that a significant impact on the issuer relating coviding a safe working environment and octing employees from occupational hazards.	Talent-driven – People-Oriented Dedication: Employee Health and Safety
Key Performance Indicators	B2.1	Number and rate of work-related fatalities.	Talent-driven – People-Oriented Dedication: Employee Health and Safety
	B2.2	Lost days due to work injury.	Talent-driven – People-Oriented Dedication: Employee Health and Safety
	B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	Talent-driven – People-Oriented Dedication: Employee Health and Safety
Aspect B3: Develop	ment and Tra	ining	
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.		Talent-driven – People-Oriented Dedication: Talent Attraction and Retention
Key Performance Indicators	B3.1	The percentage of employees trained by gender and employee category (such as senior management, middle-level management, etc.).	Talent-driven – People-Oriented Dedication: Talent Attraction and Retention
	B3.2	The average training hours completed per employee, by gender and employee category.	Talent-driven – People-Oriented Dedication: Talent Attraction and Retention

General Disclosure and Key Performance Indicators	Descriptio	n	Relevant Chapters			
Aspect B4: Labor St	Aspect B4: Labor Standards					
General Disclosure	(b) comp have	on on: olicies; and oliance with relevant laws and regulations that a significant impact on the issuer relating to enting child and forced labor.	Talent-driven – People-Oriented Dedication: Employment and Protection of Employees' Rights and Interests			
Key Performance	B4.1	Description of measures to review employment practices to avoid child and forced labor.	Talent-driven – People-Oriented Dedication: Employment and Protection of Employees' Rights and Interests			
Indicators	B4.2	Description of steps taken to eliminate such practices when discovered.	Talent-driven – People-Oriented Dedication: Employment and Protection of Employees' Rights and Interests			
Aspect B5: Supply C	Chain Manage	ement				
General Disclosure	Policies on managing environmental and social risks of the supply chain.		Product Responsibility – Striving for Sustainable Business Success: Supply Chain Management			
Key Performance	B5.1	Number of suppliers by geographical region.	Product Responsibility – Striving for Sustainable Business Success: Supply Chain Management			
Indicators	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Product Responsibility – Striving for Sustainable Business Success: Supply Chain Management			

General Disclosure and Key Performance Indicators	Descript	tion	Relevant Chapters
Aspect B6: Product	Responsibil	lity	
General Disclosure	(b) cor hav hea ma	on on: e policies; and mpliance with relevant laws and regulations that ve a significant impact on the issuer relating to alth and safety, advertising, labeling and privacy atters relating to products and services provided d methods of redress.	Product Responsibility – Striving for Sustainable Business Success: Product Quality and Safety, Information Security Management, Compliance Advertising
Key Performance Indicators	B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Product Responsibility – Striving for Sustainable Business Success: Product Quality and Safety
	B6.2	Number of products and service related complaints received and how they are dealt with.	Product Responsibility – Striving for Sustainable Business Success: Customer Service
	B6.3	Description of practices relating to observing and protecting intellectual property rights.	Product Responsibility – Striving for Sustainable Business Success: Technological Innovation and Intellectual Property Rights
	B6.4	Description of quality assurance process and recall procedures.	Product Responsibility – Striving for Sustainable Business Success: Product Quality and Safety
	B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Product Responsibility – Striving for Sustainable Business Success: Information Security Management

General Disclosure and Key Performance Indicators	Description		Relevant Chapters
Aspect B7: Anti-cor	ruption		
General Disclosure	(b) compliant have s	on: licies; and iance with relevant laws and regulations that significant impact on the issuer relating to y, extortion, fraud and money laundering.	Corporate Governance – Commitment to Responsibility: Compliance and Business Ethics
Key Performance		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.	Corporate Governance – Commitment to Responsibility: Compliance and Business Ethics
Indicators		Description of preventive measures and whistleblowing procedures, how they are implemented and monitored.	Corporate Governance – Commitment to Responsibility: Compliance and Business Ethics
Aspect B8: Commun	ity Investment		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities interests.		Giving Back to Society – Creating Shared Value: Joint Fight Against COVID-19, Community Welfare
Key Performance Indicators		Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	Giving Back to Society – Creating Shared Value: Joint Fight Against COVID-19, Community Welfare
		Resources contributed (e.g. money or time) to the focus area.	Giving Back to Society – Creating Shared Value: Joint Fight Against COVID-19, Community Welfare



维亚生物科技控股集团 VIVA BIOTECH HOLDINGS

