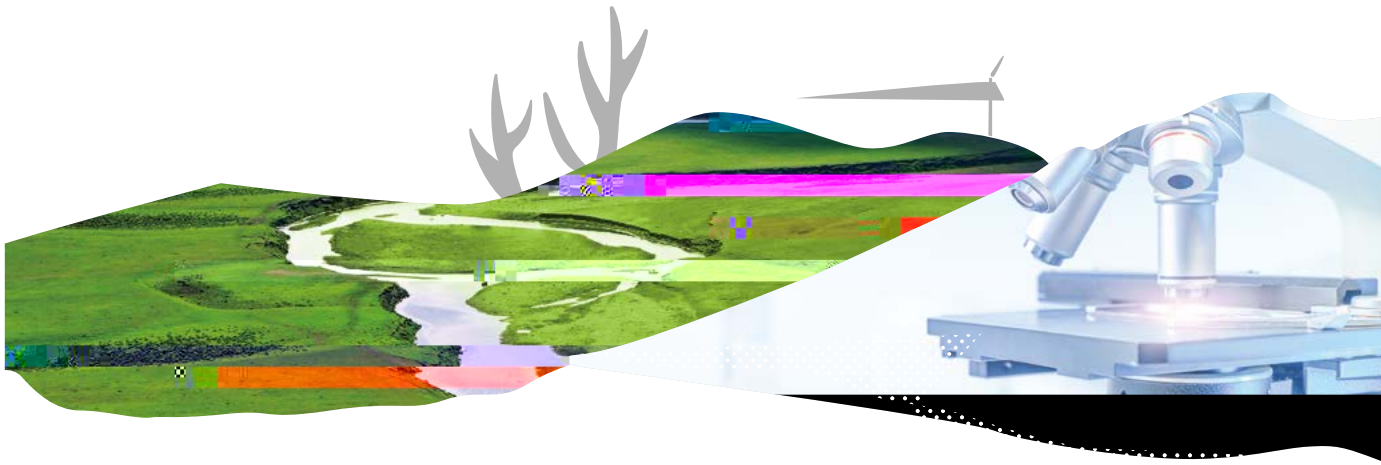
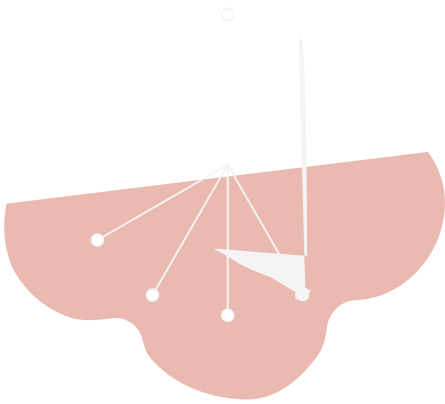
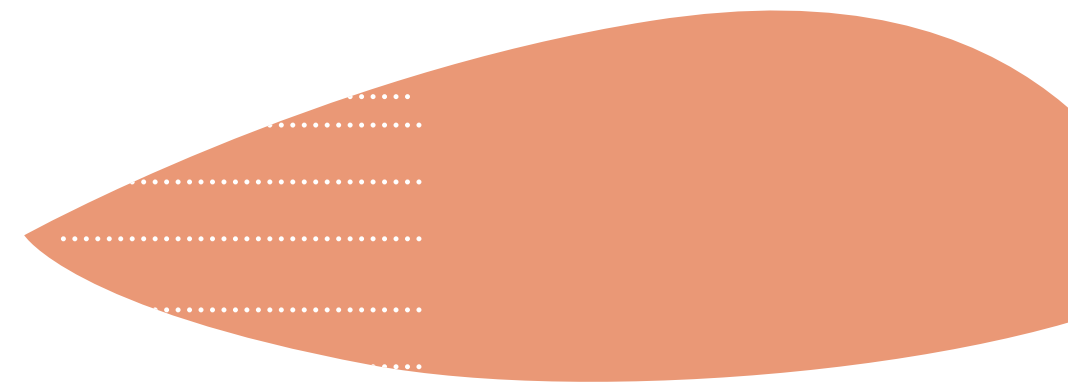
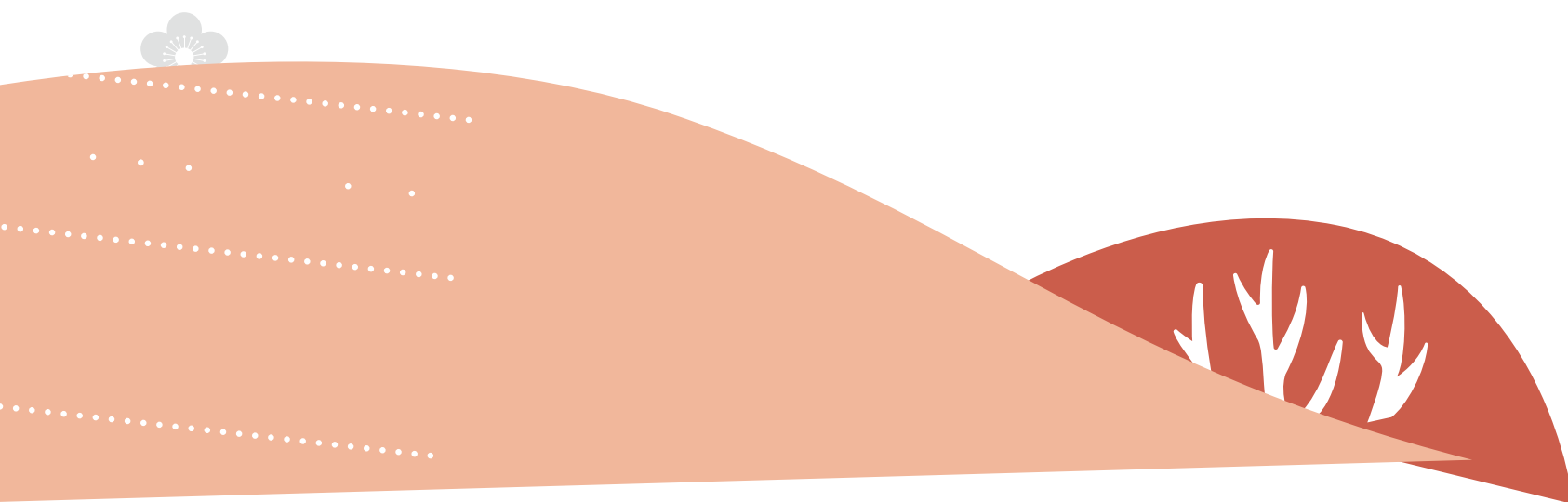
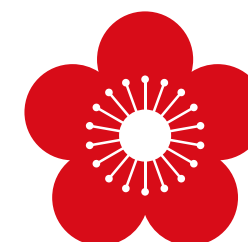










Meihua Group is a full-chain synthetic biology company mainly engaged in amino acid products. Its core competence covers all segments from strain design, construction, fermentation, separation, and extraction, to products. Through 20 years of surpass and innovation, the Company stands at the forefront of the industry in the integration of research, production, and sales, and is one of the world's largest amino acid manufacturers. It boasts the industry's most advanced integrated production line for comprehensive utilization of resources. Meihua Group has three production bases in Inner Mongolia's Tongliao, Xinjiang's Wujiaqu, and Jilin's Baicheng, and two R&D centers in Langfang and Shanghai.

We leverage synthetic biotechnology and give full play to our experience and advantages in industrialization. With a comprehensive array of research, production, supply, and sales services, we adaptably address the diverse needs of worldwide customers and their pursuit of rapid innovation. We are committed to becoming a global leader in synthetic biology. In 2022, our operating income reached 27.937 billion yuan with a net profit of 4.406 billion yuan. Our feature products are as follows.

Meihua Group is a full-chain synthetic biology company mainly engaged in amino acid products. Its core competence covers all segments from strain design, construction, fermentation, separation, and extraction, to products. Through 20 years of surpass and innovation, the Company stands at the forefront of the industry in the integration of research, production, and sales, and is one of the world's largest amino acid manufacturers. It boasts the industry's most advanced integrated production line for comprehensive utilization of resources. Meihua Group has three production bases in Inner Mongolia's Tongliao, Xinjiang's Wujiaqu, and Jilin's Baicheng, and two R&D centers in Langfang and Shanghai.

The organic combination of corporate development and personal interests

Market-oriented service awareness and the awareness of internal-external and upstream-downstream

Adhering to a holistic perspective for the long term

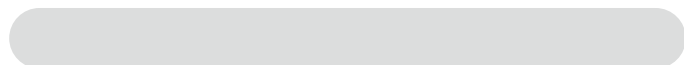
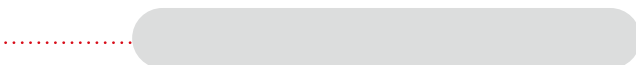


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We have combined ESG into our vision of focusing on biotechnology, building and sharing better future . We analyze the

external environment and context, sectoral needs, peer benchmarking, stakeholders appeals, and the Companys strategic



Proportion of women among senior executives
40 %

Coverage of human rights assessments for employees
75 %

Total training hours of employee
1,411 hours

100 % products made of raw materials

Overall employee satisfaction score
3.1

Average training hours per employee
1.31 hours

Donated to public welfare
4,320,323 yuan

Proportion of employees that received training
8.28 %

S S e e e e

As the highest decision-making body of ESG, the Strategic Development Committee of the Board of Directors bears the ultimate responsibility for Meihua Group's ESG strategies and disclosure. The Strategic Development Committee oversees and reviews the Company's sustainable development progress and offers recommendations. To ensure the execution and implementation of day-to-day ESG management, the Company has established an ESG Leadership Group. Authorized by the Strategic Development Committee of the Board of Directors, the ESG Leadership Group progresses the Company's ESG undertakings as a whole and regularly reports to the Board of Directors. Moreover, the Company has established a Sustainable Development Office. As a department dedicated to the management of ESG affairs, it communicates between and coordinates functional departments and facilitates the steady execution of ESG undertakings.

We prioritize determining material ESG topics and the communication and exchanges of ideas with stakeholders. We regularly identify and assess material ESG topics, and discuss and review

the results at the Strategy Committee of the Board of Directors to determine the ESG materiality matrix for the year.

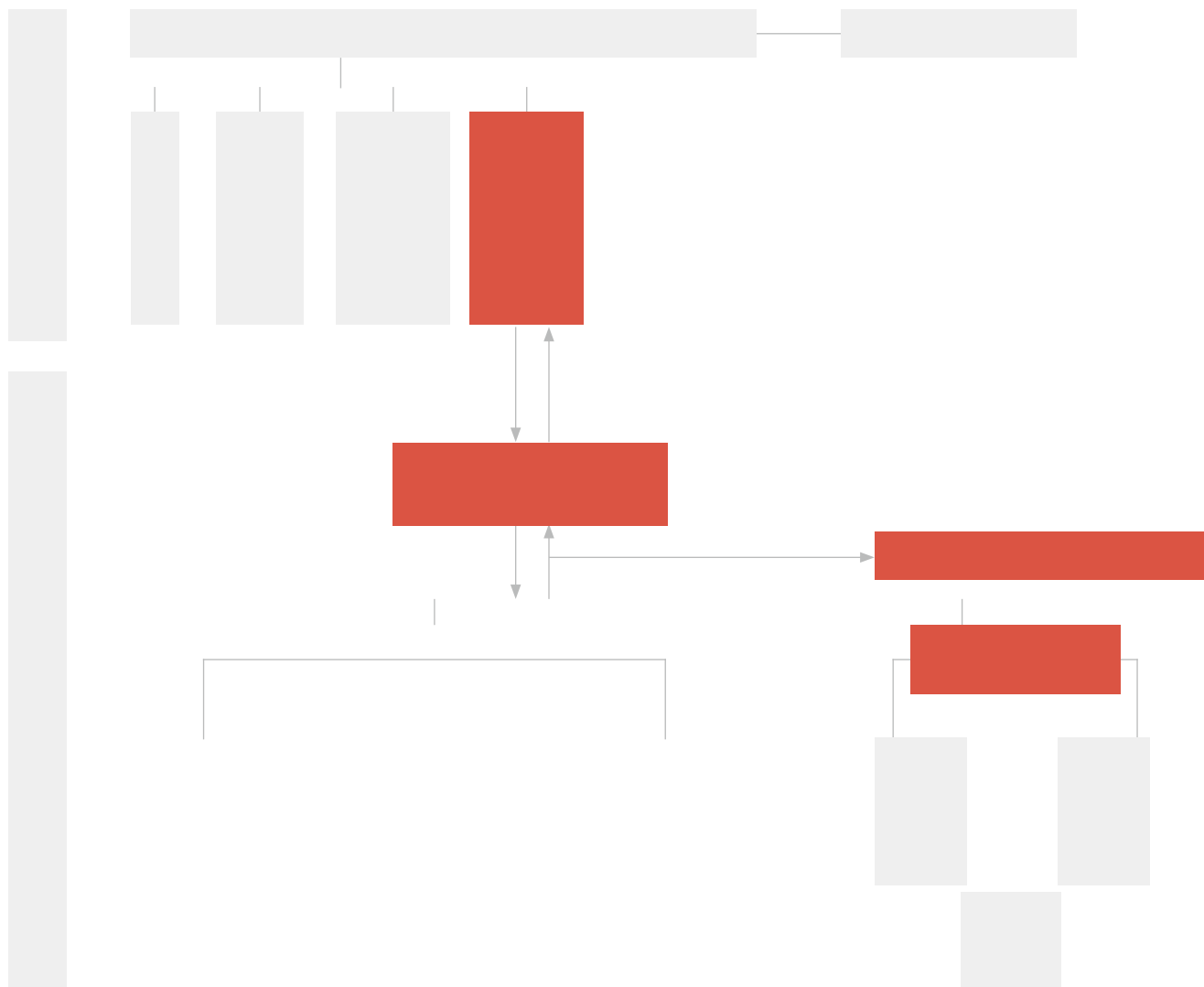
In 2022, we actively responded to the state's goals of carbon peaking and carbon neutrality by establishing a governance structure to address climate change and set a climate risk management and control process. Based on our situation, we identified and assessed the key climate-related risks of Meihua Group, and developed corresponding management objectives and countermeasures.

This report discloses in detail and truthfully the progress and effects of Meihua Group's ESG efforts in 2022, and was deliberated and adopted by the Board of Directors on March 6, 2023.

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Smile

We insist on corporate governance compliance and efficiency, continuously raise the Company's value and responsibility, and protect shareholders' interests and rights. We strictly abide by *the Company Law of the People's Republic*



Stakeholder engagement

Through constructive stakeholder engagement, a company can ensure its ESG works meet the needs of the actual developments. As a result of paying close attention to stakeholders' needs and suggestions, improving the diversified dialogue mechanism, and accepting their supervision, we have been able to achieve sustainable, high-quality, and high-standard development. Through online and offline channels, we communicate with stakeholders and listen to their demands and expectations to accurately assess the impact of our decisions and promptly adjust our strategic focus.

Stakeholder engagement			Communication		
Governments and regulators	<ul style="list-style-type: none">Observing the law and paying taxes according to the lawSupporting social sustainability	<ul style="list-style-type: none">Compliance managementPaying taxesProactively implementing national policies			
Shareholders and investors	<ul style="list-style-type: none">Returns and growthRisk controlCorporate governance	<ul style="list-style-type: none">Regular disclosure of business informationGeneral Meetings, reports, and announcementsProactively rewarding shareholders			
Employees	<ul style="list-style-type: none">Wages and benefits, securityHealth and safetyUnblocked communicationEqual promotion and development opportunities	<ul style="list-style-type: none">Paying wages and social security on timeEstablishing an occupational health and safety management systemImproving career development channelsOrganizing employee training			
Customers	<ul style="list-style-type: none">High-quality productsSatisfactory customer experienceProtection of legal rights and interests	<ul style="list-style-type: none">Need/satisfaction surveysCustomer complaint handlingAnnual reviews and evaluation			
Suppliers, contractors, and partners	<ul style="list-style-type: none">Faithfulness in businessIndustry cooperationOpen, fair, and impartial procurement	<ul style="list-style-type: none">Performing contracts according to the lawOpen tenderingProject-based collaborationDriving the healthy development of the industry			
Media	<ul style="list-style-type: none">Economic performancePollutant discharge	<ul style="list-style-type: none">Media inspection to projects			
Communities and the public	<ul style="list-style-type: none">Support for social developmentCare for vulnerable groupsHealthy cultureEnergy conservation and emission reduction	<ul style="list-style-type: none">Public welfare and charityGreen productionGreen buildings and materials			

Topics of high importance

- 1

Work safety
- 2

Human rights protection
- 3

Employee promotion and development
- 4

Customer communication and complaints
- 5

Business compliance and stability
- 6

Comprehensive risk management
- 7

Waste management
- 8

Water conservation initiatives
- 9

Talent attraction and motivation
- 10

Dangerous goods/chemical management
- 11

Employee satisfaction
- 12

Protection of intellectual property rights
- 13

Contractors' work safety
- 14

Product quality training
- 15

Patent management
- 16

Occupational health and safety
- 17

Product inspection
- 18

Employee training
- 19

R&D and innovation
- 20

Customer satisfaction
- 21

Customer privacy
- 22

Anti-corruption
- 23

Product quality and safety
- 24

Information security
- 25

Supplier quality management
- 26

Engaging in setting industry quality standards
- 27

Business ethics
- 28

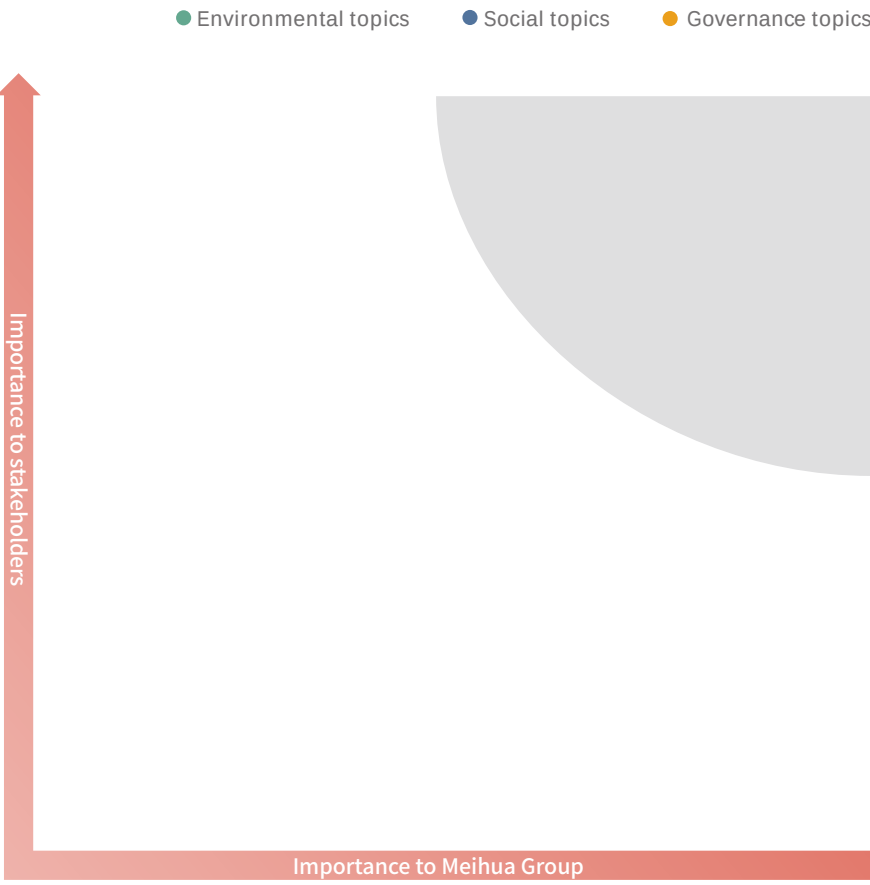
Pollutant management
- 29

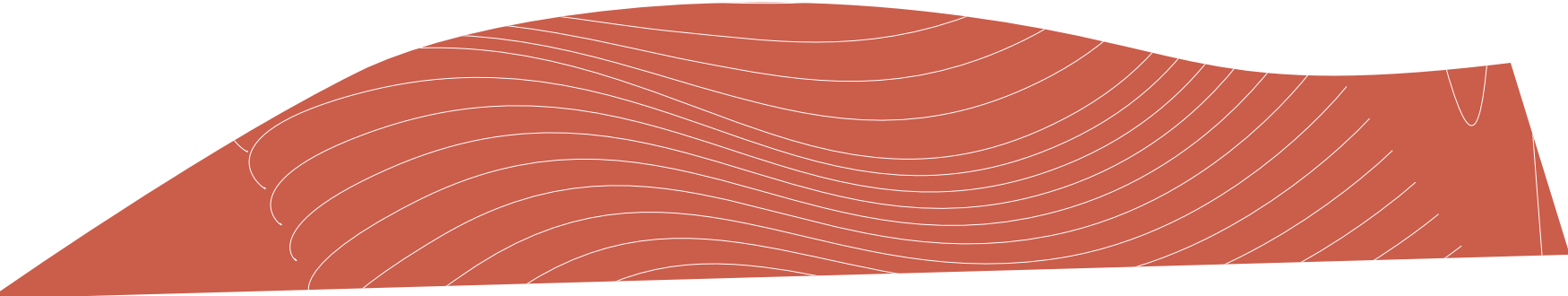
Sustainable raw material procurement

In 2022, we carried out our first systematic communication with stakeholders to better understand their concerns, expectations, and demands for the Company's sustainable development. Through peer benchmarking and media monitoring, we identified several material topics and collected internal and external information through questionnaire surveys and stakeholder research. Based on the survey results and considering the importance of each topic to business development, we comprehensively assessed and prioritized the topics and determined the focus of the Company's internal and external ESG management in the future.

In this survey, we collected 1,110 questionnaires. Based on stakeholders' concerns, expectations, and demands for the Company's ESG works, we identified and evaluated 29 high-importance, 25 medium-importance, and 5 low-importance material topics of the year. Based on the survey results, we will adjust our ESG focus promptly and continuously improve our ESG performance to meet stakeholders' expectations and respond to potential risks. This form of stakeholder engagement will also be held regularly.

Meihua Group's matrix of ESG materiality for 2022





02

Leading Product



As a global leader in providing amino acid nutrition and health solutions, we are committed to the vision of "focusing on biotechnology, building and sharing better future". We contribute to the global food health industry by providing health products and solutions in more than 100 countries and regions. We extend throughout the industrial chain of the deep processing of agricultural products and utilize biological fermentation technology. We continuously optimize our industrial structure and layout and improvegd t y p x



One of the fundamental components of a business, a key factor in customer trust, and a necessity for a company's survival is quality. We adhere to process management and control over quality, improve our comprehensive ability and performance of quality management in every aspect, and promote a quality culture to make safer and more reliable high-quality products.

The Quality Management System

We have established a sound quality management system and a multi-level governance structure, with the Company's General Manager responsible for reviews and oversight; the Production Technology Research Institute responsible for coordination; the Quality Department responsible for efficient collaboration; and the Technical Management Office of each production base responsible for implementation. We set precise and explicit product quality targets and revise them annually to meet the Company's commitment to product quality. In addition, we continuously carry out quality control and improvement.

Product quality certifications obtained by Meihua Group:

The ISO 9001 Quality Management System	The ISO 22000 Food Safety Management System	The Feed Additive and Premixture System (FAMI-QS) of the EU
The MUI Halal Certificate of Indonesia	The BRC Food Safety Management System	Halal certifications of the U.S., Malaysia, and other countries
Non-GMO Identity Preservation (IP)		

We strictly abide by the *Product Quality Law of the People's Republic of China*, the *Food Safety Law of the People's Republic of China*, the *Regulation on the Administration of Feeds and Feed Additives*, and other applicable laws and regulations. Based on national standards in relation to our products, the GB/T 19001 Quality Management Systems-Requirements, the ISO 22000 Food Safety Management System, and the BRCGS Global Standard for Food Safety, we have developed the *Product Quality Standards*, the *Product Testing Guidelines*, and the *Integrated Quality Management Manual*. These internal systems regulate the standardization of processes and the management of quality. We continuously work on quality certification. All of our production bases have passed the ISO 9001 Quality Management System and the ISO 22000 Food Safety Management System certifications.

In addition to strict self-quality control, we aspire to be part of the industry's quality improvement. With an open mind, we are prepared to collaborate and exchange cutting-edge information and expertise with peer companies in order to create a positive industrial ecosystem. We are a member of the Technical Committee 64 on Food Industry of Standardization Administration of China and the SC5 on Fermentation Industries, China Biotech Fermentation Industry Association (CBFIA), and other industry associations. We have participated in setting many national standards and social organization standards and contributed to the development of the amino acid industry.

The Quality Management and Control Mechanism

Our quality standards are stringent and we control product quality at every stage of the production and manufacturing process to ensure that it meets the standards. We have developed the *Product Testing Instructions*, a product-specific guideline which sets out testing items, pharmaceutical reagents, analysis steps, presentation methods, and regulate testing methods for different products to ensure that they meet the quality standards. We conduct internal inspections on all products regularly. We also develop annual product inspection plans and submit product samples to national authorities for inspection. As a result, the quality and safety of our products in storage, out of the factory, and in delivery are ensured. In addition, we have developed the *Unqualified Product Control System*. This policy defines

management roles and responsibilities and management standards and regulates the process control, cause analysis, and emergency treatment of unqualified products. It is designed to minimize risks associated with product quality and determine the primary accountability of products. In 2022, our products' ex-factory pass rate was 100%.

Quality management requires the participation of all employees. We attach great importance to creating a quality culture and hosting diversified training events on quality to comprehensively improve employees' skills and performance. In 2022, we delivered 21,420 hours of quality training, which was maintained at



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xx

information

Product Recall

We have developed *the Product Recall Procedures* and other rules and regulations. We have established a recall mechanism with a clear classification of products, the recall process, and corrective measures to ensure a rapid response to unsafe products. In the event of product quality defects and products with potential safety hazards, we will immediately carry out detection and analysis, recall the products, and ensure that those products are identified and traced. During a recall incident, we will investigate the cause of the defect and develop corrective and preventive measures, track the incident handling results, and prevent similar incidents from happening again. In 2022, the Company had two voluntary product

recalls, both of which were handled immediately and properly, with all products concerned recalled.

Moreover, we conduct regular product recall drills at our production bases every year. By simulating recall incidents and analyzing and checking products, we ensure that risky products can be traced within the specified timeframe and evaluate whether the recall procedures are feasible and rational. In 2022, we carried out recall simulation drills for MSG, trehalose, L-proline, and small amino acids to strengthen employees' awareness of product recall.



S e 7

We deem work safety as the fundamental essence of our business operation. We have invested considerable effort in establishing a safety management system, implementing various safety measures, and delivering work safety training and communication. In addition, we manage hazardous chemicals systematically. As a result, we strive to keep the health and safety of our employees at the highest level.

安全生产是企业的生命线，也是企业可持续发展的基础。我们始终把安全生产作为企业发展的首要任务，不断加大投入，建立健全安全管理体系，实施各项安全措施，开展形式多样的安全培训与沟通。此外，我们还对危险化学品进行系统化管理。通过不懈努力，我们致力于为员工提供最高水平的健康与安全保障。

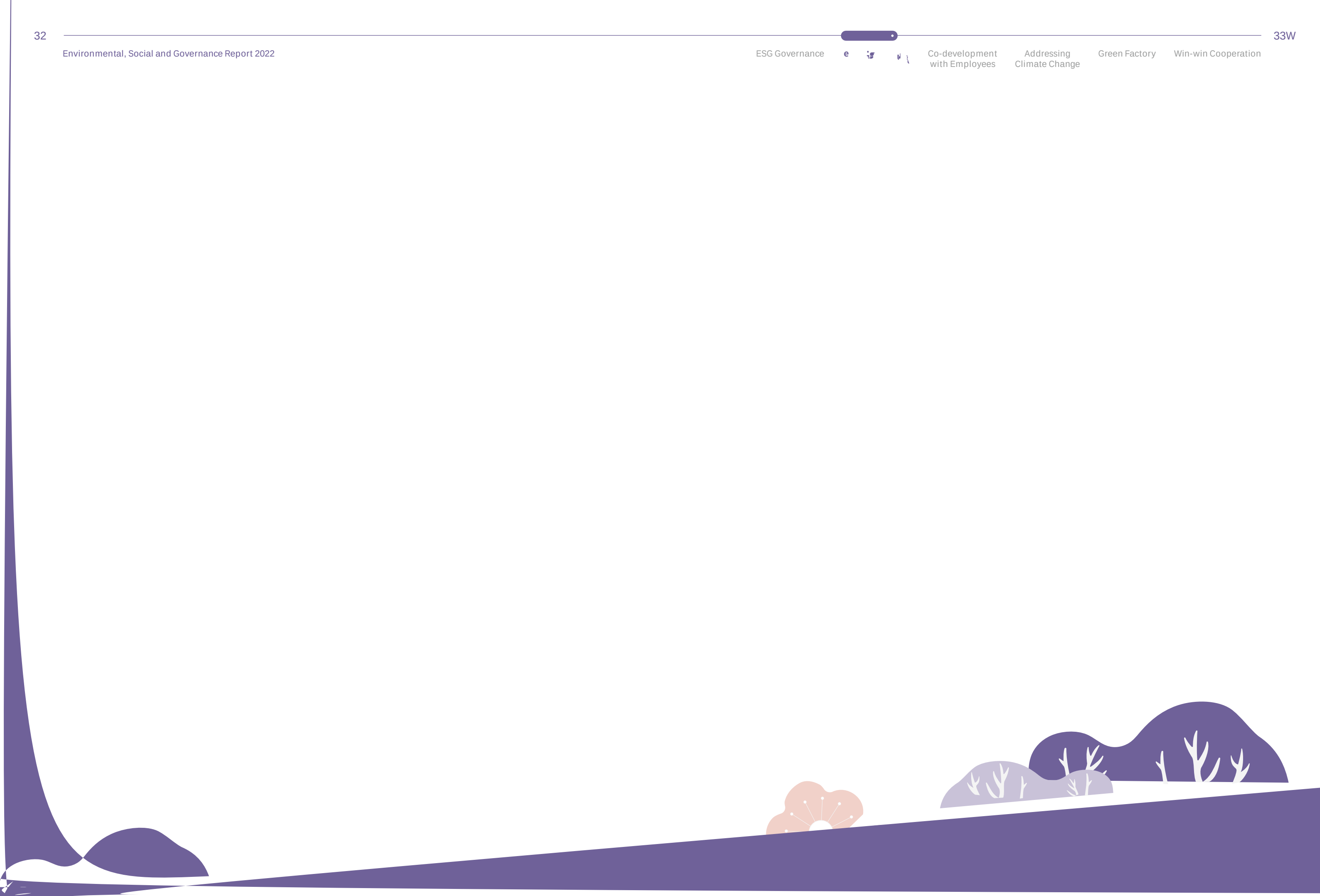
我们始终坚持“安全第一、预防为主、综合治理”的方针，严格落实安全生产责任制，确保各项安全措施落到实处。通过持续改进，不断提升企业的安全管理水平，为员工创造一个安全、健康、和谐的工作环境。

我们始终坚持“安全第一、预防为主、综合治理”的方针，严格落实安全生产责任制，确保各项安全措施落到实处。通过持续改进，不断提升企业的安全管理水平，为员工创造一个安全、健康、和谐的工作环境。

■ Safety Management

We abide by *the Work Safety Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases, the Provisions on the Safety Training of Production and Operation Entities, the Guideline of China Occupational Safety and Health Management System*, and other applicable laws and regulations. We adhere to the management philosophy that work safety is everyone's duty. We have developed *the Health, Safety and Environmental (HSE) Post Duty System for All Employees of Meihua Holding Group Co., Ltd.* and other internal management regulations to ensure the safety of our employees.





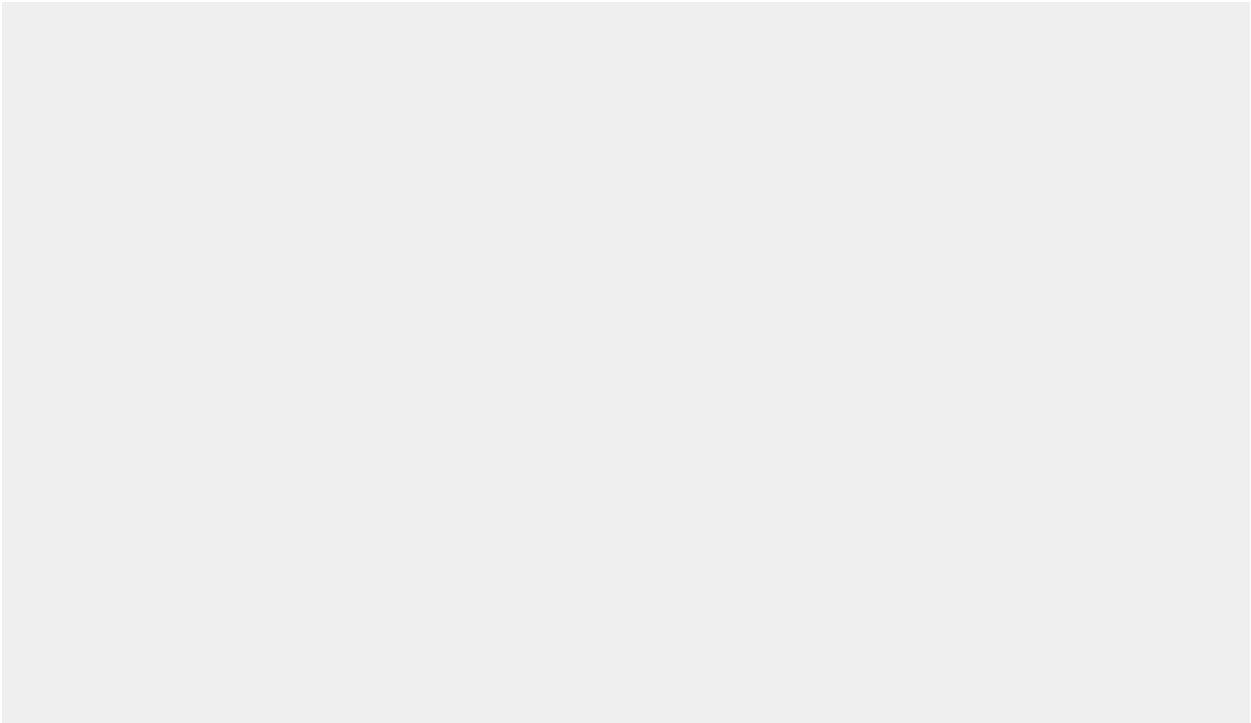
03

Co-development with Employees

Human Rights Protection
Employee Incentives
Development Training



We observe *the Universal Declaration of Human Rights, the Convention on Human Rights, the United Nations Convention on the Elimination of All Forms of Racial Discrimination, and the International Labor Organization s Declaration on Fundamental Principles and Rights at Work*, among other international human rights norms and standards. In our operations, we are committed to respecting and protecting human rights. With reference to *the SA8000 Standard* for social accountability, we have developed *the Human Rights Protection and Anti-Violence and Conflict Policy*, which is applicable to all employees, contractor



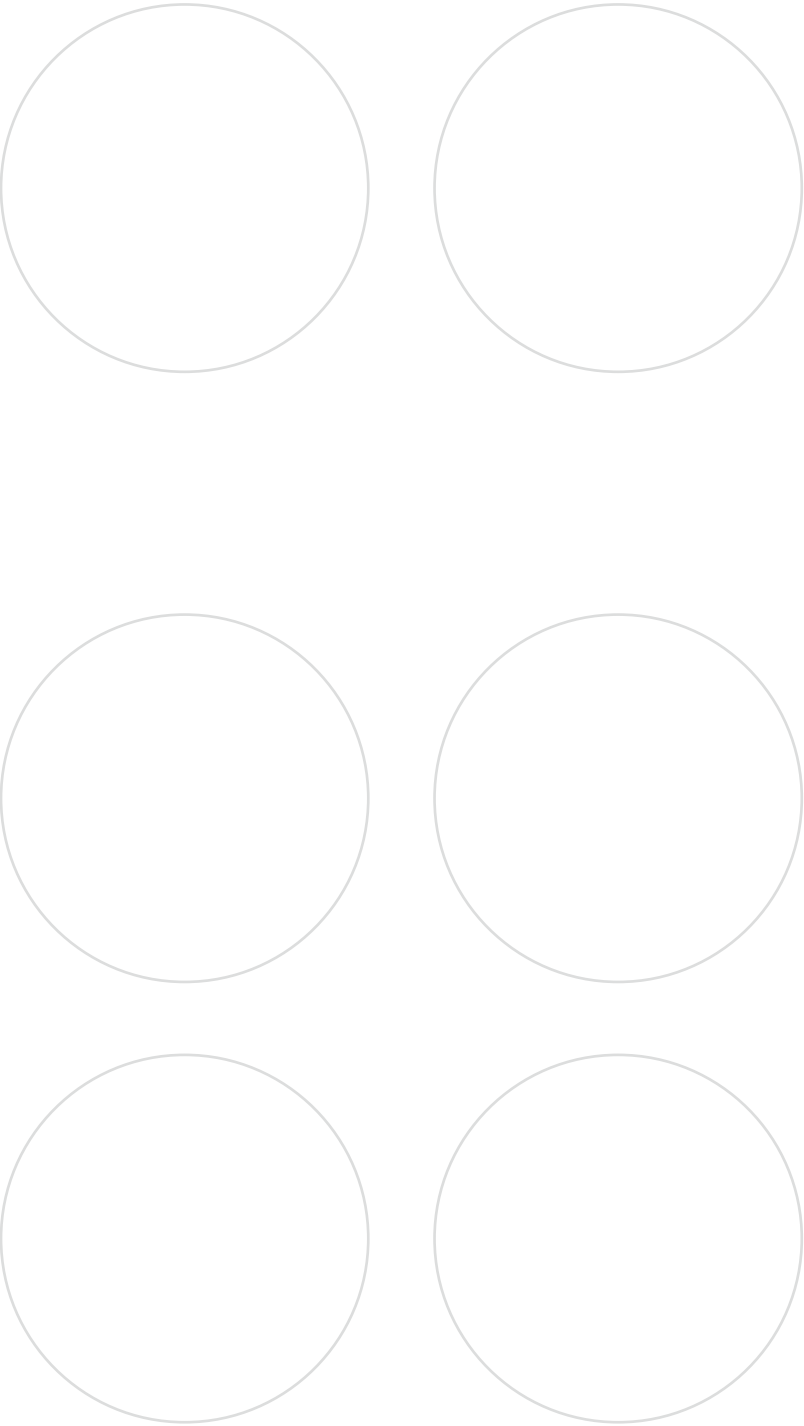




High-caliber employees are the foundation of the Company s long-term success. We put efforts into creating unrestricted promotion channels for employees and launching a variety of vocational training programs. Our employees can improve their overall quality and grow together with the Company.

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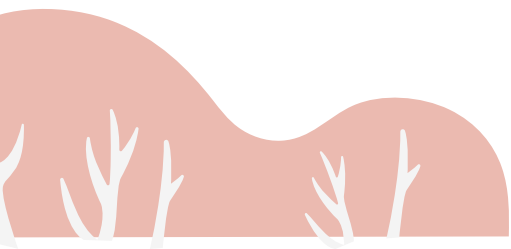
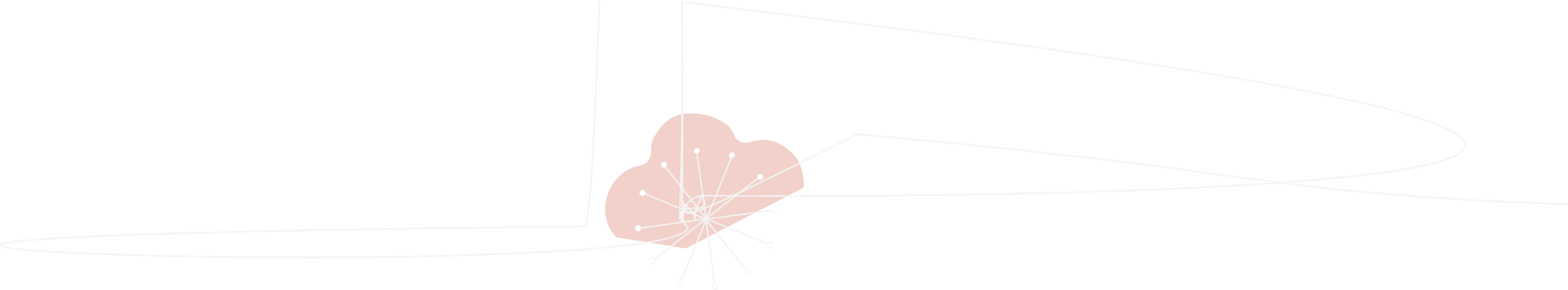
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Based on the analysis of China's carbon peaking and carbon neutrality goals and policies on climate change, types of natural disasters in the country, and the Company's actual condition, we have identified and assessed risks and developed countermeasures to adapt to or mitigate the impact of climate change on business.

Meihua Group's climate-related risk management in 2022

Risk Type	Risk Category	Risk Description	Countermeasures
Transition risks	Policy risk	Against the carbon peaking and carbon neutrality goals, China has tightened its controls on the management of greenhouse gas emissions. It increases our com-	emission / assessment

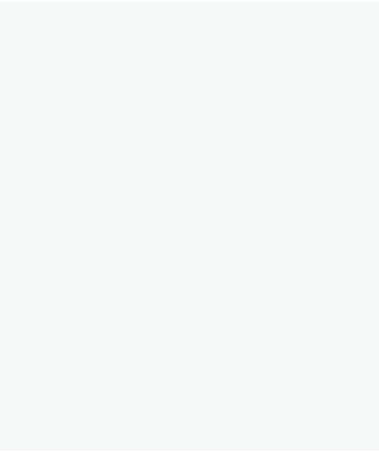






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We, in the bio-fermentation industry, face increasing external demands regarding environmental protection, which raises the standards of our environmental management system. We regard environmental protection as an essential part of our business and strictly comply with *the Environmental Protection Law of the People s Republic of China* and other applicable laws and regulations. Based on the Company s current progress in environmental protection, we have introduced an *Up-to-standard Odor Management System* and a *Stable Operation Management System for Sewage Workshops*. Our production bases strictly implement the Headquarters requirements. An *Environmental*



Indicator	Unit	Data for 2022
Reuse of water	metric ton	5,841,943
Total water withdrawal	metric ton	30,642,207
Total water consumption	metric ton	36,484,150
Water consumption intensity	metric ton/1,000 yuan of revenue	1.31

Waste Management

In waste management, we always discharge waste against standards and address problems at the source. We are committed to minimizing all kinds of pollutants and waste generated in production and operation activities. We strictly abide by *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 Environment Pollution Caused by Solid Wastes*, and other

applicable laws and regulations. We have developed a *Pollutant Discharge Management System and the Hazardous Waste Management Regulations of Meihua Holding Group Co., Ltd. (for Trial Implementation)*. These systems are designed to ensure the stable operation of pollutant treatment facilities, the up-to-standard discharge of air utant

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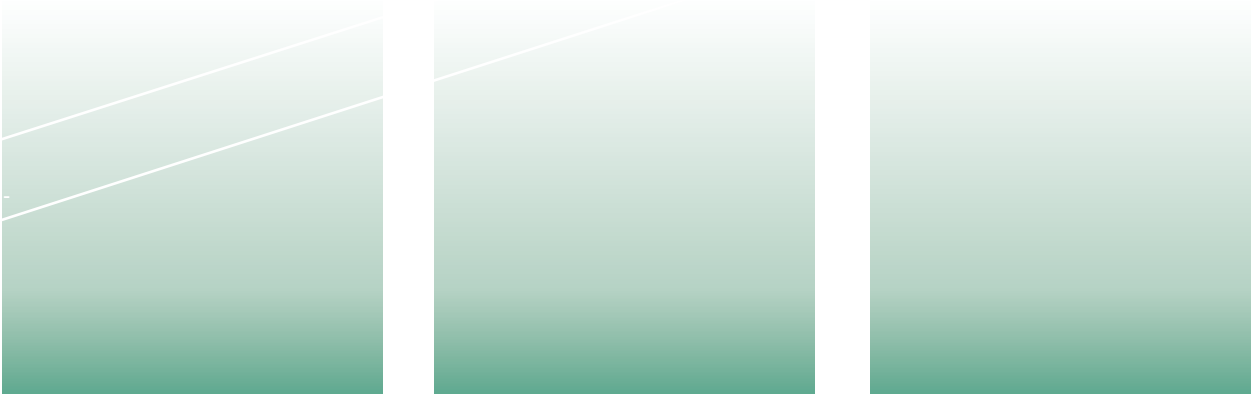
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06

Win-win Cooperation



Sustainable Supply Chain Management 62

Community Engagement 65

Social Media Marketing

To provide customers with high-quality products and services

Our mission is to provide customers with high-quality products and services

Our mission is to provide customers with high-quality products and services

Our mission is to provide customers with high-quality products and services

Supplier Assessments

For admitted suppliers, we have developed Supplier ESG Assessment Criteria. Every year, we regularly conduct ESG assessments for suppliers through questionnaires, on-site audits, and video link. We put forward expectations and requirements for suppliers' social responsibility and environmental management and focus on the performance in labor and human rights, health and safety, environmental protection, and business ethics when inspecting suppliers.

We have developed a Supplier ESG Assessment Form to score admitted suppliers. Based on the final total scores, we classify suppliers into Classes A, B, C, and D. In addition, we will give corresponding rewards or penalties to suppliers according to their ESG assessment results. In 2022, we conducted supplier ESG assessments and reviewed a total of 763 suppliers, of which 57 were unqualified, accounting for 7% of the total.

Criteria for supplier ESG assessments and rating

Type of suppliers	Definition	Rating criterion
Class-A suppliers	Outstanding suppliers	Suppliers scoring 90 or above in the ESG assessment
Class-B suppliers	Qualified suppliers	Suppliers scoring below 90 and above 75 or 75 in the ESG assessment
Class-C suppliers	Suppliers qualified after rectification	Suppliers scoring below 75 and above 60 or 60 in the ESG assessment
Class-D suppliers	Unqualified suppliers	Suppliers scoring below 60 in the ESG assessment

Supplier Termination

Suppliers who have received two Class C ratings must complete rectification and submit a rectification report within the prescribed time frame. If a supplier still fails to meet the standards after rectification, its products will be banned by the Company. Suppliers who have received D in an ESG assessment, provided false materials, had major ESG violations or violated the code of conduct for suppliers will be banned in accordance with relevant disposal procedures to ensure the integrity and impartiality of the supply chain.

■ Compliance Management and Control Over Suppliers

As part of our commitment to establishing clean and healthy partnerships with suppliers, we emphasize compliance management throughout the supply chain. We define suppliers' corruptive conduct in the *Anti-Corruption Management Measures of Meihua Holding Group Co., Ltd.* We have formulated the *Code of Conduct of Meihua Holding Group Co. Ltd. for Suppliers*. A major focus of this policy is the prevention of child labor, the protection of basic human rights, equal treatment, business integrity, operational compliance, health, safety, and environmental protection. It covers labor and human rights, health and safety, environmental protection, ethics, and corporate governance. With the above measures, we strictly regulate suppliers' conduct and maintain a transparent procurement culture.

■ Communication with Suppliers

We insist on transparency, openness, cooperation, equality, and mutual benefit. We have established effective communication channels for suppliers, including regular suppliers' conferences every year. We also encourage suppliers to participate in the exchange events regularly hosted by the Company to communicate, discuss, and share information regarding cost reduction, quality and service improvement, low-carbon technology, and human rights protection. In addition, we regularly deliver ESG training for suppliers to strengthen our partnerships and advance our mutual growth.



Despite our rapid growth and increased economic output, we have not forgotten our mission to give back to society and assist the disadvantaged. We make full use of our industry advantages and support our public welfare undertakings. We contribute to rural revitalization, charitable donations, community building, and the combat against COVID -19. Through these public welfare undertakings, we give back to society with love and assist people in practical ways, fulfilling the Company's social responsibility. By the end of the reporting period, our employees spent 1,744 working hours in commu-

nity welfare activities such as student aid and environmental protection.

We established the Tibet Meihua Public Welfare Foundation, and developed special management systems such as *the Donation Management Measures of Tibet Meihua Public Welfare Foundation*. Our charity undertakings concentrate in Hebei, Xinjiang, and Tibet. In 2022, we donated 4,320,323 yuan to public welfare.

In 2022, Tibet Meihua Public Welfare Foundation held a variety of public welfare events, which were widely recognized by the whole community.

We have carried out fertilizer donations for many years in a row. Through targeted assistance to farmers, we boost spring farming. Since 2020, we have donated 170,000 metric tons of fertilizers, worth about 100.41 million yuan in total, benefiting 140.67 million hectares of farmland.

In April 2022, the Tongliao Base donated fertilizers to farmers living nearby to address the rising prices of agricultural materials. The farmers expressed praise and thanks for the Company.

Disclosure topic/Disclosure item	Title of the disclosure item	Chapter index	Page
GRI 306: Effluents and Waste 2016			
306-1	Water discharge by quality and destination	Water Resources Management	53
306-2	Waste by type and disposal method	Waste Management	57
306-3	Significant spills	Waste Management	54
306-4	Transport of hazardous waste	Waste Management	56
306-5	Water bodies affected by water discharges and/or runoff	Water Resources Management	53
GRI 308: Supplier Environmental Assessment 2016			
308-1	New suppliers that were screened using environmental criteria	Responsible Procurement	63
308-2	Negative environmental impacts in the supply chain and actions taken	Responsible Procurement	64
GRI 401: Employment 2016			
401-1	New employee hires and employee turnover	Human Rights Protection	37
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employee Incentives	38
401-3	Parental leave	Employee Incentives	38
GRI 403: Occupational Health and Safety 2018			
403-1	Occupational health and safety management system	Safety Management	28
403-2	Hazard identification, risk assessment, and incident investigation	Safety Management	28
403-3	Occupational health services	Safety Management	28
403-4	Worker participation, consultation, and communication on occupational health and safety	Safety Training	29
403-5	Worker training on occupational health and safety	Safety Training	29
403-6	Promotion of worker health	Safety Management	28
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Safety Management	28
403-8	Workers covered by an occupational health and safety management system	Safety Management	28
403-9	Work-related injuries	Safety Management	28
403-10	Work-related ill health	Safety Management	28
GRI 404: Training and Education 2016			
404-1	Average hours of training per year per employee	Development Training	41
404-2	Programs for upgrading employee skills and transition	Development Training	41
404-3	Percentage of employees receiving regular performance and career development reviews	Development Training	41



Dear reader,

Greetings.

Thank you for your time to read *the Meihua Holding Group Co., Ltd. Environmental, Social and Governance Report 2022*. Your comments and suggestions on the report and our work will be most welcomed and appreciated.

1. Which category of Meihua Group s stakeholders do you belong to?

- ☐ Shareholders and investors
- ☐ Customers
- ☐ Creditors
- ☐ Management
- ☐ Ordinary employees
- ☐ Governments and regulators
- ☐ Suppliers
- ☐ Contractors
- ☐ Media
- ☐ Partners (industry associations, research institutions, etc.)
- ☐ Community representatives (NGOs, local residents, public welfare program representatives, etc.)
- ☐ Other (please specify)_____

2. How do you rate this report overall?

- ☐ Very good
- ☐ Good
- ☐ Average
- ☐ Bad

3. What is your opinion about the clarity, accuracy, and completeness of the information and data disclosed in this report?

- ☐ Very good
- ☐ Good
- ☐ Average
- ☐ Bad

4. How well do you think this report re fects the governance responsibility undertaken by Meihua Group?

- ☐ Very good
- ☐ Good
- ☐ Average
- ☐ Bad

5. How well do you think this report re fect the environmental responsibility undertaken by Meihua Group?

- ☐ Very good
- ☐ Good
- ☐ Average
- ☐ Bad

6. How well do you think this report re fects the social responsibility undertaken by Meihua Group?

- ☐ Very good
- ☐ Good
- ☐ Average
- ☐ Bad

7.What is your opinion about the design and typesetting of this report?

- ☐ Very good
- ☐ Good
- ☐ Average
- ☐ Bad

8. What are your opinions and suggestions for Meihua Group s environmental, social and governance performance and reporting?

Contact Information

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