



**中糧**  
**COFCO**  
自然之源 重塑你我



# Environmental, Social and Governance Report 2022

**中糧家佳康食品有限公司**  
**COFCO Joycome Foods Limited**

(Incorporated in the Cayman Islands with limited liability)

Stock Code : 01610

# Environmental, Social and Governance Report

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## About this report

COFCO Joycome Foods Limited (the “Company”, together with its subsidiaries, the “Group”) started to issue environmental, social and governance (ESG) reports in 2016. This is our seventh ESG report, which has been approved by the board of directors (the “Board”) of the Company and separately issued.

### ■ Scope of Reporting

Entities covered herein also appear in the Company’s annual report. This report mainly addresses the business operations of the Group in respect of sustainability, food safety, environmental protection, social responsibilities, caring for employees and corporate governance from January 1, 2022 to December 31, 2022.

### ■ Basis of Preparation

This report complies with the relevant provisions of the Environmental, Social and Governance Reporting Guide (the “ESG Reporting Guide”) as set out in Appendix 27 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. The basis of preparation herein is as follows:

**Materiality:** We identify our ESG issues by taking into account the characteristics of the industry and the Group’s business operations from the perspective of our strategic goals, and identify major material issues in accordance with the principle of “Materiality”. For specific details, please refer to the section headed “Corporate Responsibility”.

**Quantitativeness:** Each quantitative key performance indicator has its corresponding definition, statistical standard, and calculation method. The calculation methods used and conversion factors are in compliance with the prevailing norms or professional guidelines of international organizations and government authorities. To facilitate clear understanding of the statistical standards, calculation methods and other information, explanations of the corresponding key indicators will be provided in the notes of the report.

**Balance:** Providing an objective view of the environmental, social, and governance performance of the Group during the reporting period to avoid any selective, omitted or inappropriate presentation that may influence the decision or judgment of the report readers.

**Consistency:** The statistical methodologies applied to the data disclosed are consistent. Any changes will be further specified.

### ■ Reporting Data Description

Unless otherwise specified, the financial data quoted in this report is from the Company’s audited annual report, while other data come from the Group’s internal official documents and relevant statistics.

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## Corporate Responsibility

As one of the leading enterprises in China's meat industry, COFCO Joycome has been adhering to its social responsibilities of "Setting the Safety Standards of the Industry and Safeguarding the Safety of Meat Consumers", relying on the vertical integration business model covering the whole value chain, persisting in integrity and rule compliance, dedicated to providing the consumers with nutritious and safe food, and promoting the common development of its stakeholders including shareholders, customers, employees and the public, so as to realize the harmonious unity of economic efficiency, social efficiency and environmental efficiency.

### ■ Statement from the Board

The Board attaches great importance to the supervision of environmental, social and governance works, and is responsible for formulating environmental, social and governance management plans and strategies of the Group, assessing and identifying major material issues and management of the relevant matters in relation to the Group's environmental, social and governance issues, to ensure that the Group establishes effective environmental, social and governance risk management and internal control systems. The Board receives regular reports on environmental, social and governance related work, reviews the performance of the Group, and provides suggestions or instructions to the management and relevant departments on the optimization of environmental, social and governance, approves disclosure of environmental, social and governance report to ensure the Group's environmental, social and governance compliance is continuously improving.

The Group has established an ESG working group led by our senior management and comprising participants from relevant departments and subordinate units. The ESG working group is delegated to carry out the Group's ESG strategies, and the promotion of ESG performance management, information disclosure and relevant fundamental works.

The Group has established an ESG indicators system to clarify the division of responsibilities, tasks and performance targets of various departments and units. Through data collection, review, comparison and optimization of ESG indicators, the Group continues to promote the improvement of its own ESG management level and management performance. At the same time, the Group continuously improves information disclosure in accordance with the ESG Reporting Guide and 2022 Analysis of ESG Practice Disclosure, so as to demonstrate to the public the performance of our ESG initiatives.

### ■ Stakeholder Communication

We consider it vital to communicate with our stakeholders. Through various channels, we share with them our social responsibility notions and practices, understand their needs, and take various measures to meet their reasonable expectations and demands. The Company performs its social responsibilities and creates values for stakeholders while abiding by the laws in its operation.

Stakeholders	Communication channels	Expectations and demands	Our response
<ul style="list-style-type: none"><li>Government and regulatory authorities</li></ul>	<ul style="list-style-type: none"><li>Daily communication</li><li>Submission of information</li><li>Workshop and survey</li></ul>	<ul style="list-style-type: none"><li>Compliance with laws and regulations</li><li>Leading the advancement of the industry</li><li>Agricultural industries poverty alleviation</li><li>Energy conservation and emission reduction</li><li>Prevention and control of pollution from large-scale breeding</li><li>Control of the spread of African swine fever</li><li>Eradication of the outbreak and spread of diseases</li></ul>	<ul style="list-style-type: none"><li>Operating in strict compliance with relevant laws and regulations</li><li>Promotion of industrial development</li><li>Supporting rural revitalization</li><li>Improvement of resource utilization and reduction of waste production</li><li>Eco-farming and recycling and processing of waste</li><li>Stringent prevention and control of African swine fever</li><li>Epidemic prevention for employees and production</li></ul>

# Environmental, Social and Governance Report

Stakeholders	Communication channels	Expectations and demands	Our response
<ul style="list-style-type: none"> <li>Shareholders and investors</li> </ul>	<ul style="list-style-type: none"> <li>Regular information disclosure</li> <li>Shareholders' meetings</li> <li>Daily communication</li> <li>Official website</li> </ul>	<ul style="list-style-type: none"> <li>Board's participation in responsibility management</li> <li>Responsibility management structure</li> <li>Continuous growth</li> <li>Transparent operation</li> </ul>	<ul style="list-style-type: none"> <li>Due diligence of the Board</li> <li>Strengthening responsibility management</li> <li>Continual improvement of the ability to create value</li> <li>Transparent and open information disclosure</li> </ul>
<ul style="list-style-type: none"> <li>Consumers</li> </ul>	<ul style="list-style-type: none"> <li>Complaint hotline</li> <li>Consumer satisfaction survey</li> <li>Media reports</li> </ul>	<ul style="list-style-type: none"> <li>Product quality</li> <li>Food safety</li> <li>Client service and communication</li> <li>Elimination of false advertisement</li> </ul>	<ul style="list-style-type: none"> <li>Management and control of the whole value chain quality</li> <li>Stringent management of food safety, prevention and control of African swine fever and COVID-19 epidemic</li> <li>Professional and efficient client service</li> <li>Safeguarding consumers' rights</li> </ul>
<ul style="list-style-type: none"> <li>Environmental protection experts and organizations</li> </ul>	<ul style="list-style-type: none"> <li>Consultation and communications</li> <li>Environment information disclosure</li> </ul>	<ul style="list-style-type: none"> <li>Environmental protection compliance</li> <li>Environment and natural resource protection</li> <li>Responding to climate change</li> <li>Ecological restoration</li> </ul>	<ul style="list-style-type: none"> <li>Elimination of environmental protection regulatory non-compliance</li> <li>Advocating environmental protection concepts</li> <li>Insisting on sustainable development and improving the level of green and low-carbon operation</li> <li>Improve capability of emergency response to natural disasters</li> <li>Organic integration of ecological restoration and operation</li> </ul>

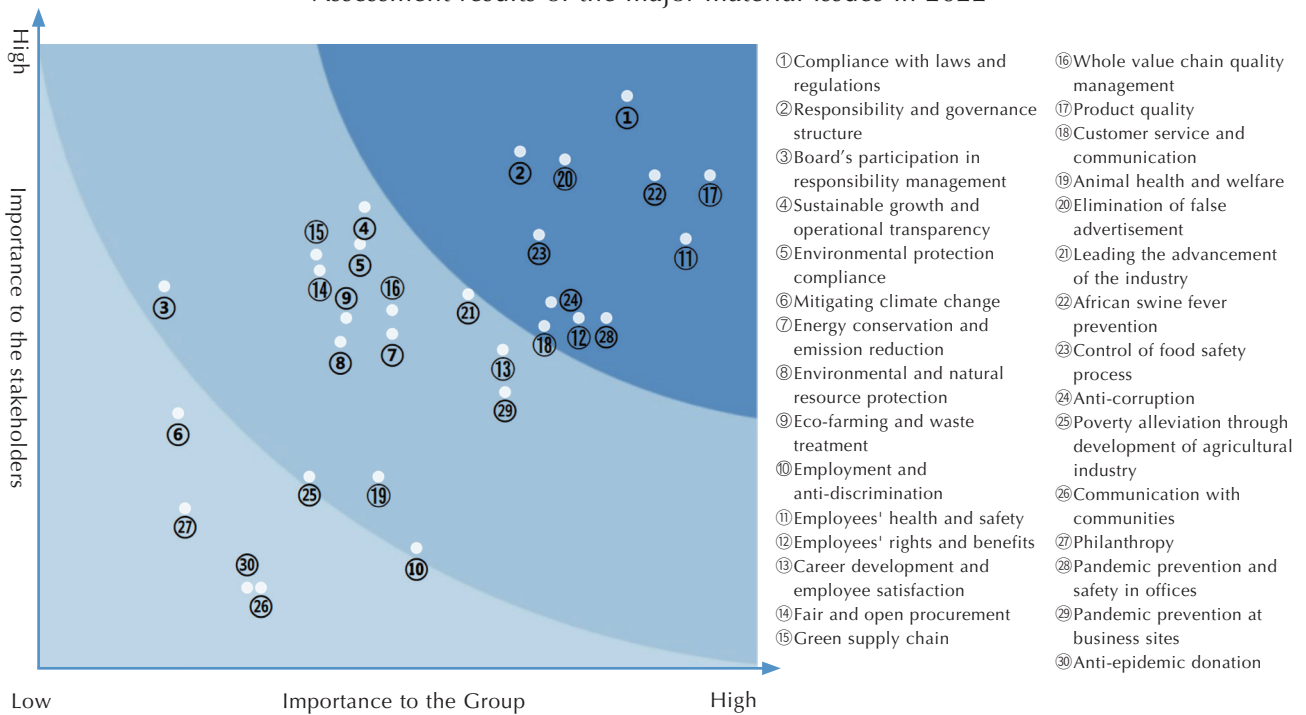
# Environmental, Social and Governance Report

Stakeholders	Communication channels	Expectations and demands	Our response
<ul style="list-style-type: none"> <li>• Employees</li> </ul>	<ul style="list-style-type: none"> <li>• Labor contract</li> <li>• Training</li> <li>• Performance management mechanism</li> <li>• Skills competition</li> </ul>	<ul style="list-style-type: none"> <li>• Employment and anti – discrimination</li> <li>• Employees’ health and safety</li> <li>• Employees’ rights and benefits</li> <li>• Career development and training</li> <li>• Epidemic prevention and safety in the offices</li> <li>• Epidemic prevention and control</li> </ul>	<ul style="list-style-type: none"> <li>• Insisting on fair recruitment to build a harmonious work environment</li> <li>• Improving employees’ occupational health, protecting their democratic rights, remuneration and benefits and caring for employees</li> <li>• Carrying out a diversity of employee training and learning courses</li> <li>• Providing clear career development paths and organizing employee activities to maintain work-life balance</li> <li>• Stringent epidemic prevention and control measures</li> </ul>
<ul style="list-style-type: none"> <li>• Suppliers and partners</li> </ul>	<ul style="list-style-type: none"> <li>• Assessment of suppliers</li> <li>• Cooperation agreements</li> <li>• Regular visits</li> </ul>	<ul style="list-style-type: none"> <li>• Fair procurement and honest performance</li> <li>• Whole value chain quality management</li> <li>• Green supply chain</li> </ul>	<ul style="list-style-type: none"> <li>• Insisting on fair and open procurement</li> <li>• Win-win cooperation</li> <li>• Improving overall quality of the industrial value chain and the ability and level of safety management and control</li> <li>• Promoting green procurement</li> </ul>
<ul style="list-style-type: none"> <li>• The public</li> </ul>	<ul style="list-style-type: none"> <li>• Community activities</li> <li>• Community services</li> </ul>	<ul style="list-style-type: none"> <li>• Animal health and welfare</li> <li>• Anti-corruption</li> <li>• Communication with communities</li> <li>• Philanthropy</li> <li>• anti-epidemic donation</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthening animal health and welfare management</li> <li>• Anti-corruption practice</li> <li>• Carrying out support of philanthropy and charity, volunteering activities, anti-epidemic donation and other activities</li> </ul>

## ■ Assessment of Material Issues

In accordance with the requirements under the principle of “Materiality” of the ESG Reporting Guide, we first extensively sought opinions from government and regulatory authorities, shareholders, consumers, environmental protection experts and organizations, food safety experts, business management experts, employees, suppliers and partners, and public representatives on the two major dimensions of “Group Materiality” and “Stakeholder Materiality”, and recovered 443 valid questionnaires. Secondly, we applied COFCO Joycome’s Material Issues Analysis Model to preliminarily assess the major material issues. Finally, through internal discussions, we verified and reviewed the major material issues to finalize the disclosure topics and contents of this report, and an “ESG Index Table” was added to the last section of this report to ensure that the substantive issues of concern of stakeholders will be addressed in a targeted and responsive manner, and that reporting data was fully covered.

Assessment results of the major material issues in 2022



# Environmental, Social and Governance Report

## Food Safety

Safety and quality are our top priorities. We apply the draconian “Five-level Safety Control” on the environment, feed, farming, breeding and processing, to achieve “Reliable Quality through Autonomous Farming”. We build a strong food safety defense for “Delicious Joycome Brings Love at First Bite (美味家佳康，一口就爱上)” to make “Every Bite Safe”.

In 2022, governmental authorities at various levels sampled 400 batches of our products, 100% were qualified.

## Case: Safeguarding China’s strengths

Joycome has successively become the meat food supplier of the Chinese sports delegation from 2012 to 2015, the supplier of “Sports • Training Bureau Preparation Support Products for National Team Athletes” authorized by the Training Bureau of the General Administration of Sport of China, and the partner of China’s aerospace industry. We supply safe and healthy meat products for many national teams and provincial sports units and sports teams all year round. During the preparation for the 2022 ice and snow event, Joycome, as the meat food supplier and partner of the “National Crossover Snowboarding Team”, accompanied the athletes to prepare for the training, received CCTV news coverage and a letter of thanks from the Training Bureau of the General Administration of Sport of China. In the future, we will, as always, persistently “safeguard China’s strengths”, and escort Chinese athletes to prepare for major events and achieve outstanding results!



## 国家体育总局训练局

### 感谢信

中粮肉食投资有限公司:

癸卯年初，吉祥纳福。值此新春佳节之际，训练局向中粮肉食投资有限公司致以节日的问候、诚挚的祝福和衷心的感谢！

过往三年，疫情给训练局国家队备战服务保障工作带来了史无前例的困难。面对严峻复杂的疫情防控形势，贵司与训练局勠力同心、奋楫笃行，为驻局国家队在东京奥运会、北京冬奥会等赛场取得优异成绩提供了有力保障。特别是贵司以高质量的“体育·训练局国家队运动员备战保障产品”给予训练局重要物资支持，以高度社会责任感积极助力体育事业发展，展现了企业的家国情怀和大爱担当。

冬深天寒，真情寄暖。训练局将继续立志于党和国家的大局、立志于人民对体育的期盼，为建成世界一流训练基地努力奋斗。再次感谢贵司对训练局和体育事业的大力支持，祝愿贵司蓬勃发展、事业蒸蒸日上！

顺颂商祺。



## ■ Quality and Safety Management throughout the Whole Industrial Value Chain

We tapped into the advanced quality and safety management experience from leading enterprises at home and abroad and established our risk management system for quality and safety throughout the whole industrial value chain in accordance with the requirements of the national regulations, so as to ensure the quality and safety of our products at each link and in all aspects. In 2022, we improved our “Quality and Safety Risk Control Outline of the Industrial Chain” to further clarify the inspection standards and control requirements for feed processing, hog farming, slaughtering and meat product processing, etc.

Our affiliates engaged in feed processing, hog production, slaughtering and meat processing have all passed the certification of ISO9001 quality management system (QMS), ISO22000 food safety management system (FSMS), hazard analysis and critical control point (HACCP) system and China Good Agricultural Practice (China GAP) system. Their advanced production processes coupled with their leading cold chain transportation technologies throughout the whole process have provided a strong guarantee for product quality and safety.

## Case: Partnering in aerospace business to disseminate the safety and high quality of our products

In order to establish safe and healthier meat concept among more families, Joycome held a series of activities themed as “Joycome Aerospace Science Popularization Training Camp” for the fourth consecutive year from May to November 2022, and innovatively held the “Hello, China Space Station” science popularization activity via live broadcast in Beijing Aerospace City, to propagandize aerospace knowledge and national pride to teachers, students and parents of many primary schools in Beijing, Wuhan and Nanjing, and at the same time spread the “zero error” quality of Joycome as a partner of China’s aerospace industry!





# Environmental, Social and Governance Report

## Source Management

**Feed control.** We used feed made from safe and pollution-free grain. We conducted tests for pesticide residues, heavy metal and mycotoxin on the ingredients according to the highest requirements before putting them into storage to ensure quality and safety. Throughout the production process, we feed our hogs with minerals, vitamins and other nutrient elements based on their daily needs and monitor every production process in accordance with the related national regulations and standards. We carried out strict inspections on processes and products to ensure that all the feed we have produced were safe and nutritious. We also strictly controlled when the feed is eaten by the hogs after it is produced, so as to maximize its freshness and safety.

**Hog husbandry.** We have formulated standard operating procedures for each link in hog husbandry in accordance with requirements of the Agricultural Product Quality Safety Law of the People's Republic of China 《中華人民共和國農產品質量安全法》, the Animal Husbandry Law of the People's Republic of China 《中華人民共和國畜牧法》, the Animal Epidemic Prevention Law of the People's Republic of China 《中華人民共和國動物防疫法》 and other relevant laws and regulations, with reference to the advanced experiences of the leading domestic and foreign husbandry enterprises, so as to standardize the hog farming processes.

We have developed a comprehensive immunity and health care process to provide delicate care for our hogs. We pay attention to the drinking water of hogs, and monitor the drinking water quality of hogs every year to ensure that the water quality meets the standard requirements of the "Quality of Pollution-free Drinking Water for Livestock and Poultry" (NY 5027). We have established the "Farming Process Control Procedure" in accordance with the "Guidelines for the Management of Hog Farming" (NY/T 5033), to standardize our hog farming process and the farming process management in the farm, and provide good ventilation and heat preservation for our hogs. We have established the "Biosafety Control Procedure" and the "Standard Operation Procedure for Immunization in Farms" in accordance with the Animal Epidemic Prevention Law, the Basic Requirements for Epidemic Prevention in Intensive Hog Farms (GBT 17823) and other regulations and standards, to strictly safeguard against epidemic diseases, and do a good job in the prevention and control of epidemic diseases in hog herds to ensure the health of our hogs. We strictly abide by the relevant national regulations and standards, use veterinary drugs in compliance with the regulations, confirm that all hogs are free of drug residues, and strictly implement the three-level audit by the farm director, supervisor, and breeder to ensure the food safety of hogs. We strictly implement the national animal inspection and quarantine standards, ensure that each batch of hogs sold in the market pass the inspection by the government regulatory department, and implement the sale of "certificate-marked" hogs.

**Supplier management.** We care about the quality and safety management of our suppliers. We have formulated quality and safety evaluation standards for suppliers of feeds, veterinary drugs and raw materials. We announced more than a thousand specific requirements in a total of 8 areas including basic management, source management, process management, export management, inspection and monitoring, traceability and emergency response, biosafety, and production safety. We defined approval and termination criteria to manage suppliers by levels and classes. In 2022, we revised/formulated our administrative measures for supplier quality and safety and administrative measures for suppliers of feeds and feed raw materials, and clarified the relevant requirements for supplier qualification, access, daily management, annual re-evaluation and termination. Through qualification review, credit evaluation, site inspection, quality evaluation and cooperation commitment, etc., we evaluate suppliers' corporate credit, comprehensive strength, financial status, corporate reputation, cultural identity, contract performance ability, site management and technology, and strategic synergy ability. We set quality and safety evaluation module to score and evaluate suppliers from such aspects as food safety, production safety, energy conservation and environmental protection, occupational health, etc., aimed at promoting suppliers to pay attention to environmental and social risks.

Our annual assessment and evaluation on suppliers follows the principles of openness, fairness, impartiality, science and rationality. Through the evaluation on quality indicators, contract performance capability, cost performance, after-sales service, etc., we can implement hierarchical and dynamic management of suppliers and give corresponding rewards and punishment incentives according to the evaluation results.

In 2022, we carried out document assessment on more than 100 veterinary drug vaccine suppliers, and conducted on-site quality and safety assessment on over 50 suppliers of them, which allowed us to timely eliminate unqualified ones and urged suppliers to enhance their quality and safety standards.

Suppliers in mainland China (number)	2,996
Suppliers in overseas and Hong Kong, Macau and Taiwan (number)	62

We understand the importance of sustainable development; therefore we integrate ecological environmental protection, energy conservation and emission reduction, social responsibility and corporate governance into our daily business operations. We pushed forward the concept of green procurement and continued to strengthen environmental protection and corporate responsibility management of our suppliers by requiring selected suppliers to comply with relevant laws and regulations of environmental protection in the course of purchasing raw materials, production and processing and rendering products and services. As much as practical, we selected production processes and equipment that were free of or come with less pollution during operations to reduce energy use, and properly handle discharges and waste to lower the impact on the environment, thereby driving the green development from the upstream of the industrial value chain. At the same time, we promote the company's supply chain to be more efficient and transparent, fair and environmentally friendly through our electronic procurement platform. We sign the "Supplier Quality Guarantee" 《供方品質保證書》 with all feed raw material suppliers, and the "Commitment on feed truck transportation quality and safety, African swine fever prevention and control" 《飼料車運輸品質安全、非洲豬瘟防控承諾書》 with suppliers involved in logistics and distribution, and pay attention to the strategic cooperation ability, quality and safety awareness, and biosafety management ability of suppliers.

## *Process control*

**Quality and safety management.** We have established a sound quality and safety management system, formulated and implemented quality and safety management standards which are tighter than national standards, and systematically managed the whole production process. During production, we effectively monitor each key link and ensure our products meet the qualification and safety requirements by utilizing advanced equipment and strictly implement the quality and safety control requirements throughout our production process. We strictly implement state requirements of COVID-19 prevention and control for cold chain foods. For the procurement of imported meat, we have formulated the COVID-19 prevention and control system for products and people in contact to strictly control the processes of transportation, acceptance, disinfection, processing, tracking, and ensure the safety of products.

We integrated the quality and safety risk information from internal and external sources including relevant parties in the value chain, the Group itself and our clients, establishing a risk surveillance index system to have precautions in place and handle the risks effectively during production and operation with real-time risk surveillance. In order to comprehensively and effectively monitor risks, we cooperated with the National Non-staple Food Quality Supervision and Inspection Center (國家副食品質量監督檢驗中心) of COFCO Nutrition and Health Research Institute to establish an inspection and test system backed up by the primary level laboratories in cooperation with third-party testing institutions at the same time.

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**Informatization intelligent management.** We continue to promote production informatization and intelligence, and use information technology to gradually build a smart factory. We apply the farming production and operation system to integrate all self-breeding hog farms and cooperative farmers into the unified management. With the electronic individual management of sows as the core, we use electronic ear labels and PDA handheld devices to make daily operation records in the farm, realizing the comprehensive management of hogs, pharmaceutical vaccines and low-consumption materials. This system not only improves production efficiency and reduces labor intensity by greatly reducing the repetitive basic work of manually copying data and making reports, but also unifies the supervision of management norms such as swine fever prevention, production management, treatment and immunization, and feeding standards by means of information technology. Therefore, various management systems can be implemented more effectively, and hogs can receive treatment and immunization services with quality and quantity assured in accordance with the norms. We apply the slaughtering informatization system, and use electronic labels to locate and track the products in each step of the production process, and ultimately establish the whole-process tracking and tracing from hogs, whole hogs, pork cuts to small packages, etc., which ensures the safety and reliability of the products. We have developed a MES system for fresh products. Through the docking with software systems such as SAP, RFID, rail separation, overhead warehouse and so on, and with information hardware such as livestock scale, dynamic rail scale, static rail scale, weighbridge, platform scale, industrial control equipment, PDA equipment, television billboard, LED billboard and so on, we can achieve paperless office in the workshop, cancel all manual reports, and automatically upload production data, which allows us to effectively reduce human interference factors to the minimum while being efficient. It also ensures that the product batch information is transmitted smoothly, the production warehousing and delivery are automated, the labor intensity is significantly reduced, the production report is automatically generated in real time, and abnormal production is warned in advance, which all contribute to the great improvement in our production management informatization. We have developed a platform for digital customer service management, which covers the fresh and meat products business through the system construction, realizes the one-stop full link from order delivery to customer sign-in, from factory, logistics carrier, driver to customer, and enables users to have online real-time view of the order in transit, logistics information, delivery information, in-car temperature, electronic sign-in information, customer complaints, etc.

**Animal welfare management.** We implement the Guideline for Animal Husbandry and Farming Quality and Safety Management, which clearly proposes animal welfare standards. We provide 11 animal welfare items in feed, drinking water, environment of breeding buildings, breeding density, sleeping area, temperature and ventilation, lighting, litter system, etc. We have established 11 animal welfare indicators including feed, drinking water, environment of farming facilities, stocking density, lying area, temperature and ventilation, lighting, farrowing system and other aspects. We purchase compliant and legal veterinary drugs, while the professional veterinarians formulate and issue medication guidelines and immunization plans to give timely and correct immunization and treatment to hogs.

Striving to provide a good growing environment for hogs, we improve the feeding, drinking water and environmental conditions in the pens for hog production by optimizing the design and techniques. We have automatic feed line (feed supply), automatic water line (drinking water supply) and environmental control system to ensure the timely supply of feed and drinking water for hogs. The environmental control system is automated to adjust the ventilation, temperature and humidity in the hog pens in real time to ensure suitable environment for the growth of hogs. In addition, video monitoring is installed in the hog pens, through which the management personnel can understand the situation in the hog pens at any time and eliminate any abnormality in a timely manner. We strictly control the number of hogs in a single pen so as to allow enough space for movement. We rely on quality feed from the feed factory to provide sufficient food for the hogs to ensure their nutritional balance. We also reduce the particle size of feed during feed processing to minimize gastric ulcers of sows. When moving the hogs from one pen to another, staff will guide them in an orderly manner to avoid frightening them. In order to actively promote humane slaughtering, we adopt the automatic hog driving channel and the world-leading carbon dioxide stunning technology from the slaughtering design, aimed to reduce the stress of hogs to be slaughtered. In addition, we regularly carry out animal welfare control training for staff, strengthen management from such aspects as hog unloading, hog driving, slaughtering and so on, to avoid unnecessary suffering or injury to the hogs.

## **African swine fever prevention and control management.**

According to the Technical Guidelines for Normalized Prevention and Control of African Swine Fever (Trial Version) (《非洲豬瘟常態化防控技術指南(試行版)》) issued by the Ministry of Agriculture and Rural Affairs of the People's Republic of China and other standards, we have further optimized the Biosafety Control Procedures (《生物安全控制程序》) to standardize the disinfection requirements for incoming personnel, vehicles and materials. We have also strengthened epidemic prevention and control at key places to strictly ensure the health of pigs.

We use high-temperature disinfection and sterilization equipment in the feed processing process, and all raw materials and finished products have been tested and passed the hygiene standards. We also set up regional central warehouses and quarantine centers in the farms, and strictly conducted quality control to prevent viral transmission while centralizing the procurement of supplies. Moreover, we established a four-level sanitization process of "customers-communities-small breeding plots-farms" to prevent the spread and growth of viruses. We used the docking method while handling dead pigs and selling live ones, and forbade external vehicles from entering the facilities to minimize the chances of disease transmission.

## **Terminal Management**

We focused on the "last kilometer" for quality and safety by strictly controlling the terminals such as cold-chain logistics, warehousing and stores, establishing procedures to standardize the admittance, management and exit of terminal-related parties, and implementing strict management and control for terminals in respect of equipment and facilities, products protection, shelf life management, returns management, emergency management and traceability, so as to guarantee the quality and safety of products.

## **Product Traceability**

We have established a traceability system covering all links of the whole industrial value chain including feed processing, hog production, slaughtering and cutting, meat product processing and sale, to regulate the records and label management of quality information in each link of the industrial value chain.

We have established an electronic tracking system for the slaughtering and processing links, giving each product a unique "ID card" through label coding, with all data uploaded to the cloud database, enabling full traceability which is continuously optimized during application. We strictly follow national regulations and standards for product labeling, which includes key information such as product name, ingredients, nutritional content and contact information. Currently, we are able to make a fast product traceability query, to ensure the "safety on the tip of the tongue".

For potentially problematic products, we have institutionalized food recalls and emergency response plans for food safety incidents to minimize the possibilities of consumers being exposed to problematic products. In 2022, we continued to launch traceability drills on the whole value chain, covering all production enterprises. From the drills, we verified the effectiveness of the traceability system and improved our emergency response capabilities.

## **Professional and Efficient Client Service**

In order to provide high-quality, professional and efficient customer service to our clients, we are constantly improving our customer service system, setting up complaint hotlines and assigning dedicated staff to be on duty. In addition, we have developed and standardized customer complaint handling process to improve customer satisfaction with immediate feedback, timely follow-up and handling. In 2022, the Group did not order any product recalls.



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Through our consumer satisfaction survey, we have collected, combined and summarized their opinions. We analyzed the causes for dissatisfaction and formulated improvement plans, taking every opportunity for improvement seriously. We specified the requirements for complaint management and implemented the sorting, classification, reporting and handling procedures, so that the person-in-charge could timely contact the complainants and addressed complaints in time. In 2022, the Group received 137 complaints with about 25% decrease year-on-year, and all complaints were handled in a timely manner according to the standard, and the complaint handling rate reached 100%, which improved customer satisfaction. On top of that, we analyzed the causes of customer complaints and took preventive measures to reduce potential complaints. We place high priority on the information privacy of our clients in compliance with relevant laws and regulations and attach great importance to keeping the privacy of our partners and customers. In the course of branding activities, we will sign confidentiality agreements with relevant personnel who will handle our customer data, so as to strictly control the information usage, while conducting confidentiality inspection regularly to completely avoid any consumer information leakage.

### ■ Advertising and Trademarks

We strictly implemented the Advertising Law of the PRC (《中華人民共和國廣告法》) and the administrative requirements for business promotion of the Company to ensure that the business promotion activities are factual, lawful, rooted in science, accurate, but not deceptive or misleading, in strict accordance with the laws and regulations. We strictly followed the requirements of national laws and regulations by drawing up guidelines for advertising compliance. On the basis of sorting out laws, regulations and judicial practices, and in view of the actual situation of the Group's advertising, we clarified key review contents of the advertising promotion to provide guidance. We internalized our system requirements through audit and practice. As for the Group's new product research and development, product packaging design and advertising, etc., we reviewed relevant contracts and clarified the rights and obligations of both parties, intellectual property ownership, liability for breach of contract, dispute resolution and other contents, to avoid accidents and reduce disputes. In addition, we reviewed product packages and advertisements in terms of their indication of source, use of special terms, false advertising and medical efficacy, to ensure that all publicity is legal and compliant, and avoid consumer complaints or administrative investigation.

We optimized the operating standards of the Joycome and Maverick brands, thereby creating a clear brand positioning and steadily promoting brand recognition in the long term. We also formulated the brand licensing management rules and the product structure standards for the Joycome and Maverick brands, improved the awareness of intellectual property right protection, regulated Joycome's obligations when using fonts, pictures and other works, and set out detailed regulations on the management departments of trademark licensing, application process and rules for the use of trademarks by dealers. In the entire process of intellectual property right application, use and authorization, we followed up and reviewed the intellectual property rights to ensure that all rights were used in a standardized manner, and urged rectification of misconducts of dealers when assisting in the supervision of their daily operations. We organized legal training to enhance the legal literacy and the understanding of intellectual property rights of relevant staff, which aimed to raise their attention to intellectual property rights, their risk prevention awareness as well as risk control capabilities. We built our brand system through an approach known as "trademark + domain names" and took initiative to register domain names that were relevant to the Company's trademarks and business operations, focusing on keywords such as "cofco-joycome", "cofcojoycome" and "cofcomeat". We have registered 6 domain names, aiming to provide a comprehensive protection across the whole cyber world.

In 2022, we reviewed the advertising and logo compliance of more than 60 product details pages in the "Maverick Flagship Store" (JD Platform), and in accordance with the relevant provisions of the General Principles for the Nutrition Labeling of Pre-packaged Food (《預包裝食品營養標籤通則》), we also reviewed the words such as "low fat", "high protein" and so on used in the promotion of nutrition content, aiming at promptly warning of relevant risks and providing solutions and suggestions to ensure the lawfulness and compliance of product publicity. We attach great importance to the protection of intellectual property rights. We have formulated regulations concerning intellectual property rights, such as the List of Compliance Obligations of COFCO Joycome Intellectual Property Rights (《中糧家佳康智慧財產權合規義務清單》), the Administrative Measures for the Review of Launch and Revised Packaging of COFCO Joycome Products (《中糧家佳康產品上市及改版包裝審核管理辦法》), the Interim Measures

for the Administration of the Authorized Use of COFCO Meat Brands 《中糧肉食品牌授權使用管理暫行辦法》, the Notice on Standardizing the Use of Fonts, Pictures and Other Works 《關於規範使用字體、圖片等作品的通知》, and the Specification for the Product Structure of Joycome and Maverick Brands 《家佳康、萬威客品牌產品架構規範》, to improve the Company's awareness of intellectual property protection, by standardizing the content of Joycome's obligations when using fonts, pictures and other works, and specifying the obligations related to intellectual property compliance such as the management department of trademark authorization, application process, and dealer use specifications. In order to effectively protect the Company's intellectual property, we have established a special "intellectual property" section in the legal affairs management system to follow up and review the intellectual property situation in the whole process of intellectual property application, use, authorization, etc., thereby ensuring that all rights are used in a standardized manner, and at the same time to assist in supervising the daily operation of dealers and urge the rectification of unqualified acts.

### Environmental Protection

We always attach great importance to the work on sustainable development for the ecosystem, and actively take the primary responsibilities as a state-owned enterprise to increase investment in environmental protection, introduce advanced equipment and facilities, explore and implement advanced technologies. We continued to play a leading and exemplary role in the industry. We did not occur any environmental incident throughout the year.

#### ■ Eco-farming

Following the direction of agricultural and environmental protection policies and regulations of the PRC, the Group further developed an eco-farming mode of "combining farming and planting for integrated application", aiming to minimize the impact of large-scale farming on the environment, realize the scientific utilization of animal excrement and lead the farming industry to a healthy and green path of development.

We are deeply aware of the impact of climate change on human survival and the production and operation of enterprises, and adhere to the technical route for the recycling and utilization of aquaculture wastes. According to the Regulation on the Prevention and Control of Pollution from Large-scale Breeding of Livestock and Poultry 《畜禽規模養殖污染防治條例》, the Opinion of the General Office of the State Council on Accelerating the Utilization of Livestock and Poultry Waste Resources 《國務院辦公廳關於加快推進畜禽廢棄物資源化利用的意見》, the Action Plan for the Utilization of Livestock and Poultry Wastes as Resources (2017-2020) 《畜禽糞污資源化利用行動方案(2017-2020)》, and the Guiding Opinions on Promoting the Utilization of Livestock and Poultry Wastes into the Field and Strengthening the Treatment of Pollution from Farming in accordance with the Law 《關於促進畜禽糞污還田利用依法加強養殖污染治理的指導意見》, we have developed an eco-circular utilization mode known as "eco-farming with combination of farming and planting" based on "feed production – hog farming – manure treatment – biogas power generation/heating – manure return to the field". Based on thorough consideration of the environmental capacity and land capability, we optimized the proportioning of our breeding scale with the surrounding lands, promoted biogas for heating and power generation, utilization of biogas fertilizer in fields, and integration of farming and planting, with the aim of developing a green and circular agricultural industry value chain. The utilization of aquaculture waste as resources can avoid greenhouse gas emissions caused by the disorderly release of methane. At the same time, the generated biogas can be effectively used as biomass energy through power generation or heating, which can reduce the use of natural gas and electricity, and reduce direct and indirect carbon emissions. In addition, the integrated utilization of water and fertilizer such as biogas slurry and agricultural irrigation water in fields can effectively reduce the amount of fertilizer application, thus reducing industrial carbon emission. At the same time, organic fertilizer can improve the soil aggregate structure, improve soil fertility, increase crop yield, and enhance carbon fixation capacity.



## Environmental, Social and Governance Report

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Our high environment protection standard is based on our supreme productivity. We have set up 36 advanced stations for utilization of farming waste nationwide, built more than 320 kilometers of pipelines to send the bioslurry back to the fields, allocated 220,000 mus of land to support bioslurry consumption and provided bioslurry free of charge for soil amelioration and growing crops at the surrounding areas. These efforts have led to the increase in both production and revenue for farmers.

On November 21, 2022, the case of “COFCO Joycome: “turning dung into treasure” with combination of farming and planting, and boosting rural revitalization with circular agriculture” was listed on the “Learning Power” platform, which is a high affirmation of our ecological breeding and environmental protection work.

### COFCO Joycome: “turning dung into treasure” with combination of farming and planting, and boosting rural revitalization with circular agriculture”



Central enterprise learning platform

2022-11-21

+subscription

Author: COFCO Corporation

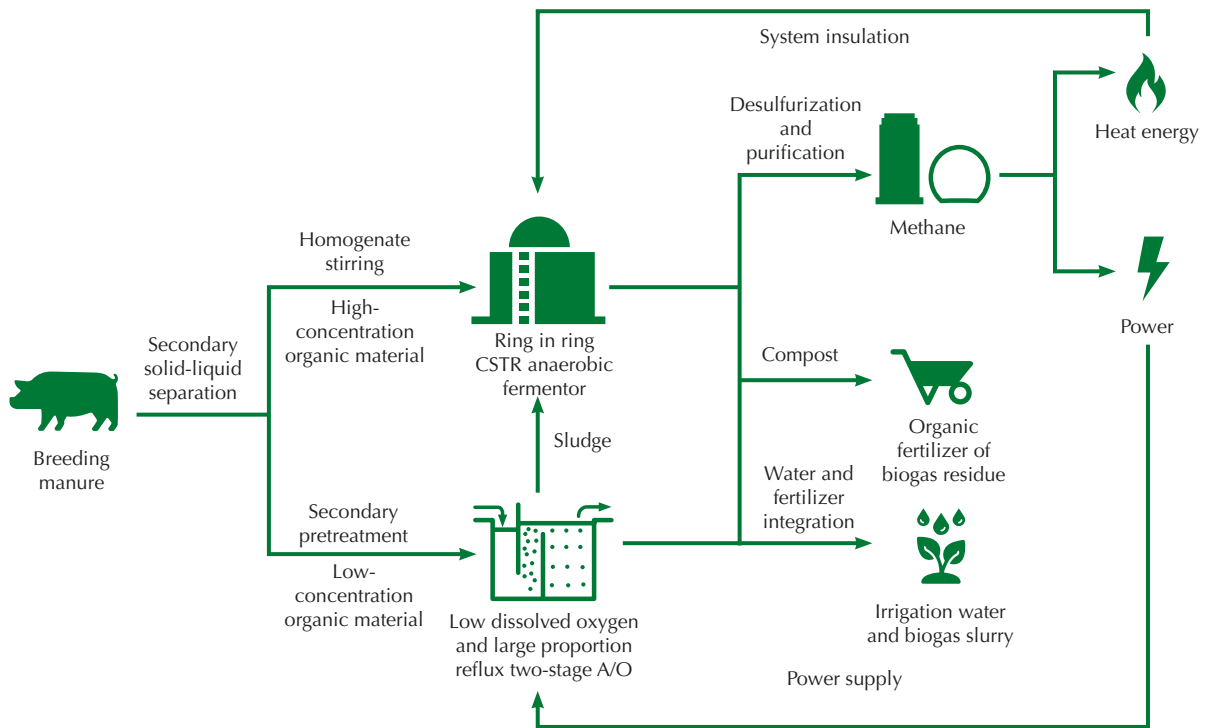
The report of the 20th National Congress of the Communist Party of China pointed out that we should comprehensively promote rural revitalization, develop rural characteristic industries, broaden the channels for farmers to increase their income and become rich, consolidate and expand the achievements of poverty alleviation, and strengthen the endogenous development momentum of poverty relief areas and people. In the great cause of consolidating the achievements of poverty alleviation and boosting the strategy of rural revitalization, COFCO Joycome, as the meat business platform of the whole industrial value chain under COFCO Group, firmly establishes and implements the concept that lucid waters and lush mountains are invaluable assets, and takes optimizing and strengthening hog industrial value chain as an effective way to boost the development of local industries and boost rural revitalization.

After more than ten years of exploration and development, COFCO Joycome has set up 129 high-standard eco-breeding bases in the country, established a complete harmless treatment system for manure fermentation, and realized the utilization of aquaculture waste as resources under the technical route of gradual upgrading through biogas power generation and biogas slurry return to farmland, which promoted the efficient docking of farming and breeding, the development of circular agriculture, green agriculture and efficient agriculture, and contributed to the success in the battle against poverty and the sustainable and high-quality development of rural industries.

When selecting the site of a new project, we insist not to select the prohibited breeding areas stipulated by laws and regulations, such as drinking water source protection areas, scenic spots, nature reserve core areas and buffer zones. The site selected has a safe distance from the surrounding residential areas. We fully evaluate and consider the impact of construction and operation period on local residents’ lives. We determine the environmental protection distance through environmental impact assessment and take it as the basis for project design and construction. According to the characteristics of the surrounding environment and the land capacity of the project site, we take appropriate measures for the treatment of breeding waste.

## Case: “Livestock – biogas – grain” circular mode of Jiangsu Company

In order to practice the “lucid waters and lush mountains concept” and serve Jiangsu’s mission to take the lead in realizing agricultural and rural modernization, COFCO Joycome (Jiangsu) Co., Ltd. actively expanded the “livestock – biogas – grain” eco-circular mode. The company is located in the coastal reclamation area of mudflat. It has built a biogas station with an annual heat supply of 750,000 cubic meters and a biogas power station with an annual power generation of 3.5 million kilowatt hours, which can produce safe and high-quality biogas slurry fertilizer of more than 700,000 tons every year to fertilize more than 30,000 mu of crops. The “livestock – biogas – grain” eco-circular mode of Jiangsu Company was rated as a typical case of green development of rural industry in 2022 by the Green Agriculture Development Research Association of Jiangsu Province.





## Environmental, Social and Governance Report



In terms of breeding wastewater treatment, we built biogas projects or/and advanced treatment projects of breeding wastewater. The breeding waste is collected and pumped to environmental protection facilities through closed pipelines. After anaerobic fermentation or/and aerobic biochemical treatment, the biogas generated is used for power generation or heating, and the biogas slurry/agricultural irrigation water and biogas residue generated are used as organic fertilizer in fields. In 2022, we renovated four breeding wastewater treatment facilities in Dongtai, Jiangsu, Yongcheng, Henan, Baodi, Tianjin, and Ongniud Banner, Inner Mongolia, and upgraded them to resources utilization facilities, further reducing the impact on the surrounding environment.

In terms of breeding solid wastes treatment, general breeding solid wastes include sick and dead hogs, domestic garbage, etc., which will be disposed by a qualified third party. Hazardous wastes include piggery diagnosis and treatment waste, waste oil, laboratory waste liquid, etc., which will be transferred and disposed by a qualified third party.

In the management of breeding odor, we built spray deodorization facilities, retaining walls, attachment nets, etc. In addition, we take balanced ventilation measures, and adjust the ventilation volume reasonably according to the season and weather conditions. The dung in the pens is discharged in time to avoid odor release caused by long-term storage.

## Case: Planting alfalfa in sandy land to control sand and become rich

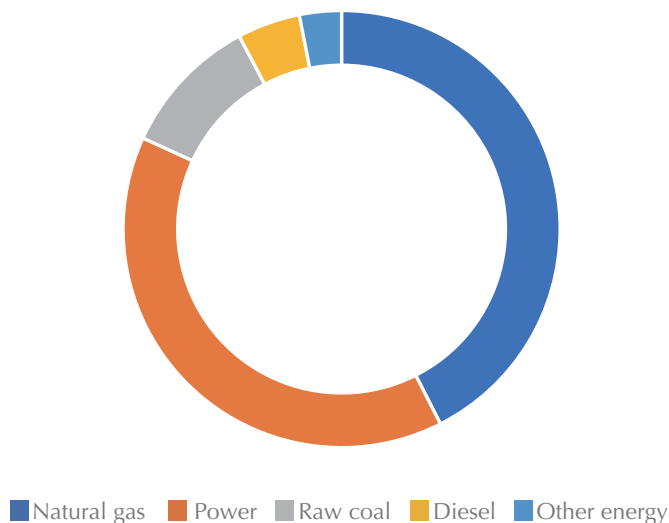
Due to the lack of water and fertilizer, most of the plants in sandy land can hardly survive. The project of reducing the burden and returning plants to farmland just solves the problem of “water and fertilizer”. In the process of sand control, we found that the root system of alfalfa is developed, which can improve the soil structure, prevent wind and fix sand. Alfalfa is also high-quality livestock forage. We have successfully used biogas slurry and agricultural irrigation water to plant alfalfa in the sand. In June 2022, we planted 200 mu of alfalfa in the sand demonstration area of Ongniud Banner, Chifeng, and successfully harvested the first crop of hay for sale as cow forage in September 2022, which brought considerable benefits to farmers. It will be widely promoted in the later stage, and also attract local governments with similar natural resources endowment to take the initiative to seek cooperation with the Group.



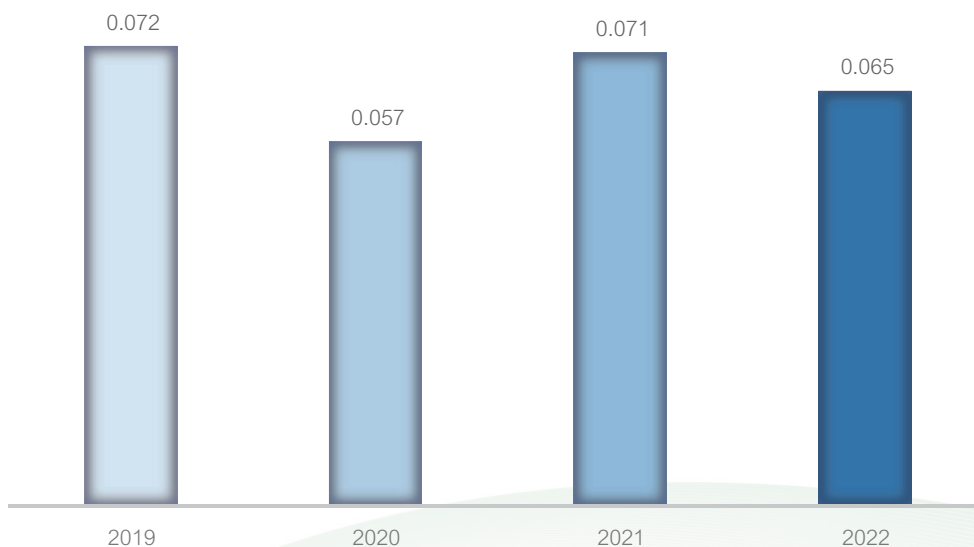
## ■ Use of Resources

We clearly understand our duties as a responsible corporate citizen in protecting the environment and maintaining ecological balance. By strictly controlling resource and energy consumption in the farming industry chain, we are getting gradually close to the goal of improving resource utilization efficiency and actively responding to climate change. We have made great efforts in management, technology and process transformation, and formulated scientific and feasible standards and an assessment mechanism for energy and water consumption limits, while actively renovating the equipment and facilities in our plants, and continuously improving our energy and resource utilization efficiency. In 2022, for our production in general, we consumed approximately 83,900 tons of energy (in standard coal), with an energy consumption intensity of about 0.065 tons of standard coal/revenue of RMB10 thousand. In spite of headwinds such as the downturn of the hog market and the rising costs of raw materials, our energy consumption intensity dropped by approximately 8% year on year.

Energy use in 2022 (in ten thousand tons of standard coal)



Energy consumption density during 2019-2022 (in tons of standard coal/revenue of RMB10,000)



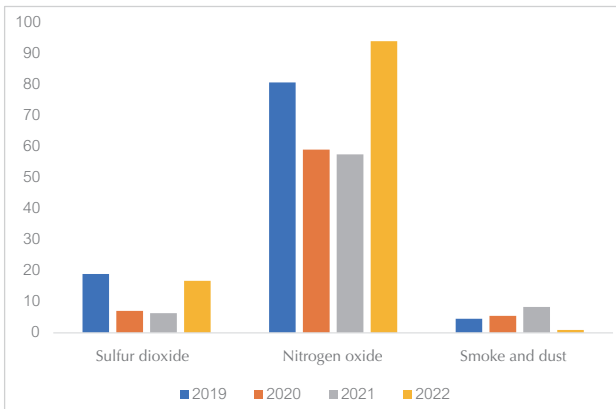
Our businesses operations, ranging from hog breeding, slaughtering and segmentation, production of fresh pork and processed meat products, and epidemic disinfection flushing require large amounts of water consumption. We comprehensively optimized our water conservation and emission reduction designs by launching a multi-tier water utilization metering system. We have also developed water utilization standards and assessment plans to further reduce water consumption. In 2022, water consumption of the Group amounted to about 16,720,000 m<sup>3</sup>, with a water usage intensity of about 13 m<sup>3</sup>/revenue of RMB10 thousand.

Taking into consideration the impact on environment of our packing materials and office paper, we strove for simple product packaging and paperless office work without sacrificing quality and work efficiency, so as to minimize the negative impact on the environment. In 2022, total packing materials consumed by the Group, including plastic bags, plastic films, cartons and plastic pallets, amounted to approximately 2,307 tons, with a packing material usage intensity of about 1.79 kilograms/revenue of RMB10 thousand.

## Emission management

We strictly complied with relevant state laws and regulations such as Environmental Protection Law of the People’s Republic of China 《中華人民共和國環境保護法》, Prevention of Air Pollution of the People’s Republic of China 《中華人民共和國大氣污染防治法》, Prevention and Control of Water Pollution of the People’s Republic of China 《中華人民共和國污水污染防治法》 and the Law of the People’s Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Waste 《中華人民共和國固體廢物污染環境防治法》 for the regulation of emission management of pollutants, and were committed to reducing pollutants, greenhouse gases, as well as ensuring our production and operations were within the environmental capacity, so as to reduce the negative impact of our operation on the surrounding ecological environment.

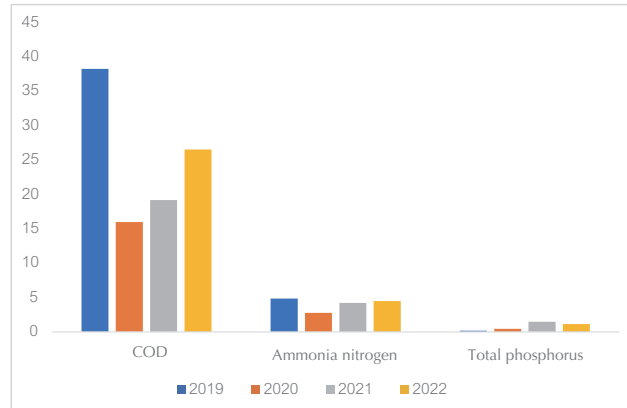
### Emissions of major pollutants during 2019-2022 – waste gas (ton)



In 2022, the Group generated atmospheric emissions including exhaust gas, sulfur dioxide, nitrogen oxides, etc., totaling approximately 408 million cubic meters of exhaust gas<sup>1</sup>, and greenhouse gas emissions<sup>2</sup> of about 290,000 tons, including range 1 emissions of about 110,000 tons, range 2 emissions of about 180,000 tons, with emission density of about 0.23 tons/revenue of RMB10 thousand.

- <sup>1</sup> The emission data is obtained from the Group’s environmental monitoring data in priority. It is calculated according to the production and emission coefficient method and the relevant emission permit application and technical specifications issued by the Ministry of Ecological Environment;
- <sup>2</sup> It is calculated according to the Greenhouse Gas Accounting System – Enterprise Accounting and Reporting Standard 2012 (Revised) 《溫室氣體核算體系企業核算與報告標準2012(修訂版)》 issued by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), and the Fifth Assessment Report 2013 《第五次評估報告2013》 issued by Intergovernmental Panel on Climate Change (IPCC). The greenhouse gas emission factor of power sector is selected by referring to the 2019 Emission Reduction Project of China’s Regional Grid Baseline Emission Factor issued by the Ministry of Ecological Environment.
- <sup>3</sup> Emission data is calculated based on the Group’s environmental monitoring data first; subsequently, it is calculated based on the pollution production and discharge coefficient method as well as the Technical Specification for Application and Issuance of Pollutant Permit issued by the Ministry of Ecology and Environment.

### Discharge of major pollutants during 2019-2022 – waste water (ton)



In 2022, the wastewater pollutants generated by the Group included COD, ammonia nitrogen, total phosphorus etc. A total of approximately 540,000 tons of wastewater was discharged<sup>3</sup>, with a waste water emission intensity about 0.42 tons/revenue of RMB10 thousand.

All solid wastes generated from our production and operation were handled in strict accordance with Law of the People’s Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Waste 《中華人民共和國固體廢物污染環境防治法》, Animal Pandemic Prevention Law of the People’s Republic of China 《中華人民共和國動物防疫法》 and other relevant national laws and regulations, among which, non-hazardous wastes, including dead pigs, pig organs abandoned during slaughtering, boiler slag, waste packaging materials and domestic wastes, were treated properly and reused based on the principles of reduction, recycle and detoxification. Hazardous wastes including medical wastes, machine oils, laboratory liquid wastes, waste ink and waste light tubes, were stored in the temporary storage which met the requirements of regulations and transferred and disposed of by qualified third party.

## Environmental, Social and Governance Report

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In 2022, the Group produced a total of approximately 50,000 tons of non-hazardous wastes (with an emission intensity of about 0.04 tons/revenue of RMB10 thousand) and approximately 126.5 tons of hazardous wastes (with an emission intensity of about 0.98 kilogram/revenue of RMB10 thousand).

### ■ Climate Change

Climate change is one of the greatest global challenges faced by the current society. In recent years, extreme weather events (especially heavy rainstorms, high temperatures and droughts, etc.) have occurred frequently around the world, leading to the interruption of power, drainage, water supply and other support systems, and the disruption of transportation caused by road washouts, which will seriously affect the normal production of enterprises, cause changes in the supply chain of enterprises and increase the operating costs.

Tackling climate change has become a shared responsibility and challenge for governments around the world. The Group actively responds to the call of the country and the development trend of the international community, and fully integrates the requirements of carbon emission peak and carbon neutrality into the medium and long-term development plan of the enterprise to ensure that various business segments implement the main goals and development directions of carbon emission peak and carbon neutrality, practice social responsibilities, and consolidate the foundation of sustainable development.

We propose to continuously reduce the Group's greenhouse gas emission intensity to ensure that the Group's total greenhouse gas emissions meet the increasingly stringent regulatory requirements of local governments by 2030, and expect our operations to be carbon neutral by 2060. We are committed to adjusting the energy structure, improving energy use efficiency and leveraging our expertise and industry progress to boost efficiency at production sites, maintain efficient management support, and ensure that the goals of carbon emission peak and carbon neutrality are achieved on schedule.

In order to further improve the Group's risk prevention capabilities, we have formulated a natural disaster emergency response mechanism, which clearly defined the duties and division of work for disaster response at all levels of the Group. We timely collect and analyze information on natural disasters released by relevant government departments to release, adjust and cancel early alarm. We have also taken into consideration the characteristics of natural environment in different places, and assessed the potential for extreme weather and secondary disasters by carrying out comprehensive natural disaster risk identification and impact assessment, and formulating specific contingency plans. We fostered effective cooperation with local governments and emergency rescue agencies. At the same time, we enhanced cooperation with professional institutions to share resources and improve our response to natural disasters, in order to minimize the impact of natural disasters and prevent the spread of disasters and the occurrence of secondary disasters.

### ■ Energy Conservation and Emission Reduction

We emphasize energy conservation and emission reduction as well as ecological protection and are committed to building environment-friendly enterprise to reduce our reliance on natural resources and ensure sustainability of the ecosystem. To try our utmost best to minimize the environmental impact of our business operations, we have established a long-term ecological environment protection mechanism by formulating the Management Regulations for Energy Conservation and Emission Reduction, Measures for Supervision and Administration of "Three Simultaneities" for Construction Projects and Emergency Plans for Environmental Pollution Accidents in accordance with relevant laws and regulations, including the Energy Conservation Law of the People's Republic of China 《中華人民共和國節約能源法》 and the Environmental Protection Law of the People's Republic of China 《中華人民共和國環境保護法》, while increasing financial support to the key energy-saving and eco-friendly projects.

In line with the national policies on resource conservation and environmental protection, the Group formulated the three-year plan for building the ecological sustainability system. We proposed to lower the intensity of COD and NOx emissions, while increasing the overall utilization rate of solid waste and the share of recycled water consumption. To ensure the feasibility of the plan, we put forward more than 30 specific tasks and a wide range of key construction projects. We also sorted out details of responsibility fulfillment, supervision and management as well as capital investment, which provided a top-level blueprint for the Group's work in energy conservation, emission reduction, and environmental protection.

We vigorously promoted our water-saving policy in the farms in the whole cycle of water utilization, including extraction, delivery, use and reuse. We also tried to reduce water consumption by introducing high-pressure flushing machines, installing equipment such as drinking bowls and water level controllers and improving procedures. At the same time, we increased our investment in wastewater treatment, set up more stringent wastewater discharge standards, recycled condensed water and advocated using standard-compliant treated water throughout the process of our operations to increase the ratio of recycled water and save every drop of precious water for the earth. We have adopted water-saving dispensers in the pig drinking system and explicitly requested in the production management system that long running water and other leakages are not allowed. We have built 20m<sup>3</sup> and 50m<sup>3</sup> water reuse ponds in Huanggang and Dongtai plants respectively for our fresh produce business, with a total investment of about RMB200,000 and annual water saving of about 35,000 tons. We have renovated the packaging machine condensate reuse in Heshan plant for meat production business, with annual water saving of about 6,000 tons. The Group utilized recycled water of over 19,000 m<sup>3</sup> in 2022.

By adjusting the management and control model, we promoted the use of residual heat and other energy-saving measures to establish a leading position in energy efficiency. We have made it clear that the environmental control temperature can meet the requirements of healthy hog production, shorten the temperature difference with the outside environment, and maximize the natural gas saving while meeting the needs of the farm. Our new breeding project adopts new energy-saving technology, which allows us to increase the heat recovery system by optimizing the structure and ventilation mode of the pens, and recover the residual heat of the hot air discharged inside the pens through heat recovery system to preheat the cold fresh air incoming from outside and thereby reduce energy consumption in cold seasons. We have developed the energy saving potential of large power consumption equipment, and added no-load alarm to the pulverizer in the feed processing process to avoid power consumption during equipment idling. For the aeration fans that consume more power during the treatment of breeding wastewater, we select the air suspension fan that is more energy-saving. We equip gas boilers with waste heat recovery facilities such as energy economizers and condensers to reduce gas consumption and improve energy efficiency. We continue to promote biogas

power generation and biogas heating, and optimize the incentives for biogas power generation and heating, with a view to increasing the comprehensive utilization of biogas and reducing the consumption of natural gas and electric energy. We achieved 2.5 million cubic meters of biogas heating gas throughout the year, equivalent to 1.25 million cubic meters of natural gas saved. According to the principle of “right crop for right land”, we continue to promote biogas power generation in Jiangsu, Hubei, Inner Mongolia and Jilin, achieving more than 3.7 million kWh of biogas power generation, reducing the consumption of fossil fuels such as oil and coal. We have eliminated 27 high-energy consuming motors in Dongtai Factory of the fresh food business, with a total of 232KW of high-energy consuming power eliminated. After replacing low-energy electromechanical equipment, the annual consumption was reduced by about 3%. Our Huanggang Factory of the fresh food business cooperates with the State Grid to develop PV power generation projects, so we enjoy discounted electricity prices, and the benefits of energy conservation and carbon reduction are distributed at 8:2. The annual power generation is about 2 million kWh, and the annual reduction in carbon emission is about 976 tons in proportion.

We strengthened the management of environmental protection data. Through the stringent review of online monitoring data, third-party inspection data and monthly reporting data, we timely identified abnormal emissions of pollutants and ensured emission compliance throughout the year. Furthermore, we optimized the techniques for sewage and exhaust gas treatment, renovated coal-fired boilers and old sewage stations, and phased out diesel forklifts, with a view to reducing pollutants and our environmental impacts. In 2022, we carried out low-nitrogen renovation of the boiler room in Heshan Factory of meat product business, making the emission concentration decrease from 66mg/m<sup>3</sup> to 39mg/m<sup>3</sup> and the nitrogen oxide emission decrease by 41%. We have renovated the Wuhan Factory with aging sewage treatment equipment, with annual COD emission expected to decrease by 1.8 tons, and ammonia nitrogen emission expected to decrease by 1 ton. Our Dongtai, Huanggang, Changling and Chifeng factories of fresh business all adopt biological deodorization system, with the ancillary system formed by deodorization tower, packing, circulating spray system, to reduce the emission of ammonia, hydrogen sulfide, non-methane total hydrocarbon and other pollutants. We have built an unorganized exhaust gas treatment facility at the fan outlet of the pens to reduce the emission of hydrogen sulfide, ammonia and other exhaust pollutants in the pens by spraying water mist, biological adsorption and other measures. We collect breeding waste through closed pipes and pump it to an anaerobic fermentation tank for medium-temperature fermentation. The generated biogas is used as energy to effectively reduce the emission of methane gas. We have eliminated six 1T coal-fired boilers and replaced them with oil-fired boilers, reducing the emission of nitrogen oxides, sulfur dioxide and other waste gas pollutants.

We further implement the concept of low carbon and environmental protection by means of information technology, and promote energy conservation and emission reduction by a series of information technology under the promotion of activities such as “Energy Conservation Publicity Week” and “Low Carbon Day” organized by the Group. In 2022, we further expanded the business scope of the Company’s production management system, OA system, enterprise WeChat system and other information systems, and launched the breeding management platform and fresh logistics management platform. Through these information systems, we have optimized relevant business processes, greatly improved business efficiency and further reduced the use of paper. At

the same time, we have carried out a series of upgrades to the existing information systems, replacing some physical servers with virtual cloud servers, which not only reduces the management costs, but also further reduces the energy consumption of the IT infrastructure.

### **Win-win Cooperation in Harmony** ■ Promotion of Industrial Development

As one of the industry leaders, we always embrace our responsibility to lead the development of standards in the industry in a well-ordered manner and have participated in the formulation and amendment of national and industrial standards for a number of times. In 2022, we participated in the revision of the national standard “General Principles of Bacon Quality” 《培根品質通則》 (GB/T 23492-2022), which was approved and issued by the State Administration for Market Regulation (the Standardization Administration of China) on December 30, 2022. We participated in the formulation of “Pure Sausage” 《純肉腸》 (T/CMATB 9007-2022), which was released on September 16, 2022. The group standards of “Biogas Residue Agroforestry Matrix” 《沼渣農林基質》 and the “Agroforestry Biogas Liquor” 《農林沼液》 of which we participated in the compilation were officially implemented on June 1, 2022. In addition, we participated in the formulation of industry standard “ $\omega$ -3 Polyunsaturated Fatty Acid Fortified Pork” 《 $\omega$ -3多不飽和脂肪酸強化豬肉》.

We actively participated in national industry exchanges to communicate with each other and jointly explore the development of the industry. We have carried out technical cooperation and exchange with China Quality Certification Centre, Centre Testing International Group Co., Ltd., SGS and other third-party institutions for food technical service, in such fields as inspection and testing, labeling and identification. As the executive director of the Hog Branch of China Animal Agriculture Association, we participated in the industry exchange meeting of China Animal Agriculture Association, etc.



## ■ Participating in Philanthropy and Charity

We cared for the underprivileged and actively held various public welfare activities, such as poverty alleviation, education aid, disaster relief, anti-epidemic, and helped those in need by setting out a management system for making donation and to actively fulfill our social responsibilities. 2022 is the year to consolidate and expand the achievements of poverty alleviation and deepen the effective connection with rural revitalization. We set up a leading group and a leading group office for rural revitalization, and held quarterly meetings to study and deploy rural revitalization. In order to strengthen the overall planning, we have prepared the “14th Five-Year Plan” action plan for rural revitalization. The Group has continued to strengthen the construction of skilled talents in the areas to be assisted, actively purchased and helped sell agricultural products, and increased the income of farmers in the areas to be assisted. This year, we have purchased and sold RMB134 million of agricultural products and raw materials in the areas to be assisted. We donated RMB9.97 million to Changling County, Jilin Province as education charity fund. Annual total public welfare donation of our group was RMB21.03 million, with a year-on-year increase of about 40%.



We also rely on the hog breeding business, give full play to industrial advantages, take the implementation of industrial assistance as a means, to comprehensively promote employment assistance, consumption assistance and financial assistance, practice our social responsibility as a central enterprise, and boost rural revitalization. We provided the treated biogas slurry and agricultural irrigation water from breeding wastes to the surrounding farmers for free, the irrigation area of which reached more than 200,000 mus. In 2022, we saved at least RMB10 million of fertilizer costs for the surrounding farmers.

## Staff Development

We stay committed to our people-oriented philosophy, which is reflected in our continuous efforts to protect our employees' legitimate rights and interests, create a safe and comfortable work environment and offer clear career development paths, providing them with a fair and value-sharing development platform.



## Environmental, Social and Governance Report

### Case: Carrying out some sports competitions to enhance collective awareness and cohesion, and stimulate work enthusiasm

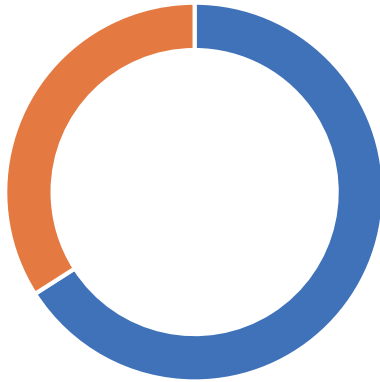
This year, we held basketball, badminton, fun games and other sports competitions in Beijing, Inner Mongolia, Jiangsu, Shanghai, Guangdong and other places. Adhering to the principle of “friendship first, competition second”, the competition process was brilliant and colorful, fully showing the personal style and spirit of unity and hard work of employees.



### ■ Staff Employment

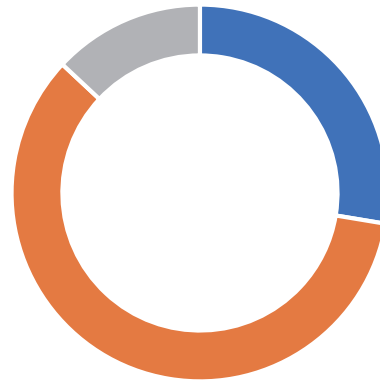
We have set up the Staff Recruitment and Management Measures, the Employee Onboarding and Offboarding Management Measures, the Labor Contract Management Measures and other systems and measures according to relevant laws and regulations including the Labor Law of the People’s Republic of China 《中華人民共和國勞動法》 and Labor Contract Law of the People’s Republic of China 《中華人民共和國勞動合同法》. We respect and treat every applicant and employee fairly, create equal and diverse working opportunities for our employees of different nationalities, races, genders, age groups, religions and culture backgrounds adhering to the recruitment principles of fairness, justice and openness and strictly follow legal employment rules to safeguard the legal interests of our employees, striving to treat all our employees on a safe and reliable basis since their application with no discrimination. As at the end of the reporting period, we had 9,980 employees in total, representing an increase of 1,015 employees or a growth of 11% as compared with 8,965 employees as at December 31, 2021.

Number of Employees by Gender



■ Male ■ Female

Number of Employees by Age Group



■ Under 30 ■ 30-50 ■ Above 50

To offer more room for employees to grow, we increased staff training to sharpen their skills and expanded the promotion channels for them. Based on our staff turnover analysis, we actively adjusted our measures to communicate more effectively with employees and improved their satisfaction with the Company. As at the end of the reporting period, the Group's employee turnover rate was 24.43%. Of which, the turnover rates of male and female employees were 14.88% and 9.55% respectively.

We attach importance to the introduction of outstanding graduates and actively carry out our campus recruitment plans and talent training programs to consolidate our talent base and promote the healthy development of the Group. At the same time, in order to implement the policy guidance and development concept of school-enterprise cooperation, we have further strengthened school-enterprise exchanges and cooperation, established regular communication system and provided targeted employment guidance and service to improve employment satisfaction of graduates. We have established school-enterprise partnership with many colleges and universities including Huazhong Agricultural University, College of Food Science and Engineering of Tianjin University of Science and Technology to jointly nurture livestock professionals and develop a talent pool for the market.

## ■ Remuneration Package

We have formulated the Remuneration Management Policy to determine the employees' salaries in accordance with industry standards, job requirements, personal performance and difference in individual abilities under the concept of "determining salaries based on position, receiving remunerations according to performance, promoting capacity development, and maintaining internal fairness and competitiveness", which realized effective remuneration management to entitle our employees to the wages and insurance allowances that they can legally enjoy. None of our employees is paid below the minimum wage standard set forth by the government. We have also implemented the "Employee Leave Management Measures" to ensure that our employees enjoy national holidays, paid annual leave, paid sick leave, marriage leave, maternity leave, paternity leave, etc.

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## ■ Protection of Rights and Interests

We fully respect and safeguard our employees' legitimate rights and interests, regard their occupational health and safety as top priority, safeguard the rights and interests of our female employees, and offer various channels for our employees to protect their rights and interests. We provide free health check benefits for employees annually and organize regular training on first-aid knowledge and health education programs, while offering business insurance services for employees to provide them with more comprehensive protection. We also promote democratic management, participation and supervision within the enterprise.

Regarding the employment of child labor and forced labor, no tolerance is given. We spare no effort in preventing the possibility of any labor issues. We strictly abide by the Labor Law of the People's Republic of China 《中華人民共和國勞動法》 and the requirements under relevant laws and regulations, and do not employ any person under 18 years of age. Labor contracts were signed in accordance with laws to specify the conditions of employment, so as to ensure that employees gain a full understanding; our recruitment procedures do not involve any restrictive and unreasonable condition.

### Occupational Health

We have formulated and implemented the Management System for Occupational Health (職業健康管理制度), the Management System for Labor Protection Equipment (勞動防護用品管理制度) and other systems following the laws and regulations in relation to occupational health such as the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases 《中華人民共和國職業病防治法》, to create an effective occupational health management system.

We invite third party on a regular basis to conduct occupational hazard assessment; equip outfit standards for personal protection supplies and instruct employees to use them correctly; organize regular training programs on occupational health and issue notices of potential hazards, to ensure that every employee has the knowledge and skills of occupational health necessary to their work. We organize health check for employees regularly, especially for occupational hazards-related staff, and provide employees with injury insurance, accident insurance and other insurances, so as to protect employees' occupational health and safety.

We continued to work hard to establish intrinsic safety. We have built a dual prevention mechanism of safety risk classification management and control, and hidden danger investigation and governance, established a three-dimensional management and control model for daily safety production of "Aerial Monitoring + Ground Inspection + Intelligent Control", and created a comprehensive safety protection and control system of "personal defense, physical defense, technical defense and intelligent defense" to maximize the

prevention and reduction of casualties and economic losses caused by production safety accidents. We have formulated the Management Measures for Quality and Safety Accidents to clarify the requirements for accident reporting, investigation and handling, including recording the causes of accidents, recommending preventive measures and follow-up methods, so as to avoid similar accidents in the future. In 2022, the Group lost 2,935 working days due to work-related injuries.

Index	2022	2021	2020	2019
Number of death at work	0	1	1	0
Ratio of death at work	0.000‰	0.110‰	0.140‰	0.000‰

### Epidemic Prevention for Employees

We actively responded to the requirements of government departments and COFCO for the prevention and control of the COVID-19 pandemic, and formulated the Guidelines for the Prevention and Control of COVID-19 Pandemic and contingency plans to guide the work against the epidemic. We provided drugs, thermometers, etc. and regularly distributed protective supplies such as masks, sanitizers and alcohol wipes to employees. Meanwhile, we took temperature for our staff and guided them to receive COVID-19 vaccination and maintain a safe social distance. In addition, we implemented the management requirements of wearing masks, frequent disinfection, not gathering and not traveling. We closely tracked the changes in the epidemic situation in various places, checked up on the staff of the Group in a timely manner, took the initiative to reduce outside activities of staff, held meetings by video-conferencing as much as possible, and strengthened ventilation and disinfection in public areas. For employees who are inconvenient in daily life due to the pandemic, we provided them care and assistance in time.



Grassroots enterprises distributed epidemic prevention drugs

## Democratic Communication

The Group strived to maintain “standard procedure, effective system and strong protection” for staff. It convened the employee representative meetings as it acknowledged its role in encouraging all staff to focus on the whole picture, safeguard their rights and participate in corporate management. The Group also protected employees’ right to know, right to participate, right to express and right to supervise in accordance with laws.

We attached great importance to employees’ participation in management and motivated them to engage in corporate management by soliciting reasonable suggestions and feasible proposals. In 2022, we convened 13 employee representative meetings and considered 86 proposals from staff.

## Caring for Employees

To promote care for employees, we conscientiously implement the measures to assist employees in need such as expressing regards to employees in difficulties and employees who stay put during the Lunar New Year, and sending greetings to veterans on the Army Day on 1st August. We effectively help employees in need to reduce economic burden, and thus enhance corporate cohesion and employee satisfaction. We also offered festival benefits, children’s education support and nursery assistance for employees. Besides, we promoted first-aid knowledge so as to enhance employees’ sense of happiness, achievements and safety.

We organized celebrations for our female employees on International Women’s Day to give them holiday greetings and show our respect, care about their health and safeguard their special rights and interests. We actively held activities such as parent-child day, staff family day, etc. We attach importance to female employees’ needs and show them more care by taking actions to solve their problems and do good deeds for them, which motivates their enthusiasm at work.

We cared about our employees’ spiritual life and organized popular recreational and sports activities including birthday party, sending cool in summer, providing epidemic prevention materials, etc. to make staff feel the warm from the company family and care from colleagues and enhance their sense of belonging, achievement and recognition. We organized team buildings to further enrich corporate culture and bring positive energy together, improve employees’ health quality and demonstrate their impressive spirit, boost employees’ energy and create a harmonious atmosphere in the Company.

## Development and Training

Attaching great importance to the career development and training of our employees, we always regard the growth of employees as the cornerstone of corporate development. We insist on offering them clear and smooth career development paths and provide them with a wide range of training opportunities. We reasonably allocate corporate resources and continuously improve the overall capabilities and professionalism of employees to support the mutual growth of them and the Company through the systems and resources.



## Career Development

Upholding the corporate culture of “integrity, team spirit, professionalism and innovation”, we regard talent development as our major task. We have developed the measures for administration of talent development to clarify the development and promotion paths of employees and encourage them to obtain more development opportunities through their outstanding performance and professional skills. We organise regular talent development meetings to continuously monitor the working conditions of employees and to assess our employees’ overall work performance and development during the year, provide them with agreeable development opportunities according to their work experience and ability.

## Staff Training

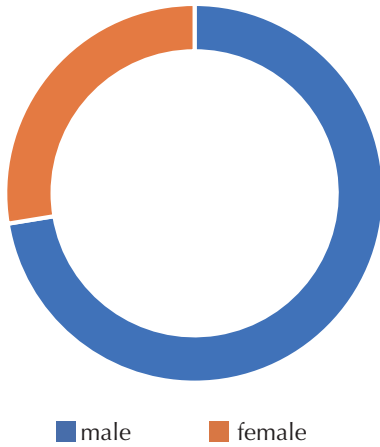
We always attach importance to talent development. We formulated relevant training plan that fulfilling the training demands of employees in core sectors such as production, operation and management in accordance with our annual training program and the strategic requirements for development, aiming to establish the “Seven Star Plan (七星計劃),” a training system focusing on the three core aspects of “new employees, professionalism and leadership” and create abundant training opportunities for all employees. We organize training programs for new employees and accelerate their integration into the team through, among others, corporate culture learning, exchanges between old and new employees and team building activities. According to the characteristics of the hog production business, we have set up a training base for Joycome’s hog production talents to enhance their skills and team management through systematic training on production skills. We have developed a mentor-apprentice system, whereby on-site experienced staff guide new staff to integrate into the team quickly and help solve difficult problems in their lives. As for the sales staff in the fresh product stores, we launch a brand enhancer campaign and hire lecturers from inside or outside the Company to safeguard the enhancement of communication skills and store management and control capabilities of staff. We focused on increasing training on production safety, and conducted 10,072 sessions of training with over 200,000 participants in the whole year. We also established a brand enhancer and high quality college to focus on systematically improving the business capability of professional talents. We have initiated “Spark (星火)”, “Sunrise (晨曦)” and “Star”(星銳) talent incubation programs for employees with high potential and management trainees at all levels to enhance the comprehensive ability and leadership of our key talents. In order to meet the various training needs of our general employees, we have selected a group of in-house



trainers to conduct regular training on production safety, sales techniques, laws and regulations and other professional skills, so as to pass on and share the rich experience and skills of the outstanding employees to their colleagues.

By gender		
Training hours of male employees		16.17 hours
Training hours of female employees		14.73 hours
By level		
Training hours of senior management		35.73 hours
Training hours of middle management		5.61 hours
Training hours of general staff		16.27 hours

Distribution of Training Participants by Gender



Distribution of Training Participants by Level



## ■ Anti-corruption Practice

We strictly comply with the national laws and regulations, and the relevant provisions of COFCO Group. By formulating and improving our regulations, we have continuously standardized the professional behavior of the management and employees of the Group, and prevented all corrupt practices such as corruption, bribery, fraud, and seeking improper benefits. In 2022, we formulated and improved the regulations concerning fund management, internal control management, management of feed raw material procurement, grain bidding management, avoidance of near relatives and other specific related persons, and further improved the level of group governance.

We prevent corruptions by opening mail reporting channels, launching publicity and education on anti-corruption and imposing more severe punishment on unlawful behavior. We encourage employees to report corruption, bribery, fraud and matters that are detrimental to the interests of the Company in real name, give priority to handling real-name reports, and give timely feedback on the acceptance and report the handling results. The Group will keep the name, contact information, work unit and other relevant information of the real name whistleblower and contents of the reporting strictly confidential. We persistently carry out targeted and diverse forms of anti-corruption education activities that are rich in content, systematically sort out typical cases, relevant laws and regulations, and key points of integrity risk prevention and control, and carry out warning education for party members, managers, and key personnel at different levels in various occasions. We always maintain a stringent attitude toward anti-corruption, resolutely investigate and deal with the problems we found, and never be indulgent and soft.

In 2022, the Group carried out 126 anti-corruption education activities for employees at all levels, with a total of 3,080 participants. A series of anti-corruption measures we took have achieved remarkable results, and no major violations were found in 2022.

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## Appendix: ESG Reporting Index

Subject number	Index description	Disclosure section
A1 Emissions	General disclosure	Environmental protection-Emission management
	A1.1	Environmental protection-Emission management
	A1.2	Environmental protection-Emission management
	A1.3	Environmental protection-Emission management
	A1.4	Environmental protection-Emission management
	A1.5	Environmental protection-Energy conservation and emission reduction, Climate change
	A1.6	Environmental protection-Energy conservation and emission reduction
A2 Use of Resources	General disclosure	Environmental protection-Use of resources
	A2.1	Environmental protection-Use of resources
	A2.2	Environmental protection-Use of resources
	A2.3	Environmental protection-Energy conservation and emission reduction
	A2.4	Environmental protection-Energy conservation and emission reduction
	A2.5	Environmental protection-Use of resources
A3 Environment and Natural Resource	General disclosure	Environmental Protection-Eco-farming
	A3.1	Environmental Protection-Eco-farming
A4 Climate Change	General disclosure	Environmental protection-Climate change
	A4.1	Environmental protection-Climate change
B1 Employment	General disclosure	Staff development-Staff employment, Remuneration package
	B1.1	Staff development-Staff employment, Remuneration package
	B1.2	Staff development-Staff employment, Remuneration package

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Subject number	Index description	Disclosure section
B2 Health and Safety	General disclosure	Staff development-Occupational health, Epidemic prevention for employees
	B2.1	Staff development-Occupational health, Epidemic prevention for employees
	B2.2	Staff development-Occupational health, Epidemic prevention for employees
	B2.3	Staff development-Occupational health, Epidemic prevention for employees
B3 Development and Training	General disclosure	Staff development-Development and training
	B3.1	Staff development-Development and training
	B3.2	Staff development-Development and training
B4 Labor Standards	General disclosure	Staff development-Protection of rights and interests
	B4.1	Staff development-Protection of rights and interests
	B4.2	Staff development-Protection of rights and interests
B5 Supply Chain Management	General disclosure	Food safety-Quality and safety management throughout the whole industrial value chain-Source management-Supplier management
	B5.1	Food safety-Quality and safety management throughout the whole industrial value chain-Source management-Supplier management
	B5.2	Food safety-Quality and safety management throughout the whole industrial value chain-Source management-Supplier management
	B5.3	Food safety-Quality and safety management throughout the whole industrial value chain-Source management-Supplier management
	B5.4	Food safety-Quality and safety management throughout the whole industrial value chain-Source management-Supplier management



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Subject number	Index description	Disclosure section
B6 Product Responsibility	General disclosure	Food safety-Quality and safety management throughout the whole industrial value chain, Professional and efficient client service, Advertising and trademarks
	B6.1	Food safety-Professional and efficient client service
	B6.2	Food safety-Professional and efficient client service
	B6.3	Food safety-Advertising and trademarks
	B6.4	Food safety-Quality and safety management throughout the whole industrial value chain, Professional and efficient client service
	B6.5	Food safety-Professional and efficient client service
B7 Anti-corruption	General disclosure	Staff development-Anti-corruption practice
	B7.1	Staff development-Anti-corruption practice
	B7.2	Staff development-Anti-corruption practice
	B7.3	Staff development-Anti-corruption practice
B8 Community Investment	General disclosure	Win-win cooperation in harmony-Promotion of industrial development, Participating in philanthropy and charity
	B8.1	Win-win cooperation in harmony-Promotion of industrial development
	B8.2	Win-win cooperation in harmony-Participating in philanthropy and charity