

萬洲國際有限公司 WH GROUP LIMITED

(Incorporated in the Cayman Islands with limited liability) Stock code: 288











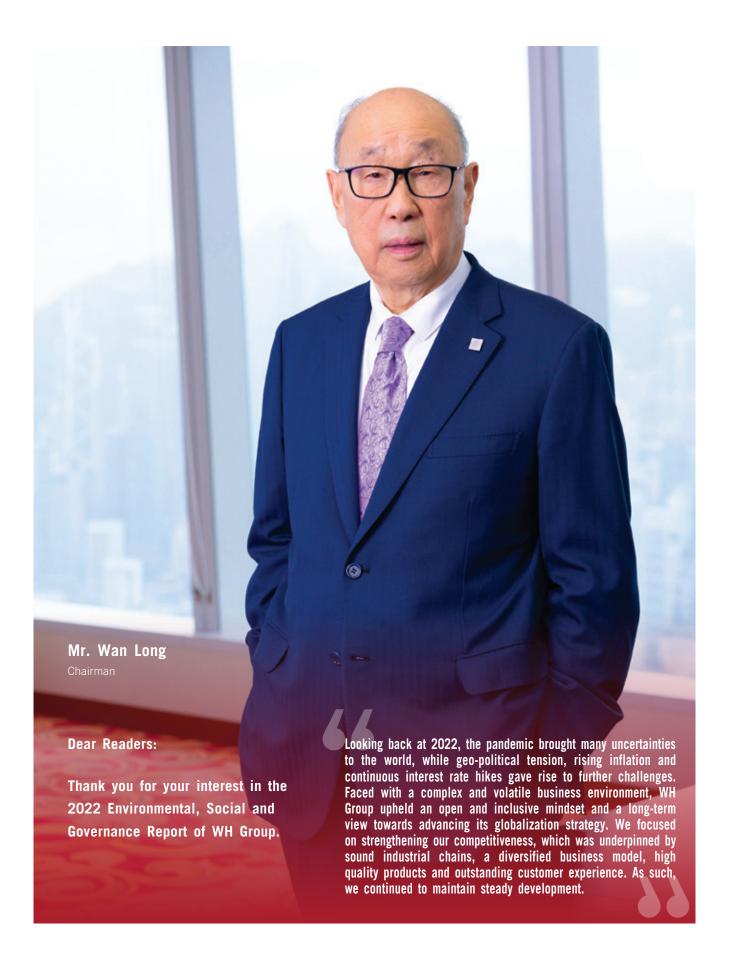
2022

Environmental, Social and Governance Report

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MESSAGE FROM CHAIRMAN



MESSAGE FROM CHAIRMAN (continued)

WH Group believes that good governance serves as the cornerstone of sustainable development and business success. As such, we operate and grow businesses following the founding principle of "integrity and honesty", adhere to business ethics and compliance. We codified how we interact with others in the WH Group Corporate Principles, and continued to explore best practices in and foster a culture of sustainability. Meanwhile, we have reinforced the diversity and independence of our Board, while maintaining effective communication with our stakeholders. The expectations of our stakeholders provide a unique perspective on our risk identification, thus ensuring that our risk management system remains resilient.

As a responsible enterprise, WH Group engages in the response to global climate change, incorporating the potential impacts of climate change into the decision-making process when we contemplate future business development. We assessed the potential risks and opportunities that climate change may foster on our business, in light of the TCFD (Task Force on Climate-Related Financial Disclosure) framework, and will take further steps to analyse relevant financial impact. We launched carbon inventory building and will roll out to each of our operating regions, to identify and assess greenhouse gas emissions sources across the value chain through a phased approach. Additionally, we focused on resource efficiency by monitoring the consumption intensity of energy, water and packaging material at source and in process. We also took actions to abate food loss and waste, and invested in innovation that utilizes livestock manure as resource, aiming to reduce and gradually neutralize the negative impact of our operations on the natural environment.



MESSAGE FROM CHAIRMAN (continued)

As the world's largest pork company, WH Group has always held to the highest of standards to build a trusted consumer brand. We operate a rigorous quality management system across our vertically integrated businesses to efficiently implement food quality and safety control. We also expanded our industry chain to the pre-prepared food sector in the China market, reaping additional synergy. At the same time, we were driven by continuous innovation to develop and explore protein products featuring low-added sugar, low-fat, low-sodium and organic to meet the growing consumer demand for a healthy diet

"People-centric" is our employment philosophy. Our employees are our source of strength in driving sustainable development. We created a diverse, equal and inclusive workplace, while caring for the development of our disabled, veteran and ethnic minority employees. We listened to the voices of employees and the organizations representing their interests through a variety of channels, and sought solutions to meet their needs. By doing so, we hope to build a strong sense of belonging, and work towards a shared future of success with our employees.

On our journey of sustainable development, WH Group is committed to supporting causes for public interest. We are concerned with the phenomenon of hunger and food waste, hence we donated protein products to communities in need. We focused on equity in education and helped improve access to educational resources of the vulnerable through a range of assistance programs. In the face of major natural disasters, WH Group took actions on disaster relief bringing hope to the affected people.

Looking forward to 2023, WH Group will continue to "integrate global resources to improve synergy, creating a sustainable future", and at the same time deliver sound sustainable performance in response to the expectation of our stakeholders, contributing to a healthy, green and prosperous future for our industry.



2022 ESG PERFORMANCE



The annual revenue reached

US\$ 28,136 million

an increase of

3.1% year-on-year

The annual operating profit reached

US\$ 2,093 million

an increase of

6.5% year-on-year



- Rated BBB by MSCI ESG Ratings
- Rated A+ by Hang Seng Corporate Sustainability Index
- Outperformed 10% of industry peers in S&P Dow Jones Corporate Sustainability Assessment





- During the reporting period, the Board appointed one female Director, who chairs for the Audit Committee
- Smithfield has 1 Chief Information Security Officer (CISO) and 4 Information Security Directors in the U.S., an IT Director and a Data Protection Officer (DPO) in Romania, and an information and cybersecurity management and reporting structure consisting of a Chief Technology Officer (CTO) and Chief Information Officer (CIO) in Slovakia



Addressing Climate Change

- Performed climate change risk assessment and opportunity identification based on key links in value chains in alignment with the TCFD (Task Force on Climate-Related Financial Disclosure) disclosure framework
- The U.S. business completed the periodical carbon emission inventory, and disclosed Scope 3 GHG emissions for the first time in accordance with the GHG protocol



2022 ESG PERFORMANCE (continued)



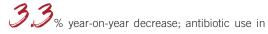
Providing Quality Products

- WH Group invested US\$182 million in product innovation and R&D
- Across our operations in China, a total of 42 factories were certified with the ISO 9001 Quality Management System and 34 with the ISO 22000 Food institutions Safety Management System or the HACCP system; Smithfield factories in the U.S. and Europe were are certified with the Global Food Safety Initiative (GFSI), and were audited by external independent institutions, including the ISO 22000, the Safe Quality Food (SQF), the Brand Reputation Compliance Global Standard (BRCGS) and the International Food Standard (IFS)
- WH Group fulfilled the targets set for customer and consumer satisfaction
- Our business in China promoted 29 kinds of ready-meals, and participated in the formulation of the first group standard for ready-meals in Henan Province



Enhancing Value Chain Partnership

- The tier 1 suppliers of our U.S. business have been certificated by the Good Manufacturing Practice (GMP), the TUV quality assurance system, the ISO 9001, the HACCP and the BRC
- We have issued a Supplier Code of Conduct in China to strengthen the daily management, evaluation and assessment of suppliers
- The palm oil supplier of our business in China have been accredited by the Roundtable on Sustainable Palm Oil (RSPO) certification
 - Antibiotic use in the U.S. animal production business was 239 mg/kg, representing a



China was 260 mg/kg, representing a 4.4%

year-on-year decrease



Managing Resource and Pollution

- A total of 35 subsidiaries of Shuanghui Development are ISO 14001 certified; all of Smithfield's operating facilities (except new acquisitions and facilities not applicable for certification) and all company-owned farms are certified ISO 14001
- Our U.S. business strengthened external cooperation to reduce food loss and food waste
- WH Group proactively promotes resource utilization of farming manure. In China, we convert manure generated in animal production into organic fertilizers, reaching a treatment rate of

100 %. In the U.S., we work with carbon-cycling energy companies to generate renewable natural gas (RNG) by processing manure with fermentation facilities

• Smithfield has a total of Sfactories that obtained zero-waste-to-landfill certification

2022 ESG PERFORMANCE (continued)



Empowering Employee

- In the U.S., a total of // veterans were recruited through the Helping Our Heroes program
- The number of employees in WH Group grew by 7%, and the percentage of female senior executives is 18.7%, a rise from 16% of last year
- 100% of employees across our business in China and Romania are covered by collective bargaining agreements
- WH Group provided a total of 566,593 hours of safety trainings, with total participants of 234,587 and approximately US\$ 6.4
- In China, we have supported 10,663 children of our employees with an accumulative amount of US\$4.1 million grants, among which

US\$ 579,331 was distributed to fund 1,510 children through the "Golden Autumn" activity in 2022



Co-Building Community

- WH Group made an approximate total donation of US\$ 34.8 million to communities, and its employees delivered a total of over 4,900 hours on voluntary service
- In the U.S., we donated more than 20,000 pounds of protein products to help the victims of the floods in eastern Kentucky, and delivered over 37,000 pounds of food to Fort Myers, Florida, in an effort to help the locals affected by the Hurricane Ian
- In the U.S., we have established the Minority Farmer Initiative, supporting farmers of ethnic minorities and thereby fostering a more inclusive supply chain



ABOUT WH GROUP

Company Overview

As the world's largest pork company, WH Group is committed to providing safe, affordable, and nutritious protein options to elevate the quality of life of consumers. WH Group boasts a vertically integrated pork business chain covering livestock farming, hog harvesting and processing, packaged meats, distribution and sales, and is moving forward in the R&D and promotion of preprepared food. With this unique global platform, WH Group has gained a leading position with considerable competitive advantage in the pork industry, maintaining top market share where we have primary presence, namely in China, the United States and countries in Europe. WH Group has been listed on the Main Board of the Stock Exchange of Hong Kong Limited since August 5, 2014 under the stock code 0288.HK and was formally included as a constituent member of the Hang Seng Index since September 4, 2017.

WH Group has a number of subsidiary companies including Henan Shuanghui Investment & Development Co., Ltd.(Shuanghui Development), Asia's largest meat processing company, and Smithfield Foods Inc. (Smithfield), the biggest pork food company in the U.S. With a host of our renowned brands serving multiple markets worldwide, WH Group has established a rich portfolio of products and a sizable market network. The Group also has earned unrivalled advantage thanks to a globally integrated platform that enables resource allocation across regions with efficiency and synergy; at the same time, we pay close attention to the quality, safety and nutritional value of our offerings, striving to provide high-quality services to consumers who put trust in our brands and products.



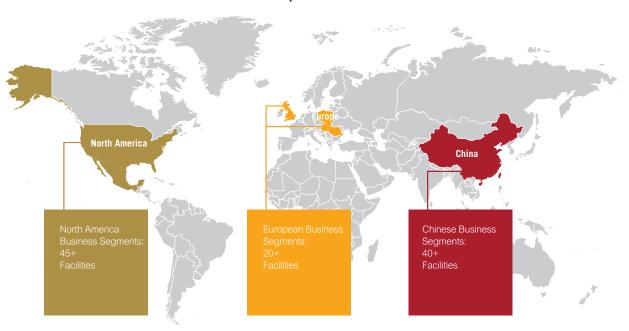
Business Segments

The Company's principal business covers packaged meats, hog production and hog farming, with packaged meats being the main source of revenue. The Company is also engaged in other peripheral business activities, including the harvest and sale of poultry, manufacture and sale of packaging materials, provision of logistic services, operation of retail chains, and production of seasonings, natural sausage casings, and biopharmaceuticals.

WH Group pursues global development by allocating assets and integrating resources around the world. As at the end of the reporting period, WH Group had established more than 100 meat production and processing facilities in China, the U.S., Europe and Mexico. Together with tens of thousands of partners such as suppliers and distributors around the world, the Group is building a Farm-to-Fork service chain to reach consumers and households directly.

ABOUT WH GROUP (continued)

WH Group's Globalization





More than $100,\!000 \; \mathsf{jobs}$



Operate in over





100+ operation sites



700+ owned farms



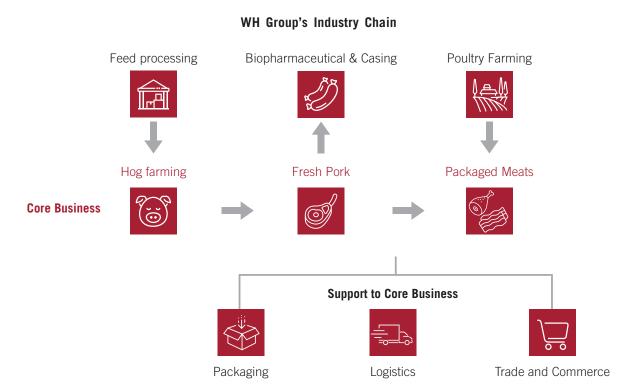
3,000+
partner farms





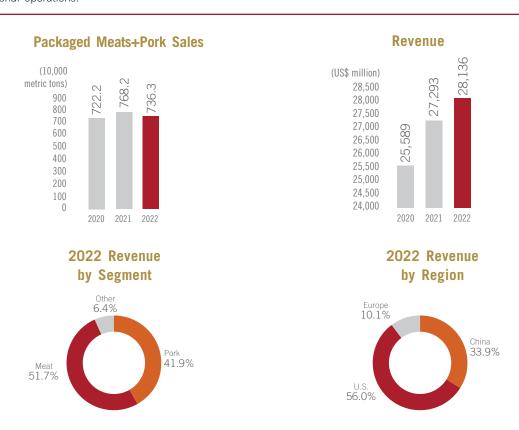


ABOUT WH GROUP (continued)

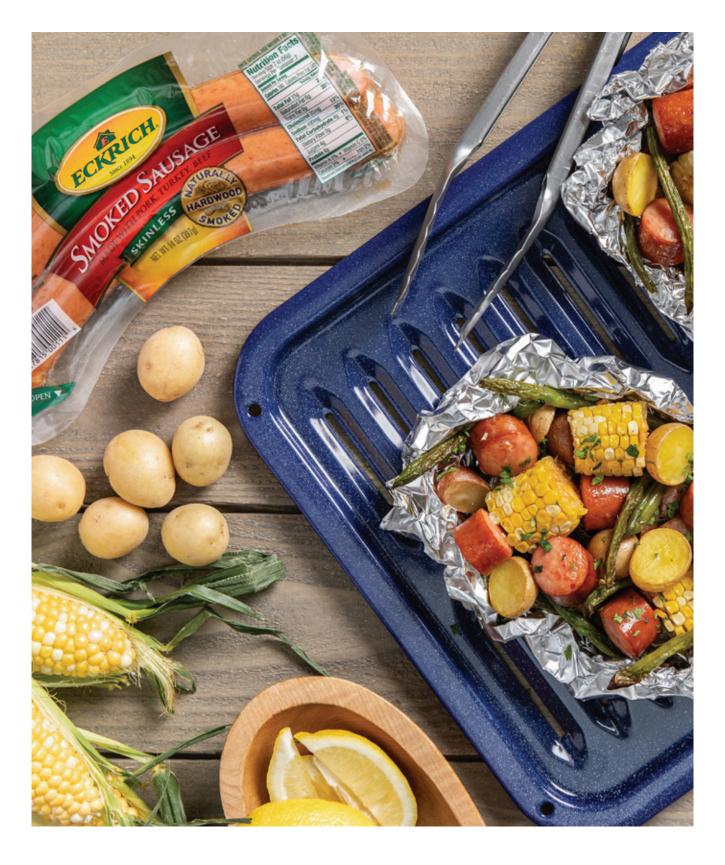


Business Performance

During the reporting period, amid economic complexity and market volatility WH Group achieved steady growth in both revenue and profit with the Group's resilience sustained from its vertically integrated businesses which allow synergy leashed out amongst various regional operations.



CREATING A CULTURE OF SUSTAINABILITY



In line with the ESG philosophy of "Holding Ourselves to the Highest Standards and Creating Sustainable Value for Society," WH Group incorporates its sustainability culture into the Group's strategy and operational management. The WH Group Corporate Principles, aligned with the UN Sustainable Development Goals, define the Group's principles of conduct in seven areas: Climate Change and Environment, Food Safety and Nutrition, Labour Standards and Employee Rights, Work Environment and Safety, Animal Welfare and Care, Sustainable Supply Chain, and Business Integrity.

WH Group Corporate Principles

UN Sustainable Development Goals

Business Integrity

WH Group follows the founding principle of "integrity and honesty", upholds an unwavering commitment to ethical business conduct, transparency, and accountability, addressing concerns from stakeholders.

- Ethics and compliance
- Anti-corruption and anti-bribery
- Whistleblowers mechanism

16 AND STRONG INSTITUTIONS

 Promote peaceful and inclusive societies for sustainable development

Climate Change and Environment

WH Group supports the Paris Agreement's initiatives to combat global climate change, delivering carbon emissions reduction across all subsidiaries to achieve the target of zero emission.

- Environmental management system
- Climate change
- Biodiversity and resources management
- Energy and emissions management



 End hunger, achieve food security and improved nutrition and promote sustainable agriculture



Ensure access to affordable, reliable, sustainable and modern energy



 Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation



Take urgent action to combat climate change and its impacts



 Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

WH Group Corporate Principles

UN Sustainable Development Goals

Food Safety and Nutrition

We are fully aware that consumers are sensitive to safety, quality and nutrition when choosing food products. To meet their expectations, we have been strictly managing and continuously investing in all aspects of our operations and productions. Incorporating material safety features and priorities at each stage, effective and high-standard management measures have been formed, focusing on issue identification, prevention and correction capability. We require all our subsidiaries to strive for our goal of zero incidents and zero recalls.

- Quality assurance system
- Supplying and testing standards
- Nutrition R&D
- Additives management
- Alternative protein
- Employee training



 Ensure healthy lives and promote wellbeing for all at all ages



Ensure sustainable consumption and production patterns

Sustainable Supply Chain

We are committed to building a sustainable supply chain and delivering positive impact, from sourcing livestock and raw materials to working downstream with distributors and retailers to provide consumers with high-quality, nutritious protein choices.

Our suppliers have joined us in ensuring the safety and quality of our end products by meeting the procurement standards of WH Group and its subsidiaries. They are further encouraged to take initiatives in environmental conservation, labour standards, employee safety and animal welfare outlined in our Supplier Code of Conduct.

- Sustainable agriculture
- Suppliers' quality assurance
- Supplier code of conduct



End hunger, achieve food security and improved nutrition and promote sustainable agriculture



 Make cities and human settlements inclusive, safe, resilient and sustainable



Ensure sustainable consumption and production patterns



Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development



Ensure availability and sustainable management of water and sanitation for all



Ensure sustainable consumption and production patterns

Animal Welfare and Care

The Group takes pride in building a best practice and leads by example to make animal welfare a standard practice in the industry. We seek ways to make positive impact and collaborate with stakeholders to support and promote the development of animal welfare standards.

- Animal welfare principles
- Responsible use of antibiotics
- Implementation and review

WH Group Corporate Principles **UN Sustainable Development Goals** Labour Standards and Employee Rights Ensure healthy lives and promote well-We value respectful relationships and encourage enterprising being for all at all ages work ethics; we nurture an inclusive culture and provide safe work place. Guided by the principles of the United Nations Sustainable Development Goals (UNSDGs) and the United Achieve gender equality and empower Nations Global Compact (UNGC), we respect and protect all women and girls individual rights within our operations and across our value chain, supported by a fair and efficient human resources system. Promote sustained, inclusive and Employee rights and development sustainable economic growth, full and A culture of mutual respect productive employment and decent work for all Labour standards Reduce inequality within and among countries Work Environment and Safety Ensure healthy lives and promote wellbeing for all at all ages Most of our employees work on production lines, where they frequently come into contact with livestock and poultry, and some operate machines. As a result, employee occupational health and safety has always been of utmost importance to Achieve access to adequate and the management team. We focus on enhancing preventive equitable sanitation and hygiene for all measures to reduce accidents, aiming to maintain a safer and

more comfortable work environment.

Management systems and targets

Emergency response and drills

Workplace safety and occupational health

1.1. Corporate Governance

WH Group continues to strengthen its corporate governance with a diversified Board of Directors that allows effective communication of insights from different perspectives and expertise to complement each other for better decision-making. We abide by the *Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited* and other applicable laws and regulations where we operate and have set up a high-standard corporate governance structure with the Board of Directors as the highest responsible body supported by a number of professional committees to effectively safeguard the interests of shareholders and the Group as a whole. On top of that, the Group follows a practice of allowing each subsidiary to tailor-make their respective management approach to suit the market, nevertheless ESG performance is considered key to be linked with the appraisal and remuneration of relevant managerial personnel. During the reporting period, the Board of Directors of Shuanghui Development further specified that ESG performance to be included in the job description and its appraisal result to be reflected in the variable remuneration of the President and his core senior management team, to align the incentives in delivering the overall strategic objectives of the Company. Smithfield also incorporated ESG factors into its management evaluation of daily operations to advance its ESG performance.

Board of Directors Remuneration Committee Remuneration Committee

The professional committees under the Board of WH Group perform their respective roles and cooperate as required to safeguard the interests of the Group as a whole. Among them, the Food Safety Committee, chaired by Mr. Wan Long, is responsible for overseeing, reporting and advising on corporate policies, operating practices and performance in relation to food quality and safety. The Food Safety Committee closely monitors food safety-related standards, guide the innovative exploration in product and technology, and calls for precautionary measures against material food safety risks.

The *Board Diversity Policy* seeks to maintain a board composition that is diverse in terms of gender, age, culture, educational background, race, and professional experience, amongst others. This helps enhance the Board's governance capabilities in assessing the quality and risk management of the Group from broader perspectives in order to achieve its long-term strategic goals and bolster its corporate reputation. In 2021, the Group announced the separation of the role of Chairman of the Board from the Chief Executive Officer. On this basis, we continued to optimize the Board structure during the reporting period by appointing Ms. Zhou Hui as an Independent Non-executive Director, a step forward in gender diversity. As of the end of the reporting period, the Board is comprised of nine members, including five Executive Directors, one Non-Executive Director and three Independent Non-Executive Directors, of which one is a female Director. Please refer to the *List of Directors and their Roles and Functions*, and the Corporate Governance section of the 2022 Annual Report of WH Group for details about the meetings of the Board and its committees.

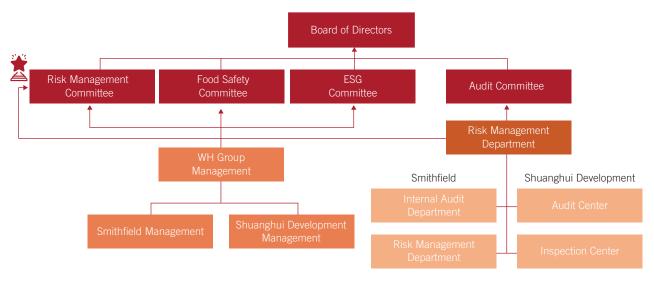
1.2. Risk Management

WH Group is committed to a high standard of risk management and abides by the laws and regulations where we operate, including the PRC, the U.S. and Europe. We have established a robust risk management structure and process that underpin an all-around identification, assessment, handling and monitoring of ESG-related risks.

1.2.1. Risk Management Structure

The Board of WH Group holds the ultimate responsibility for the Group's risk management and oversight. It is responsible for supervising and guiding management on matters related to the assessment and effective control of risks. The Risk Management Committee under the Board takes the lead in establishing and supervising the Group's risk management system, supported by other committees as appropriate, in risk identification and monitoring, and reports to the Board. The management team of the Group and its subsidiaries are responsible for performing concrete tasks across risk identification, assessment and prioritization to fully ensure the effective operation of the risk management process.

Risk Management Structure of WH Group



Responsibilities of Board Committees of WH Group in Risk Management



Risk Management Committee

Establishing and overseeing risk management systems.

Conducting regular reviews of the Group's risk management system, risk management related internal control systems and risk management policies and procedures to identify, assess and manage risks, oversee their effective operation, and ensure the effective implementation of appropriate internal risk controls.

Responding proactively to the Board's assignment to assess significant findings with regard to risk management and internal control matters and management's response to such findings.

Reporting to the Board on any significant risk management matters and proposing recommendations or solutions for improvements in the Company's compliance and risk management.



ESG Committee

Identifying ESG issues that are relevant and material to the Group's operations and other significant stakeholders.

Reviewing and making recommendations to the Board on the effectiveness of the Company's policies and performance in relation to material ESG issues.

Responding to ESG issues of concern to stakeholders through appropriate means.



Food Safety Committee

Reporting and advising on the Company's policies, operational standards and performance in relation to food quality and safety to ensure compliance with relevant laws and regulations.

Evaluating, reviewing, overseeing, and reporting to and advising the Board on the Company's food safety internal control standards and product tracking processes.



Audit Committee

Providing independent opinions on the effectiveness of the Company's financial statement preparation process, internal controls and risk management systems.

Overseeing the audit process and performing other functions and duties assigned by the Board.

Evaluating and reviewing risk management policies and assisting the Board in overseeing the implementation of risk management policies.

1.2.2. Risk Management Procedure

WH Group implements the *Risk Management Policy* that specifies the risk management procedure with five main steps in the implementation process, including budgeting and planning, risk assessment, action plan, management and supervision, and reporting. Through a sound risk control procedure, we mitigate potential risks in operations and ensure the stable operation of our business.



We conduct regular risk management assessments to identify and prioritize potential risks, develop risk response strategies and continuously follow up on the implementation of risk controls accordingly. During the reporting period, we carried out corporate risk assessments according to our Risk Management Policy and Risk Assessment Guidelines and classified the risks into 6 major areas with 26 categories in total, including commodity price and market volatility, planning and strategy, and food safety.

In response to these major risks, we developed relevant countermeasures, that were implemented continuously by respective persons in charge of risk management in relevant departments. As for strategy, we continuously build resilience by diversifying animal proteins with poultry upstream and ready-meals downstream with our processing advantage. Meanwhile, we leverage our brand power to bring new products to market delivering value-creation. As for management, we regularly monitor market trends and fluctuations, analyse competitors' performance, hold regular management meetings to deliberate on trade strategies, food safety solutions, and develop long-term plans to ensure effective implementation of our business strategies. With regard to operations, we strictly control food safety and product quality, continue to improve relevant control system as a solid defence, and increase investments in innovative quality management. In addition, we place emphasis on animal welfare and biosecurity, and implement risk controls through initiatives such as forming pandemic prevention and control teams and adopting biosecurity protocols. For details of the Group's risk management and countermeasures, please refer to the Key Risks and Their Management section of the WH Group Annual Report 2022.

1.3. Business Ethics and Anti-Corruption

WH Group upholds the ESG philosophy of Holding Ourselves to the Highest Standards and Creating Sustainable Value for Society and integrates sustainability-related issues of concern raised by stakeholders and from society into our decision-making process to bolster the Group's long-term development and deliver sustainable value to society through sound governance, business ethics, and risk management.

1.3.1. Business Ethics

We adhere to the founding principle of "integrity and honesty" and governance principles that emphasis business ethics, transparency and accountability. We regulate practices encompassing conflicts of interest, insider trading, gifts and entertainment with internal standards more stringent than applicable laws and regulations, strictly prohibit misconduct such as discrimination, harassment, extortion, commercial fraud, corruption, bribery, and money laundering, follow the principle of fair competition, and advocate a healthy business environment that drives sound development of the industry.

We abide by applicable laws and regulations where we operate

China: Law of the People's Republic of China Against Unfair Competition, Anti-monopoly Law of the People's Republic of China, Civil Code of the People's Republic of China, Criminal Law of the People's Republic of China, Anti-Money Laundering Law of the People's Republic of China

U.S., Europe and Mexico: Sherman Antitrust Act, EU Antitrust Policy

Business ethics issues are guided and supervised by the ESG Committee in the WH Group. WH Group's Corporate Principles clearly define guidelines for corporate conduct covering ethics, prohibition of unfair competition and prevention of insider trading. On this basis, our subsidiaries, Shuanghui Development and Smithfield, have established their codes of conduct and standards adapted to their respective markets and stages of development, to better engage in the shaping of sound market practice.

Code of Business Ethics of WH Group's Subsidiaries

Shuanghui Development

Shuanghui Development developed its corporate code of business ethics including the *Shuanghui Integrity Code* and the *Anti-Bribery Statement*, requiring all employees and partners to raise awareness, strictly abide by relevant regulations, and resolutely prohibit misconduct such as bribery, extortion, fraud, money laundering and unfair competition. A clear provision on integrity issue determination and punishment criteria definition is also in place.

Smithfield

Smithfield established its *Code of Business Conduct and Ethics*, which provides explicit requirements on business practices such as business fraud, gifts and entertainment. Meanwhile, a conflict-of-interest declaration system has been in place to prevent potential conflicts of interest among employees and suppliers, thus shaping good business practices. Smithfield also has an ethics hotline to encourage employees to report any non-compliance behaviour at any time.

The Group set up a strict business ethics-related review mechanism. In China, Shuanghui Development conducts internal control testing and system reviews annually, with business ethics audits covering anti-fraud, anti-money laundering and anti-monopoly as the focus for departmental audits, to assess the effectiveness of relevant internal management system. During the reporting period, Shuanghui Development revised the *Anti-Money Laundering Risk Management Policy of Henan Shuanghui Group Finance Co., Ltd.* and the *Internal Control System of Anti-Money Laundering and Anti-Terrorist Financing of Henan Shuanghui Group Finance Co., Ltd.*, among others. It formed an Anti-Money Laundering Steering Group to execute internal audits on areas of anti-fraud, anti-money laundering and anti-monopoly annually. In the U.S., Europe and Mexico, Smithfield established internal audit teams responsible for conducting annual global risk assessments and specific internal audits covering anti-fraud, anti-money laundering and anti-monopoly, with the results reported to the Audit Committee of WH Group. During the reporting period, Shuanghui Development completed 20 special and regular audits and Smithfield completed a total of 34 internal audits, of which no significant rectification request was made, and subsequent improvement plans confirmed by management following the audits are progressing.

Our operations are subject to the laws and regulations in force in different locations where we operate, and we respond from time to time to compliance inquiries from corresponding local regulatory agencies. In connection with Smithfield's previous class action lawsuit alleging antitrust violations in the U.S. pork industry, the Group made a one-time payment of US\$42 million to settle all class claims of commercial and institutional indirect purchasers pursuant to a settlement agreement in March 2022, and in August 2022, further agreed to a one-time payment of US\$75 million to settle the class claims of consumer indirect purchasers. The terms of the settlement are subject to court approval after notice to all class members. Please refer to WH Group's 2022 Annual Report for further details.

1.3.2. Anti-Corruption

WH Group strictly adheres to the requirements of anti-corruption and anti-bribery laws and regulations applicable to all regions where it operates. We hold a corporate culture featuring honesty and integrity, and continually strengthen anti-corruption management in line with internal anti-corruption control policies. In the WH Group Corporate Principles, the Group defines relevant guidance in prohibiting direct or indirect offering, promise, acceptance and solicitation of any improper benefits for the Group's business development or personal gain. The Group has zero tolerance for fraud, bribery or corruption.

We abide by applicable laws and regulations where we operate

China: Anti-Money Laundering Law of the People's Republic of China, the Interim Provisions on Banning Commercial Bribery, Civil Code of the People's Republic of China, Criminal Law of the People's Republic of China

U.S.: Foreign Corrupt Practices Act (FCPA)

Europe: Council of Europe's Criminal Law Convention on Corruption, Civil Law Convention on Corruption, Resolution (97) 24 on Twenty Guiding Principles for the Fight Against Corruption

The subsidiaries of WH Group established their own codes of conduct and norms for anti-corruption and anti-bribery and require management and all employees to follow international and local anti-corruption initiatives and practices in their work. We also require our partners such as suppliers, distributors and joint-venture partners to establish and adhere to similar principles. In financial and accounting work, the Group has internal policies and processes in place to prevent and eliminate money laundering.

Anti-Corruption Management of WH Group's Subsidiaries

Shuanghui Development

Smithfield

For our employees, Shuanghui Development set up the *Shuanghui Integrity Code*, which provides clear requirements on the determination and handling of integrity issues. The Company conducts on-site training on the *Shuanghui Integrity Code* for all new employees.

For external suppliers, Shuanghui Development requires all partners to sign the *Anti-Bribery Statement* before engagement to jointly eradicate bribery and ensure a clean and sound business environment.

Smithfield established the *Code of Business Conduct and Ethics* that provides clear requirements for management and employees regarding anti-bribery, anti-corruption, anti-money laundering, conflicts of interest, principles of gifts and gratuities, and independent and fair competition.

For suppliers, Smithfield established the *Supplier Anti-Corruption Code of Conduct* that requires all partner suppliers to establish and adhere to the same principles. In addition, Smithfield conducts annual risk assessment and internal audit, and has developed an program incorporating relevant anti-corruption audits, which are carried out at least every three years.

1.3.3. Business Ethics and Anti-corruption Training

WH Group and our subsidiaries organize Group-wide awareness campaigns and trainings on business ethics and codes of conduct covering full-time employees, part-time employees, suppliers and contractors annually. These annual training programs on anti-corruption, anti-money laundering and anti-monopoly are also joined by members of the Board of Directors of the Group, during these occasions who also elaborate the Group's position on business ethics among the management and employees. During the reporting period, Shuanghui Development launched internal awareness campaigns on anti-monopoly, and anti-money laundering. Likewise, Smithfield conducted awareness campaigns on the *Code of Business Conduct and Ethics* for all existing staff and new hires, who were required to acquaint themselves with the anti-corruption policy. Staff in high-risk positions received additional anti-corruption trainings from the Internal Audit Department. During the reporting period, all employees passed the study and assessment requirements related to business ethics. We also conducted special training on anti-corruption, with a total of 9 training hours participated by board members and a total of 133,857 training hours by employees. The total number of participants reached 34,215.

1.3.4. Whistleblowing

WH Group encourages the stakeholders of the Group and its subsidiaries, including customers, suppliers, contractors, creditors, debtors and employees, to report through publicly available channels any confirmed or suspected misconduct of the Group in relation to financial reporting, internal control, business conduct, etc. The WH Group Corporate Principles provided guidance on the whistleblowing protocol, reporting content, investigation approaches, confidentiality, protection of whistle-blowers and misreporting.

Whistleblowing Mechanism of WH Group Whistleblowers Reporting **Report Content** Investigation channels Protection The whistleblower can Irregularities may Implement confidential Preliminary send the written include misconduct, investigation by the arrangements communication to the fraud, immorality, and Audit Committee regarding the Secretary of the non-compliance Internal investigation whistleblowing and the Group's Audit Report should also Consultation with identity of the Committee of the include description of external professional whisteblower Board of Directors via the suspected or actual advisors Anonymous Law enforcement offence, background whistleblowing is and evidence procedures permitted

The subsidiaries of WH Group also established effective reporting channels and rigorous reporting processes. In China, Shuanghui Development made the contact information of the Audit Center publicly available, allowing employees and outsiders to provide information on misconduct or to file reports. The Audit Center is authorised to receiving reports expressed in real name or anonymously via email, phone call, WeChat and other channels, investigating any violation or misconduct against the interests of the Company, its customers, employees and consumers, and proposing solutions to handle confirmed violations. Shuanghui Development has also set up a Special Protection List to ensure that the whole reporting process starting from report acceptance, registration, filing, to investigation and reward is strictly confidential and such confidentiality not to be breached in any form. In the U.S., Smithfield established multiple reporting channels including but not limited to third-party whistleblowing hotline and email. Cases will be investigated and handled by a cross-function task force comprising Internal Audit, Legal, Compliance and Human Resources Departments. In Poland, the Legal Department and the Compliance Department of Smithfield are assigned to co-investigate and deal with such cases and report the results to the Chief Financial Officer. During the reporting period, Smithfield internal audit department submitted its semi-annual risk management report, which included risk appraisal on business ethics and compliance, to the Group's board of directors, with a positive conclusion on the effectiveness of current risk management system.

During the reporting period, based on the available information, no petitions against corruption and other forms of misconduct were received and no related lawsuits were in progress.

1.4. Information Security and Cybersecurity

The WH Group Corporate Principles define a stakeholder information management system and a privacy protection system, and incorporated cybersecurity as an important part of risk control, of which dedicated functional departments have been appointed to control, monitor and report.

We Abide by the Laws and Regulations Where We Operate

China: The Cybersecurity Law of the People's Republic of China, the Administrative Measures on Internet Information Services, the Law of the People's Republic of China on the Protection of Consumer Rights and Interests

U.S. and Mexico: Legal and regulatory requirements at operation sites

Europe: General Data Protection Regulation (GDPR)

With full awareness of the importance of cybersecurity, the subsidiaries of WH Group, Shuanghui Development and Smithfield, both established information management processes, confidentiality principles and authorization procedures for the use of confidential information, coupled with tailormade cybersecurity assurance systems and assessment methods that best fit their respective conditions.

During the reporting period, Shuanghui Development and Smithfield adopted the following information security governance measures to mitigate business operation risks.

Information Security Governance of WH Group's Subsidiaries

Shuanghui Development

A host of cybersecurity management regimes have been put in place, including the *Information System Management of Shuanghui Development, the Emergency Plan for Information System Security, the Information System Confidentiality of Shuanghui Development,* and the Management Standards for Information Technology Equipment of Shuanghui Development, which provide explicit requirements on computer network management, user management, password management, daily use management of office computers, virus and Trojan horse invasion protection, management of Shuanghui Development central server room, storage, server management, database management, backup management, information system security emergency plan, information confidentiality system, information technology equipment management, etc.

For the protection of trade secrets, Shuanghui Development formulated the *Provisions of Shuanghui Development on Trade Secret Protection* and the *Information Confidentiality Management System*, which clearly define the user access and protection process of customer information and data.

Smithfield

Smithfield's *Code of Business Conduct and Ethics* has clear stipulations on the protection of data and employee information. Smithfield US appointed a Chief Information Security Officer (CISO) and four Directors during the reporting period to strengthen the management of information security. These roles report to the Chief Executive Officer (CEO) through the Chief Information Officer (CIO), who has further fleshed out the management and reporting structure for information security and cybersecurity.

In Romania, Smithfield appointed an IT Director to take charge of IT security and cybersecurity governance. All employees are required to inform the IT Department of any incidents or potential threats related to IT security, and report to the Data Protection Officer (DPO) any threats that may infringe on data privacy.

In Slovakia, Smithfield established an information security and cybersecurity management and reporting structure headed by the Chief Technology Officer (CTO) and the Chief Information Officer (CIO).

In China, Shuanghui Development established a cloud-based information collection model and rolled out a wide range of measures to strengthen information security management and customer privacy protection.

Information Security Measures at Shuanghui Development

Improving the Process of Information Use Management

- Strengthening information security management through multiple measures such as defensive technology, data encryption, access control, disaster recovery and backup
- Setting up an operational and systematic data verification protocol mechanism to fully guarantee that data and user information would only be obtained with access approved by a strict authorization procedure

Establishing a Cybersecurity Early Warning Mechanism

- Building a system resource monitoring platform and a complete backup system, regularly conducting intranet vulnerability
 scans by an upgraded multi-level security monitoring and protection system that employs technologies such as
 firewalls, IPS, WAF, jump servers and log auditing to guarantee the effectiveness of the information and cybersecurity
 management system
- Updating the high-performance firewalls during the reporting period, and conducting vulnerability remediation and security testing and analysis of LAN terminals on a monthly basis

Improving Customer Privacy Protection Measures

- Setting up a separate Enterprise Resource Planning (ERP) account for every customer that offers access to data query, reconciliation, etc.; assisting customers to create separate accounts for their employees in the Cloud Business System to ensure that sales personnel at all levels work within respective area of authority
- The Business Department appointed dedicated personnel to manage customer information. Approval of at least two levels of management is required to access customer information
- Performing data binding in ERP accounts, Office Automation (OA) System, Cloud Business System, marketing systems,
 WeChat platforms, to ensure the security of personnel accounts. Appointing dedicated personnel by business divisions to manage account access and review user authority on a regular basis

Launching Information Security Training Programs

• Conducting regular information security training for employees

In the U.S., Smithfield developed and implemented cybersecurity control programs aligned with the Cybersecurity Framework (CSF) created by the National Institute of Standards and Technology (NIST), with regular third-party vulnerability detection and penetration testing to secure systems. Smithfield's Internal Audit Department conducts IT security audits every year to prevent information and cybersecurity risks. During the reporting period, Smithfield updated its Business Continuity Plan and Disaster Recovery Plan and tested the response process of related incidents. Smithfield has partnered with third parties to conduct vulnerability testing and information security assessments of business-critical systems, and has expanded its vulnerability management program and established quarterly "tabletop incident" response exercises to better detect and respond to information security risks and implement security controls. Smithfield is also undergoing a cybersecurity controls assessment for the NIST Cybersecurity Framework to improve corporate cybersecurity level. In Poland, Smithfield has employed a dedicated system that will automatically report all incidents that are potentially detrimental to information security. It is also leveraged by the IT Security Department for incident analysis and response strategy development.

To improve employees' awareness of information security and enhance their information protection capabilities, WH Group has launched regular employee training programs. In the U.S., Smithfield organizes trainings about information security and cybersecurity knowledge through online training platforms, emails and newsletters. In Poland, training programs on mobile device security protection, cyber-attack protection and other topics are conducted on Smithfield's in-house platform Moodle. In addition, Smithfield has set up an employee reporting mechanism for cybersecurity incidents, whereby employees should report to operators of the IT Helpdesk suspicious activities that may threaten cybersecurity. During the reporting period, the Group was not aware that any information security and leakage incident occurred.

1.5. ESG Management

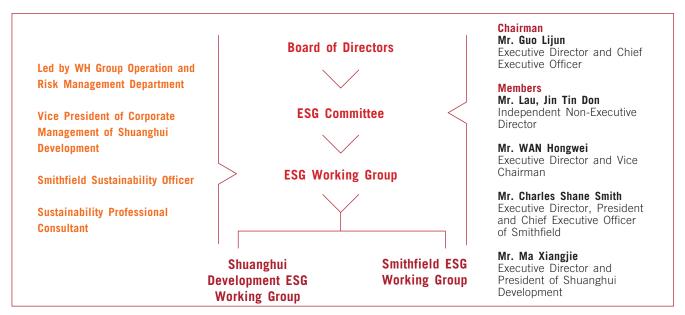
The Group remains committed to strengthening the ESG oversight and tracking the quality of progress toward the ESG objectives. Continuous efforts have also been devoted to improving communication channels and dialogue mechanisms for efficient interactions with stakeholders, at the same time, exercising rational judgement to balance the Group's interest as a whole with the expectation from each stakeholder group.

1.5.1. ESG Governance Structure

WH Group has formed a three-tier governance structure consisting of the WH Group Board of Directors, the ESG Committee under the Board, and the ESG Working Group. The two major subsidiaries, Shuanghui Development and Smithfield, are responsible for delivering ESG performance in their daily operations. The ESG Working Group provides necessary coordination for joint actions and experience sharing.

During the reporting period, the ESG Committee and the ESG Working Group continued to drive the ESG agenda. On the environmental front, Smithfield verified its emission inventory covering the entire industry chain to capture environmental performance at granular level, while Shuanghui Development launched an evaluation on the plan of emission inventory building. Meanwhile, WH Group held regular Food Safety Working Group and Committee meetings which identified and discussed solutions to major food safety issues. In terms of governance, the Group made progress in addressing single-gender board.

WH Group ESG Governance Structure



Roles within each tier of the ESG governance structure have been clearly defined to ensure that the Group's policies, with appropriate goals, are enforced in an orderly manner and a close oversight is maintained on risks and performance.

Roles within WH Group's ESG Governance System

WH Group Board of Directors Assessing, defining and managing ESG risks to ensure that the Group has appropriate and effective ESG objectives and risk management measures in place, and that the Board's governance initiatives are in compliance with the relevant rules of the HKEX ESG Committee Reviewing and reporting to the Board of Directors on the effectiveness of the Company's policies and performance in relation to significant ESG issues Identifying and responding to material ESG issues to stakeholders through appropriate means Supervising the standards set and performance achieved by the Group on material ESG issues ESG Working Group Organizing regular and detailed internal exchanges with counterpart leaders and functional departments of subsidiaries including Shuanghui Development and Smithfield, promoting the exchange of sustainability management experience and synergy between subsidiaries, and working with them to jointly advance the implementation of routine ESG-related work under the coordination and guidance of the ESG Committee

1.5.2. Board Statement

Board Accountability

The Board of Directors is accountable for developing WH Group's ESG management policies and strategies, setting ESG targets and monitoring progress toward the targets and ESG performance. It is also responsible for the final review and approval of ESG information disclosures. The ESG Committee under the Board formulates strategic plans and targets for sustainable development, identifies ESG-related risks, coordinates ESG management and reports regularly to the Board on progress. The Committee is composed of one Independent Non-Executive Director and four Executive Directors, one of whom takes the office as the Chair, whose responsibilities are specified in the *Terms of Reference of the ESG Committee*.

Since the Group announced the separation of the role of the Chairman of the Board and the Chief Executive Officer in 2021, WH Group continued to press forward with priorities placed on improving the corporate governance structure and strengthening diversity. During the reporting period, WH Group appointed Ms. Zhou Hui as an Independent Non-executive Director.

ESG Governance

The ESG Committee regularly reviews and tracks the progress of ESG-related topics in business operations, communicates with WH Group's stakeholders, responds to their demands, and continuously tracks the performance of the medium- and long-term environmental targets set by the Group in carbon emissions, energy use, water use and waste disposal. Based on the progress toward these targets, the Committee urges subsidiaries to make necessary adjustments accordingly and reports to the Board of Directors. During the reporting period, the ESG Committee held two meetings to review ESG related issues, assess material issues and guide the development of ESG reports.

Daily Practice

The ESG Working Group, responsible for driving the ESG agenda in the daily operation of WH Group, holds regular communication meetings with Shuanghui Development and Smithfield to follow up on the progress of the implementation of sustainable development goals and to assess the overall implementation of sustainable development work within the Group. In addition, the ESG Working Group also works with the Food Safety Committee and the Risk Management Committee to coordinate planning when necessary to jointly promote sustainable development.

During the reporting period, the ESG Working Group organized the implementation of TCFD (Taskforce on Climate-Related Disclosure)'s risk and opportunity analysis; maintained open communication with external rating agencies, investors and regulators and introduced the Group's status quo and exploration of ESG; reviewed the compliance of the annual ESG report and disclosure with the principles required by regulators; and improved the approach and schedule of annual report information collection, in an effort to foster a systemic approach to ESG governance.

Identification of ESG Risks and Opportunities

At WH Group, ESG risk management is headed by the Board of Directors, supervised by the Audit Committee, Risk Management Committee, Food Safety Committee and ESG Committee and executed by management teams of the Group and its subsidiaries. ESG risks have been integrated into the Group's overall risk management system.

During the reporting period, we identified climate-related risks and opportunities with reference to the recommendations of the TCFD (Task Force on Climate-Related Financial Disclosure) framework and the Guidelines on Climate Disclosures issued by the HKEX, analysed the impact of physical and transition risks on operation under different scenarios, with one high risk, seven medium risks and seven low risks identified. Dozens of departments of the Group's subsidiaries, Shuanghui Development and Smithfield, participated in the process, and after reaching a consensus on the results of the relevant risk assessment, the companies initially confirmed their response strategies. For details, please refer to the chapter on Tackling Climate Change of this report.

Material ESG topics

WH Group and its subsidiaries maintain close communication with internal and external stakeholders to identify and evaluate significant ESG issues, and through management discussions and Board of Directors' deliberations, the Group's ESG issues have been ranked in order of importance. WH Group and its subsidiaries maintain close communication with internal and external stakeholders to identify and assess the ESG topics, and conduct the materiality prioritisation through management discussions and Board of Directors' deliberations. The Board keeps abreast of international ESG trends and peer performance, discusses and approves significant ESG issues identified, and reviews ESG strategies, objectives and management policies based on the Group's sector characteristics and development phase.

1.5.3. ESG Practice

In China, Shuanghui Development attaches great importance to building constructive stakeholder relations, and seeks to maintain trouble-free communication by establishing viable and effective communication channels to understand the expectations of all parties. Shuanghui Development regularly summarizes the concerns of stakeholders and provides high-quality responses through the daily work of various functional departments, including investor relations, corporate communications, supplier management and consumer services, and integrates them into the closed loop of corporate management, such as business process review and improvement, risk identification and system update. During the reporting period, Shuanghui Development met the six targets set for product quality, spear-headed the signing of the Supplier Code of Conduct with a phased approach, and made progress in the acquisition of certifications from relevant international standard institutions, advanced animal welfare practice and antibiotic management, explored energy-saving and innovative low-carbon technologies, and achieved steady progress in various energy-saving projects.

In the U.S., Smithfield appointed for a long-time a Chief Sustainability Officer to coordinate the formulation of sustainable development strategies and goal performance tracking, and advocate for industry progress and community relations. In addition, Smithfield has updated its materiality ranking of sustainable development issues after in-depth communications with stakeholders, including investors, customers, suppliers, NGOs, and sustainability experts. Smithfield initiated the carbon footprint tracking years ago and has now completed an inventory of Scope 3 greenhouse gas emissions from its U.S. operations and, for the first time, has disclosed its Scope 3 greenhouse gas emissions for the past three years in accordance with the Greenhouse Gas Protocol (GHG Protocol). In Poland, Smithfield established a sustainability team consisting of experts from various fields to guide the local sustainability practice in the areas of environmental protection, animal welfare, food safety, health and safety, employee development, local communities and corporate governance.

1.5.4. Stakeholder Engagement and Material ESG Topics

WH Group attaches great importance to the expectations of our stakeholders. We have established regular and diversified communication channels to fully understand their views and needs and to inform decisions on the Group's sustainable development plans. Considering the positioning of WH Group, we have identified the following parties as our key stakeholders: investors, employees, suppliers, regulators, industry organizations and experts, NGOs, sustainability think tanks, media, distributors and consumers. Our subsidiaries, Shuanghui Development and Smithfield, have also established their own engagement processes and mechanisms, striving to achieve their sustainable development taking account of stakeholders' interest.

Stakeholder Engagement of WH Group's Subsidiaries

Shuanghui Development

In accordance with the Stakeholder Expectations and Concerns Management Procedures, Shuanghui Development has established efficient communication channels made available to all stakeholders to offer suggestions in devising its ESG policies and systems. Such dialogues also help enforce the implementation and improve the quality of Shuanghui Development's ESG performance. During the reporting period, Shuanghui Development also conducted a questionnaire survey with stakeholders to update its materiality topics matrix.

For more details, please refer to the 2022 Environmental, Social Responsibility and Governance Report of Shuanghui Investment & Development Co., Ltd.

Smithfield

In the reporting period, Smithfield conducted interviews of stakeholders, including farmers, employees, customers, communities, governments and regulators, suppliers, industry associations and academia, to understand their expectation and address their concerns as appropriate.

More details can be found in the Smithfield 2022 Sustainability Impact Report.

WH Group analyses ESG trends semi-annually. We review and update the Group's material topics based on a holistic analysis that consolidates media reports, peer benchmarking, stakeholder interviews, international standards for ESG disclosure and the material topics identified by the subsidiaries. These material topics were prioritized, discussed, and validated by the management team, before the final review and approval of the Board of Directors of WH Group.

The Identification Process of Material Topics

Identification/update of potential material topics

 Identify potentially material topics based on a holistic view that combines extensive industry benchmarking, media coverage analysis, macro environment analysis, international ESG disclosure standards and the Group's positioning

Materilaity assessment

- Conduct stakeholder interviews to summarize the topics of high interest to stakeholders
- Consolidate and comprehensively evaluate the material topics of subsidiaries

Determination and priortization of material topics

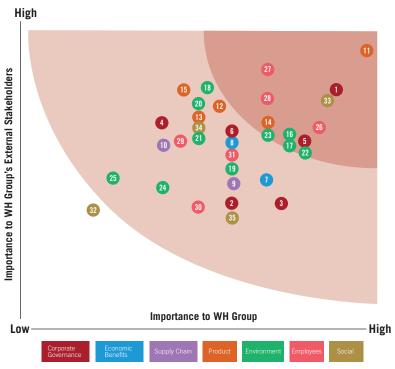
 Management team is responsible for prioritising and summarizing material topics

Review of material topics

 The Board of Directors reviews and approves of the material topics prioritised, for disclosure in the ESG report

During the reporting period, Shuanghui Development communicated with stakeholders through questionnaires, whereby 22 material topics were identified, and the materiality matrix was updated. Likewise, Smithfield conducted stakeholder interviews and updated the material topics. Taking into account the updates on materiality topics of its subsidiaries and those raised by its own stakeholders, the management team of WH Group ranked the topics and adjusted the priority of "Technology and Innovation" from high to medium, resulting in a materiality matrix for 2022.





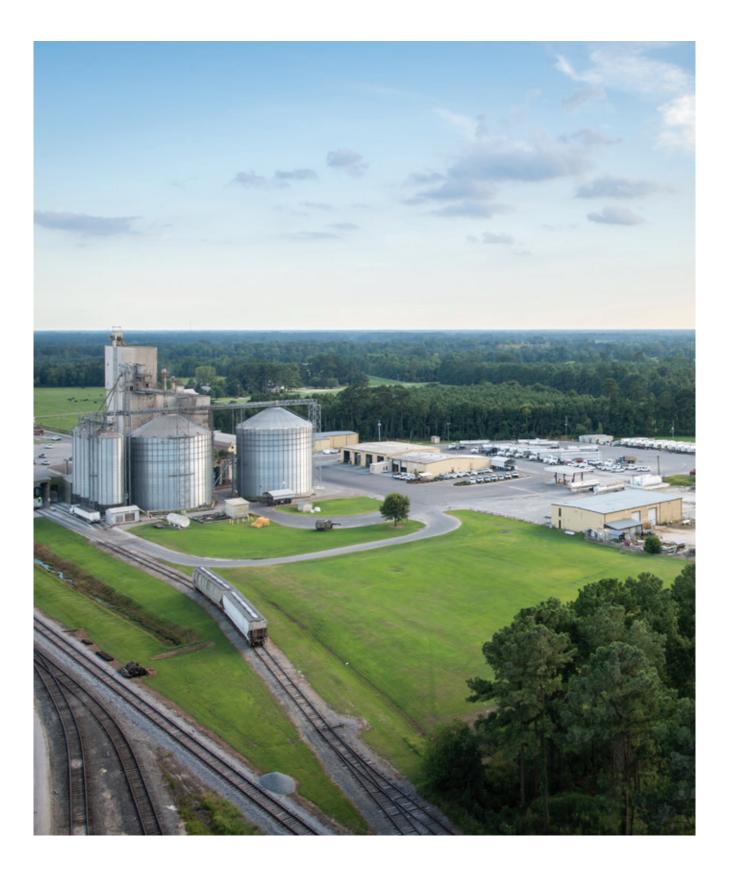
	Corporate Governance		Environment		
1	Governance framework and transparency	18	Water resource management		
2	Code of business conduct and anti-corruption	19	Use of packaging material		
3	Risk management	20	Atmospheric pollution		
4	Public policy and responsibility	21	Odor control		
5	Information and security	22	Wastewater discharge		
6	Responsible marketing	23	Waste management		
	Economic Benefits	24	Ecological restoration		
7	Sustainable income growth	25	Biodiversity conservation		
8	Internal tax regime		Employees		
	Supply Chain	26	Occupational health and safety		
9	Supply chain management system	27	Equal employee development		
10	Sustainable procurement system	28	Reasonable remuneration and benefits		
	Product	29	Diversified staff training		
11	Product quality and safety	30	Non-discrimination		
12	Product nutrition (food health and nutrition opportunities)	31	Protection of basic labour rights		
13	Product labeling (advertising and labeling)		Social		
14	Technology and innovation	32	Elimination of hunger		
15	Consumer complaint platform	33	Use of antibiotics		
	Environment	34	Social contribution		
16	Response to climate change	35	Animal welfare		
17	Energy management				

1.5.5. External Recognition

During the reporting period, WH Group received recognitions for its ESG governance and performance from ESG ratings and indexes, including the MSCI, the Hang Seng Corporate Sustainability Index, and the Dow Jones Sustainability Index. Such encouragement from the international capital market community will drive the Group's further efforts in sustainable development.

WH Group	 Rated as BBB by MSCI-ESG Inclusion in the Hang Seng Corporate Sustainability Index, rated as A+ Rated ahead of 90% of peers in S&P Dow Jones Corporate Sustainability Assessment
Shuanghui Development	 Shuanghui Development obtained A in Wind ESG Rating Shuanghui Development has been a top-ten brand preferred by consumers for te consecutive years The General Office of the Ministry of Agriculture and Rural Affairs of the People Republic of China recognized Shuanghui Development as "2022 Base for High Quality Development of Agricultural International Trade" Shuanghui Development was named "2022 Henan Province Energy Carbon Management Demonstration Enterprise"
Smithfield	 Smithfield received 2022 GLOBEE® Award for "Manufacturing Company of the Year for carbon reduction efforts Smithfield received 2022 GLOBEE® Business Awards for highlighting the important of diversity, equity and inclusion in American agriculture Smithfield received 2022 World Sustainability Awards — The Vice President of Community Development recognized as a 2022 Future Leader Award recipient Smithfield received 2022 Manufacturing Leadership Award from the Manufacturin Leadership Council

2 ADDRESSING CLIMATE CHANGE



Climate Change and Environment A robust ecosystem of land, water and air is the very basis of the existence and sustainability of our industry. WH Group fully supports the Paris Agreement's initiatives to combat global climate change, delivering carbon emissions reduction across all subsidiaries to achieve the target of zero emission by 2050 inclusive of supply chain, through a combination of technology enhancements, process transformation, and energy mix optimization. • Climate change • Energy and emissions management

Compared with the pre-industrial era, the global climate has experienced substantial changes. The impact of climate change has been increasingly conspicuous over recent years. During the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26), countries across the globe agreed to reach net zero and the Paris Agreement goal of a 1.5°C increase around the mid-century so as to mitigate the otherwise irreversible impact. As the world's largest pork producer, WH Group has proactively responded to climate change initiatives in the Paris Agreement and China's 30.60 NDCs. We consistently assess environmental impacts of our operations and strengthen our strategies and capabilities in climate-related risk management.

WH Group has integrated climate change mitigation into its business development strategies and specified its position and action commitments in climate change, energy, and emissions management in the *Group's Corporate Principles*, which we shall act upon as a responsible corporate citizen. In accordance with the recommendations from the Taskforce on Climate-Related Disclosure (TCFD), we have identified and assessed climate risks, and proceeded our low carbon emission plan while learning best practice in an effort to address these risks.

The Group's ESG committee takes the lead in analyzing and reviewing responses to climate-related risks and the plan to achieve zero-carbon emission. It makes recommendations and reports to the Board to ensure the needed level of transparency and clarity on climate-related strategies.



2.1. Climate Risk Identification and Potential Opportunities

WH Group anticipates the impact of different climate change scenarios on the Group varies. To accurately identify the impact of climate change on our businesses, three different climate scenarios adopted by the Intergovernmental Panel on Climate Change (IPCC) have been referenced, namely RCP¹ (representative concentration pathway) 2.6, RCP 4.5 and RCP 6.0, in the process of identification and analysis of climate-related risks and opportunities in regions where we operate.

During the reporting period, aligned with the Group's internal risk management and control practices, three time periods (short-term: within 3 years, mid-term: 3–5 years, and long-term: more than 5 years) are defined for quantitative and qualitative analysis in determining the level of impact of climate change risks on the Group.

Impact Level of Climate Risk

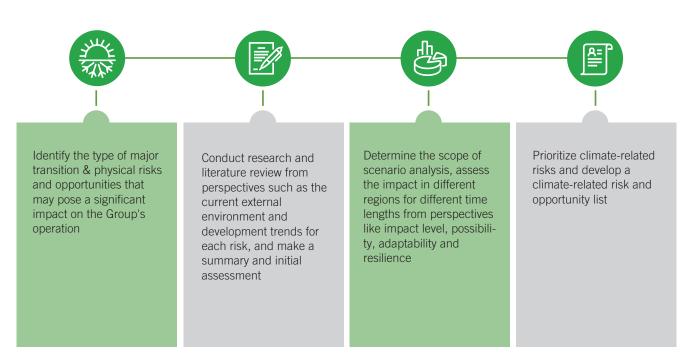
Impact level — low: The risk has a limited negative impact on the development of WH Group and is under control with the current strategies and measures.

Impact level — medium: The risk exerts a certain level of negative impact on the development of WH Group. Current plans and strategies shall be further optimized with continuous efforts to strengthen our responses.

Impact level — high: The risk poses a large negative impact on the development of WH Group, which requires constant attention. Major adjustments of current strategies may be made to reduce the impact of the risk.

Both external and internal factors have been considered for a comprehensive assessment including local policies, government planning, historical records of extreme weather events, operation characteristics and business planning. As an output of this exercise a list of specific climate-related risks and opportunities were produced, providing the needed groundwork in addressing them in daily operations.

Climate Change Risk Identification Process



RCP6.0 represents a pathway under government intervention, where total radiative forcing is stabilized at 6.0W/m² after 2100. RCP4.5 is the lower intermediate stabilization pathway under government intervention, where total radiative forcing is stabilized at 4.5W/m² after 2100. RCP2.6 is a scenario with very low greenhouse gas concentrations, where total radiative forcing reaches 3.1W/m² by the middle of the century and lowers down to 2.6w/m² in 2100.

WH Group conducted climate-related risk identification for key operating locations including China, the United States, Europe, and Mexico, with the following results:

WH Group Climate Change Risk Identification

Type of Climat	e-Related Risks	Potential Impact	Time Dimension	Impact Level	Responses	
Physical risks	Physical risks					
	Flood	Extreme events like flood or cyclone may impact farmlands, block traffic or damage facilities. In turn, that would lead to damage to factory facilities, suspended production because of raw material shortage and affect transportation and sales.	Mid-and long-term	Medium		
Acute risks	Cyclone	Under the RCP 6.0 scenario, the risk can largely impact our operations in China while the impact in Europe is small.	Mid-and long-term	Medium	Complying with appropriate laws and regulations where we operate, a feasibility study is conducted prior to any construction project to reduce the risk	
Acute risks	Drought	Drought and extreme heat affect crop yields and hog fattening, which increases the cost of raw materials. Meanwhile, it may also lead to a rise in water and energy bills, which would result in a corresponding increase of the Group's operating cost.	Mid-and long-term	Low	of natural disasters. Meanwhile, emergency plar have been prepared across all facilities to ensure of preparedness and capability to respond temergencies.	
	Extreme heat	Under the RCP 6.0 scenario, the risk exerts a large impact on our operations in China while the impact in Europe is small.	, the risk exerts a large Mid-and model helps diversify and lower	In addition, the Group's vertically integrated business model helps diversify and lower the impact of physical risks.		
Chronic risks	Sea level rise	Rising sea levels will submerge land and affect production and operation of enterprises. Meanwhile, seawater salinization may lead to water shortage in some areas. Under the RCP 6.0 scenario, the risk exerts a low impact on areas where we operate.	Long-term	Low		



Type of Clima	te-Related Risks	Potential Impact	Time Dimension	Impact Level	Responses	
Transition risk	Transition risks					
Policy	Increased pricing of GHG emissions	Supporting control and adjustment mechanisms for emissions trading have been introduced on a global scale and the rise of carbon pricing/carbon taxes will lead to additional financial costs. Not energy intensive as it is, the meat processing industry is not likely to be brought into control in the short run. However, in the long run, the industry may be included in carbon emission control as agriculture may account for a higher proportion of global GHG emissions, and that may increase the operating cost of the Group. The Group's operations in Europe may be the first to be affected by carbon pricing due to the mature market mechanism there. The closer to the RCP 2.6 scenario, the larger impact the risk exerts on the Group.	Long-term	Medium	In addition to disclosing regional GHG emissio our regional operations embarked on developing GHG inventory, across the entire chain of fe production, livestock farming, harvesting a processing, distribution and sales, storage a transportation. Meanwhile, efforts have been made evaluate and explore the feasibility to calcul carbon footprint of products. WH Group set its carbon emission targets a relevant pathway. Specifically, Smithfield Foods i joined Science Based Target Initiative (SBTi), wi Shuanghui Development has formulated the 1 Five-Year Carbon Plan and set a goal for electricuse from renewable sources. The Group continues make progress on these targets to build resilience climate changes and mitigate negative regulat impact.	
	Mandates on and regulation of existing products and services	With the gradual tightening of carbon emission control, enterprises may be required to disclose carbon emissions and comply with low carbon regulations. Carbon emission control of products and services will put high requirements on the production and operation of enterprises, which may increase the operating cost. WH Group is not heavily affected by the risk as meat products are not classified to be energy-intensive.	Long-term	Low		
	Enhanced emissions- reporting obligations	It is necessary to invest in necessary resources to fulfill the obligation of carbon emissions declaration. This would increase the operating cost as it requires investments in carbon footprint verification, human resources (as enterprises employ staff with carbon backgrounds) and third-party assurance. As a listed company, WH Group has been required to disclose carbon emissions to regulators.	Short-term	Low		

Type of Climat	e-Related Risks	Potential Impact	Time Dimension	Impact Level	Responses	
Technology	Costs to transition to lower emissions technology	Low-carbon technologies in the meat processing industry mainly refer to energy efficiency improvement, energy electrification and manure-to-energy utilization. However, the timing to develop and adopt technologies and result uncertainty affect the benefits of technology investment and increase operating costs. Carbon reduction targets in Europe are more aggressive than those in other regions, which leads to a higher transition risk of low-carbon technologies. The closer to the RCP 2.6 scenario, the greater impact the risk exerts on WH Group.	Mid-and long-term	High	WH Group has established a mechanism for low-carbon technology development and application in major operating locations to lower the cost needed by low-emission technology transformation. Specifically, Smithfield has partnered with multiple organizations to develop and implement renewable energy programs. It has developed mature technologies in manure-to-energy programs. Meanwhile, Shuanghui Development assesses low-carbon technologies through feasibility studies and cost analysis and reduces possible trial and error costs through pilot projects in technology application.	
	Substitution of existing products and services with lower emissions alternatives	Low-carbon products or services such as cell-cultured meat, plant-based meat and green packaging may affect the existing meat product market. All of these products require financial and human resource investments. Those new technologies and products are still in the early stage of development. Therefore, be it the acceptance or the cost, traditional meat products have not been heavily affected. The impact of the risk on the Group is small.	Mid-and long-term	Low	WH Group's carbon emission target includes carbon reduction in the value chain. It is estimated that unavoidable GHG emissions such as intestinal fermentation in pigs can be offset by promoting a circular economy and accelerating manure-to-energy utilization. These measures help lower the carbon footprint of its products and reduce the cost of low-carbon transition.	
Market	Changes in consumer behavior	As climate change has become a topic of concern to consumers around the world, consumers are increasingly interested in green products. Green packaging may be a focus of their attention considering features of the meat processing industry. However, green packaging may increase processing and operating costs. The United States and Europe have higher requirements for the use and recycling of plastics, which may affect the operating cost of the Group.	Mid-and long-term	Medium	WH Group has specified its principle on managing packaging materials in its <i>Corporate Principles</i> . We manage product packaging by reducing excessive wrap, replacing with lightweight materials, and adopting recycling methods, with a view to introducing biodegradable plastic packaging or equivalent technology when applicable. Both Smithfield and Shuanghui Development have set targets for packaging materials, which help mitigate the risk of changes in consumer behaviors.	
	Increased cost of raw materials	Under the RCP 6.0 scenario, extreme events caused by climate changes may affect crop yields. Under the RCP 2.6 scenario, carbon pricing and technological costs in response to climate change affect crop prices. All these factors will affect the downstream value chain due to the rise of the procurement cost. Our operating sites in China are affected more than other regions where WH Group operates due to its high reliance on imported crops.	Long-term	Medium	The Group's globe vertically integrated business model helps provide mitigation on the operating risk of rising cost of raw materials. Meanwhile, we enhance our cooperation with suppliers to help them improve the adaptability and resilience to climate change, thereby reducing the likelihood of rising raw material costs.	

Type of Climat	e-Related Risks	Potential Impact	Time Dimension	Impact Level	Responses
	Uncertainty in market signals	Affected by climate change risks, the market may change its preference. For instance, cell-cultured meat, plant-based meat and vegetarian foods may become more popular. These trends may affect the meat market, which in turn affects the revenue of the Group. People's demand on meat products is on the rise as the living standard improves. The risk exerts a small impact overall in the short run. However, lifestyle changes in places like Europe may affect people's choices of food, which in turn may affect operations of WH Group in those regions.	Long-term	Medium	WH Group aims to gradually reduce carbon footprint of its products as part of the action plan to achieve the Group's carbon emission targets. Meanwhile, Shuanghui Development has launched plant-based protein products such as Shuanghui's Vegetarian World". We keep monitoring market changes to adjust product portfolio in time to meet market expectations.
Reputation	Shifts in consumer preferences	The drive of brand values to consumption is increasingly conspicuous. Consumers may pay more attention to the relation between brand and carbon emissions in the context of climate changes, which in turn may affect the market share and revenue of the Group. In Europe and the United States, better living standards may lead to a higher level of consumer awareness of low-carbon brands, affecting sales of WH Group.	Mid-and long-term	Low	WH Group set its carbon emission targets and has taken actions to abate its emissions based on a holistic plan. Such actions help reinforce the brand credibility featuring low-carbon products and initiatives to resonate with consumers who aspire to follow a low-carbon lifestyle.
	Increased stakeholder concern or negative stakeholder feedback	Regulators, investors, clients, and consumers have increasingly stringent requirements on the disclosure of climate risks and low-carbon products. Noncompliant disclosure and improper climate performance may result in damage to the firm's reputation, declined share prices and financing barriers, which may pose a risk to the Group's operation and revenue.	Short-term	Medium	The Group has a regular review system on stakeholders' concerns and stays responsive, particularly on those climate-related issues. We communicate with all parties through corporate website, ESG report and all types of ratings results to address stakeholders' concern.



Climate change is reshaping consumption patterns and driving the transition of economic model. Amid such complexity, there are potential opportunities through the lenses of sustainable development. WH Group identified following opportunities after much deliberation over external environment and internal resource in light of its current strategy.

WH Group Climate Change Opportunity Identification

Resource efficiency opportunities

- More efficient transportation: In response to climate-related risks, the Group will further optimize logistic routes with big data to improve transportation efficiency and reduce transportation costs
- Reducing water consumption: The Group will continue to upgrade its production processes, which help reduce operating
 costs while reducing water consumption intensity, addressing water risks and further improving recycling
- Optimizing livestock & poultry breeding: The Group keeps exploring the utilization of manure to convert waste into resource and energy in the farming process
- Production flow: The Group will optimize production flow to enhance energy efficiency during the product R&D process
- Degradable packaging materials: The Group cooperates with external parties for research and development to win a competitive edge on low carbon strategy

Energy sources opportunities

- Low-carbon energy sources: Continuously explore the conversion of manure into resource and energy in livestock farming,
 and use byproducts to produce electricity and heat through methane fermentation
- Clean energy: Dependence on external energy may be reduced through measures like technological transformation and on-site photovoltaics. Clean energy such as solar and wind energy can be installed at plants with sufficient space to replace fossil fuels. More green power can be purchased

Product and service opportunities

- Lowering our carbon footprint can help the Group cater to requirements of governments, investors and consumers who are in favor of low-carbon products
- More green packages can be used to bolster the low-carbon and green brand image
- Through R&D and innovation, the Group works to solve potential product storage problems brought about by the future global temperature rise

Market opportunities

- Plant-based proteins: The Group may undertake more R&D initiatives on alternative meat products, launching innovative products
- Low carbon footprint: Lowering the Company's carbon footprint will facilitate access to and retention of markets with more stringent carbon emissions regulations

Adaptation opportunities

- Supply chain reliability: The Group may improve the technology of cold chain transportation to enhance its logistic reliability that is business-critical
- R&D of new products and services: Conducting R&D on low-carbon products to gain better resilience

2.2. Calculating GHG emissions

WH Group has a system that tracks and evaluates its energy consumption and GHG emissions performance. In the reporting period, Smithfield developed carbon inventories for the US business based on GHG Protocol issued by the World Resource Institute (WRI) and the World Resources Business Council for Sustainable Development (WBCSD), with Scope 1 and Scope 2 emissions recalculated. Scope 3 emissions from upstream and downstream as well as own operations are included in the inventory, such as business travel, capital goods, transportation and distribution, employee commuting and end-of-life treatment of sold products. Moreover, these data are undergoing validation by an independent third-party assurance service, thus enabling sufficient rigor in the process and providing a solid ground for the Group's further work. Please refer to Smithfield Foods' Sustainability Impact Report 2022 for detailed information.

WH Group's energy consumption² and GHG emissions data for the reporting period are shown as follows:

WH Group's Energy Consumption

Energy consumption	Unit	2020	2021	2022 ³
Direct energy consumption	Million kWh	5,216	4,889	12,903
Direct energy consumption intensity	kWh/metric ton of products produced	603	525	1,437
Indirect energy consumption	Million kWh	3,811	4,067	4,287
Indirect energy consumption intensity	kWh/metric ton of products produced	440	436	477
Total energy consumption	Million kWh	9,026	8,956	17,190
Total energy consumption intensity	kWh/metric ton of products produced	1,043	961	1,914

WH Group's Scope 1 and Scope 2 GHG Emissions in 2022

GHG emissions ⁴	Unit	China ⁵	U.S. ⁶	Europe and others ⁷
GHG emissions — Scope 1	Metric tons of carbon dioxide equivalent	422,669	2,957,489	133,516
GHG emissions — Scope 2	Metric tons of carbon dioxide equivalent	833,655	986,770	210,160
Total GHG emissions (Scope 1 + Scope 2)	Metric tons of carbon dioxide equivalent	1,256,324	3,944,259	343,677
WH Group GHG emissions intensity	Metric tons of carbon dioxide equivalent/ metric tons of products produced		0.62	

WH Group's Scope 3 emissions — US locations in 2022

GHG emissions	Unit	2022
Scope 3 in total	Metric tons of carbon dioxide equivalent	29,699,786

- The coverage of this data does not include the GCM Group acquired in 2021.
- The scope of data collected and shown in this column are expanded from those in 2021. Additional information includes Mecom Group acquired in 2021 and Nantong Huiyufeng New Material Co. acquired in 2022, both contributed to an increase in total energy consumption. Meanwhile, as the metric tons of production products currently include meat products and pork production but do not include poultry meat production, this contributes to the intensity increase. The Group plans to provide granular data reflecting each segment going-forward and explain data fluctuations accordingly if any.
- The coverage of this item does not include the GCM Group acquired in 2021.
- The scope of data collected and shown in this column are expanded from those in 2021. Additional information includes Nantong Huiyufeng New Material Co. acquired in 2022. Meanwhile, the livestock farming business in Fuxin and Xihua in China have been undergoing considerable growth following the strategy of upstream expansion during the reporting period. Horizontal and vertical business expansions of the Group contributed to an increase in total GHG emissions and GHG emissions intensity in China operations.
- The scope of data collected and shown in this column are expanded from those in 2021. Additional information includes self-owned farms and the inventory includes sources of emissions such as manure, enteric fermentation, and refrigerants. These changes contributed to an increase in total GHG emissions and GHG emissions intensity in the U.S. operations.
- The scope of data collected and shown in this column are expanded from those in 2021. Additional information includes Mecom Group acquired in 2021 which contributed to an increase in total GHG emissions and GHG emissions intensity in European operations.

2.3. Life-Cycle Assessment (LCA)

WH Group not only measures GHG emissions from the perspective of operations but also from the perspective of its products, in this way its consumer offerings could be defined with lower carbon feature. Smithfield had partnered with the Institute on the Environment at the University of Minnesota for many years to apply LCA methodologies identifying "hot spots" and perform lifecycle assessments (LCA) so as to more accurately track progress towards its GHG-reduction goals. This enabled Smithfield to pinpoint the top-three GHG-emitting operational categories of its product carbon footprint and made targeted efforts to reduce carbon emissions in these areas.

Manure (approximately 27%)

Manure is the largest contributor to Smithfield's emissions, but it is also the greatest area of opportunity for reduction. Through the use and expansion of anaerobic digesters in its company-owned operations, Smithfield shrunk the GHG emissions associated with manure management from 40–45% in 2010 to just 27% as of 2020.

Home Consumption (approximately 34%)

The impact of home consumption on GHG emissions is influenced heavily by energy grid mixes in different regions and consumer behaviors. Smithfield has implemented various strategies including the expansion of its pre-prepared product lines to reduce the demand for food processing on the consumer side.

Smithfield has implemented several measures simultaneously to reduce food waste from the consumer.

Feed Supply (approximately 27%)

Smithfield partners with upstream suppliers to track feed supply and experiment with alternative feed ingredients that carry a smaller environmental footprint. By using alternative feed ingredients, Smithfield reduced GHG emissions associated with feed by more than 100,000 tons from a 2010 baseline.

2.4. Our Responses to Climate Change

WH Group has set GHG emissions targets and energy use targets based on a comprehensive consideration of internal and external factors such as the requirements of applicable laws and regulations, energy structure, and policy trends in the regions where we operate, and the results of GHG emissions and life-cycle assessments of its products as appropriate. WH Group's subsidiaries have also set their own GHG emissions targets in response to the Group's commitment to carbon reduction. Smithfield announced its participation in the Science Based Target Initiative (SBTi), which involves setting short-term carbon reduction targets in line with SBTi. WH Group is proud to have Smithfield onboard with this initiative.

WH Group adheres to all applicable laws and regulations in the regions where it operates

China: Environmental Protection Law of the People's Republic of China, Atmospheric Pollution Prevention and Control Law of the People's Republic of China, Law of the People's Republic of China on Conserving Energy

U.S., Europe, and Mexico: Energy Policy and Conservation Act of 1975, Clean Air Act, The Industrial Emission Directive

WH Group's internal policies and regulations

China: Shuanghui Development Environmental Protection Management Code, Energy Technical Standards, Energy Management Code, Energy Assessment Program

U.S. and Europe: Smithfield's Environmental Policy

2.4.1. Environmental Goals

WH Group

2030/2050 Carbon Reduction Goals

To reduce GHG emissions per unit of product by 30% by 2030 compared with a 2017 baseline and to achieve zero emissions by 2050 inclusive of supply chain.

Shuanghui Development

The 14th Five-year Plan

- Adjust the energy structure by steadily reducing the use of fossil energy to reduce carbon emission
- Increase the use of renewable energy to limit GHG emissions
- Explore new technology applications in carbon reduction and utilization to apply to the company's carbon reduction activities
- Introduce energy conservation projects to reduce energy consumption per unit and carbon emissions

Smithfield

Carbon Negative by 2030

Achieve carbon negative in all company-owned US operations by 2030



Shuanghui Development 25% of total electricity use from renewable sources by 2030

Smithfield

 Obtain 50% of electricity needs from renewable sources by 2030

2.4.2. Actions and Measures

WH Group has developed four pathways to achieve its goals: 1) promoting the circular economy to realize carbon reduction from farming, 2) forming a diversified energy structure by increasing the proportion of renewable energy, 3) promoting energy efficiency improvements to meet the growth of energy demand, and 4) broadening the scope of carbon reduction actions to lead the low-carbon development of our value chain. We are continuously exploring and evaluating the aforementioned pathways, verifying the technical feasibility through pilot projects, and has obtained promising results.



Promote a circular economy

We believe that the recycling of waste not only helps the Group reduce costs and increase efficiency, but also promotes low-carbon transformation. During the reporting period, WH Group continued to utilize biomass energy to recover the value of waste.

Case:

Utilizing biomass energy: During the reporting period, Shuanghui Development continued to prioritize the use of biomass energy in various projects, including in the Baoquanling plant, Wangkui plant, Luohe Power Company, and Qingyuan plant. Shuanghui Development reduced its coal-fired use by 97% in 2022, leading to a total reduction of approximately 50,000 tons of carbon emissions.

Utilizing wastewater: Smithfield has partnered with Optima BioEnergy on a wastewater-to-RNG project at its Tar Heel, North Carolina facility. This helps protect water resources while producing clean energy.



Accelerate energy mix transformation

In 2022, WH Group further increased its investment in clean energy, raised the proportion and use of renewable energy sources, and adopted a variety of renewable energy sources, including solar, wind, and biomass, in place of fossil fuels.

Case:

Utilizing Solar Energy: Shuanghui Development's Henan Luohe Industrial Park operates a distributed photovoltaic power generation project, which involves the installation of solar electric systems on rooftops and carport sites throughout the park. By adopting a contract energy management model, the project not only generates electricity for domestic use but also for the grid if there is a surplus, providing green electricity for the plant. The project covers a shared area of 300,000 square meters, with an installed capacity of 35MW, which can generate 35 million kWh of green electricity annually and reduce carbon emissions by 23,828 tons per year.

Utilizing Wind Energy: Smithfield has invested in ALLETE Clean Energy's Diamond Spring project, which has a 112-turbine wind site in south-central Oklahoma that will deliver up to 15% of Smithfield's U.S. energy needs.





WH Group has been proactively fulfilling its corporate environmental responsibility, identifying energy-saving potential in all aspects of production, and implementing a series of optimization measures to improve energy efficiency.

Case.

An Intelligent Cloud Energy Management Platform: As of the end of the reporting period, WH Group implemented an intelligent cloud energy management platform in 14 facilities across China. This platform allows for automatic meter reading with better energy measurement accuracy and real-time monitoring, enables timely identification of energy consumption issues and improvement measures for rapid response to data anomalies, and improves management and energy utilization.

Ammonia Heat Pump Innovation Project: In 2022, Shuanghui Development continued its ammonia heat pump innovation project at the Tangshan plant. The project recycles heat discharged from refrigeration using heat pump technology, leading to energy cost reduction and the saving of 3,263 tons of steam. The project was expanded to include the shared processing plant, resulting in a total saving of 3,732 tons of steam.

Facility Upgrade: Smithfield's facility in Poland began upgrading its coal-fired steam boiler house. The new boiler house will reduce CO₂ emissions to an estimated 30,000 tons annually — a nearly 50% reduction.



Lead the low-carbon development of the value chain

WH Group has been promoting energy saving and emissions reduction in the value chain, tapping into carbon reduction opportunities and potential values of the industry through investment and partnership, and diversifying its carbon reduction pathways. This allows the Group to promote GHG emissions reduction inside and outside its value chain, improving the overall resilience, and turning risks into opportunities.

Case:

Reducing The Agricultural Carbon Footprint of The Supply Chain: Smithfield's agronomics initiative, SmithfieldGro, helps farmers across the Company's grain supply chain reduce crop inputs and improve crop yields by investing in carbon reduction and conservation methods. This helps reduce Smithfield's carbon footprint in the feed and grain supply chain.

Biodiversity: Smithfield installed manure-to-energy technology on nearly all its company-owned finishing farms in northern Missouri. In addition to generating carbon-negative RNG at a rate of approximately 800,000 dekatherms annually, Smithfield planted hundreds of acres of prairie grass through our partnership with Environmental Defense Fund (EDF) and Roeslein Alternative Energy (RAE) to provide ecological services and wildlife habitat for monarch butterflies across the United States.

Green Logistics: Smithfield launched a logistic optimization program that helps reduce transportation distance each year by approximately 11.2 million miles and reduce diesel consumption by 1.6 million gallons, equating to an annual GHG emissions reduction of nearly 13,000 metric tons of carbon dioxide equivalent (CO₂e).

Reducing The Carbon Footprint Associated with The Use of Its Products: The majority of WH Group's offerings are packaged meat products (pre-prepared and ready-to-eat), which do not require additional water for cleaning or additional energy for cooking by consumers. This contributes to the prevention of a greater amount of the Scope 3 emissions in the downstream consumption process.

PROVIDING QUALITY PRODUCTS



WH Group Corporate Principles

UN SDGs

Food Safety and Nutrition

We are fully aware that consumers are sensitive to safety, quality and nutrition when choosing food products. To meet their expectations, we have been strictly managing and continuously investing in all aspects of our operations and productions. Incorporating material safety features and priorities at each stage, effective and high-standard management measures have been formed, focusing on issue identification, prevention and correction capability. We require all our subsidiaries to adhere to our goal of zero incidents and zero recalls.

- Quality Assurance System
- Supplying and Testing Standards
- Nutrition R&D
- Additives Management
- Alternative Protein Choice
- Employee Training



WH Group knows consumers care deeply about safety, quality and nutrition when choosing food products. To meet their expectations, we continually enhance our product quality and consistently invest in all aspects of our production and manufacturing operations to create safe, high-quality products that are more convenient and nutritious. Moreover, we are dedicated to building consumer trust by maintaining the highest standards of customer service and responsible marketing.

3.1. Product Quality and Safety

Ensuring product quality and safety is the foundation and our commitment to consumers. The Group operates an effective quality management system that regulates the whole process from the operation of livestock and poultry farms to meat processing and delivery. We also extend our high standards in product quality and safety to our entire supply chain, in an effort to exceed our consumers' expectation.

Laws and Regulations

We abide strictly by the Food Safety Law of the People's Republic of China, the Law of the People's Republic of China on Animal Epidemic Prevention, as well as the Federal Food, Drug and Cosmetic Act and other food safety regulations required by the U.S. Department of Agriculture and other applicable laws and regulation in locations where we operate.

3.1.1.Quality Management System

WH Group has established a multi-layered quality management system that is overseen by a long-standing Food Safety Committee under the Board of Directors, which is charged with the responsibility for quality and safety-related policymaking, deliberation on material trends, and oversight on product traceability. Subsidiaries develop food safety policies and processes according to their own regulatory environment and market needs, and each carries out enforcement measures, and reports to the Committee on major food safety issues.

Quality Management Framework of WH Group and Subsidiaries

WH Group

Food Safety Committee

Establish corporate policies and operation standards and measure performance relating to food quality and safety to ensure legal compliance.

Evaluate, review and oversee internal product safety control standards, product-tracing procedures and report to the WH Group Board of Directors.

Shuanghui Development

Food Safety Management Committee

Identify, assess and determine food safety landscape and coordinate food safety management, with a president-level executive appointed as the first person accountable for product quality.

Food Safety Monitoring Group

It is a cross-departmental task force comprising members from quality management, inspection, and auditing departments with over fifty factory-level food safety directors responsible for supervising food safety implementation and procedures. The group's quality management center sets relevant measures and monitors performance.

Food Safety Group

It consists of 514 frontline food safety inspectors who implement all food safety procedures through "daily control, weekly inspection and monthly coordination".

Food Safety and Quality Inspection Team

It carries out random inspection at facilities and has the authority to halt the production and demand rectification in the event of failure to meet the standards.

Smithfield

Food Safety and Quality Assurance, FSQA

A Smithfield Foods Vice President reporting to the President of Manufacturing, is responsible for food quality and safety for the Company's U.S. operations. The Vice President leads four FSQA Directors and 12 FSQA Managers under a multi-level supervision and accountability system that covers more than 40 facilities across the country.

In Poland, we appoint a Managing Director of Quality Assurance who leads 12 Factory Quality Managers, 2 Product Quality Export Coordinators, 1 Quality Management Coordinator, 1 Quality Management System Coordinator, 1 Microbiology and Food Chemistry Coordinator, 1 Continuous Improvement Coordinator and 1 Process Quality Manager.

In Romania, we appoint a working group led by a Quality Manager who is supported by Quality Assurance Coordinator, Food Safety and Animal Welfare Manager and Quality System and Quality Labeling Coordinator.

WH Group's subsidiaries have obtained and retained multiple quality management system certifications in line with their respective business nature and needs. We ensure that sufficient resources are deployed when planning new facilities for certification such as Global Food Safety Initiative (GFI), ISO 22000 of Food Safety Management systems, ISO 9001 Quality Management Systems, HACCP or equivalent. We faithfully follow the requirements of relevant quality management systems to regulate the entire process of production.

Quality Certifications of WH Group's Subsidiaries

Shuanghui Development

In China, 42 operation sites of Shuanghui Development have been certified with the ISO 9001 quality management system, and 34 operation sites hold ISO 22000 food safety management system or HACCP system certification. Operation sites pending certification have already been managed according to the same standards, and are preparing for certificate application.

All 25 harvesting and packaged meats facilities have received quality and food safety management system certifications (ISO 9001 and ISO 22000).

The newly commissioned poultry harvesting facility has been certified by the FSSC 22000 food safety system, the pollution-free agricultural product certification program, and the export filing reviewing mechanism. Additionally, its high-temperature packaged meat plant was certified by the British Retail Consortium (BRC) Global Standard, Marine Stewardship Council (MSC) and Marine Stewardship Council (ASC) standards, and other related certifications.

Smithfield

Smithfield's operation sites in the U.S. are all GFSI (Global Food Safety Initiative) certified, and regularly audited by the Brand Reputation Compliance Global Standard (BRCGS) and International Food Standard (IFS).

In Mexico, 48% of our facilities are Calidad Suprema-certified and our food plant is ISO 22000-certified.

In Romania, our farms, warehouses and rendering facilities are ISO 22000 certified, and the fresh meat division is IFS and BRCGS certified.

All our operation sites in Poland and Slovakia are IFS and BRCGS certified.

3.1.2. Quality Risk Control

WH Group ensures food safety with a stringent and effective set of management measures including risk control and safety testing.

In each of our operation sites in the U.S. and Europe, we use Hazard Analysis and Critical Control Point (HACCP) as our quality control framework, assessing potential biological, chemical and physical hazards throughout production and relevant risk factors, to ensure control on product safety. Our raw materials, finished products, shelf-life samples and environmental swabs are all tested for chemicals and food microbiological agents to ensure product safety is uncompromised.

In China, we create a food safety risk control list that covers every process in the production chain. A three-level inspection on food safety led directly by the manager and deputy manager of each facility is also conducted monthly, while the Quality Control division oversees rectification follow-ups to identify and address issues promptly, and prevent reoccurrence of relevant incidents, as an effort to standardize safe and compliant production.

Risk Control List on Food Safety at Shuanghui Development



Supply

 Review the qualifications of the supplier companies and inspect the purchased materials



Production

 Manage personnel hygiene and health, control the quality of production process (hygiene control, use of additives, date printing, etc.), and manage non-conforming products (storage, marking, disposal, etc.)



Delivery

 Verify transport vehicle hygiene and temperature in line with the requirements



Storage

 Separte storage of raw materials, finished goods with proper labeling from prohibited substances, spoiled and expired food. The finished products can only be released after passing inspection



Sales

 Verify temperature, sanitary conditions, sales environment hygiene in line with the requirements; substandard products and expired products are not on display; product labelling is in line with the requirements



Catering

Verify processing site environmental conditions, processing control, finished product sampling, utensil management, delivery management, storage control, food waste disposal in line with the requirements

During the reporting period, the food safety inspection teams have inspected 35 of our operation sites to reinforce effective implementation of various quality rules. For our core products of packaged meats, Shuanghui Development has established a quality control task force, led by the Vice Presidents (VPs), to address and strengthen each of the three major areas of quality issues in packaged meats, namely unexpected foreign matters, spoilage and odor, and moldiness and broken wrappings.

Special Programs on Quality Control

Task Force for Quality Control Programs

In March 2022, three quality control task forces were set up by the Food Safety Committee of Shuanghui Development to enforce quality controls on three major issues, namely unexpected foreign matters, spoilage and odor and moldiness and broken wrappings. The task forces, headed by three VPs, were charged to identify systemic root causes and implement targeted measures for rectification.

Measures against unexpected foreign matters

For foreign matters control of raw materials and ingredients during harvesting and processing, it implemented targeted control measures through plan break-down, training, examination and evaluation

• It ensured designated personnel are adequate and well-trained, and connection of quality control with the markets is in place. Dispatchers and quality controllers checked every step per shift for foreign matters control

Measures against spoilage and odor

According to the principles of prevention-first and problem-oriented, key learnings from systematic and sporadic problems identified among 25 packaged meats facilities were compiled by the task force of spoilage and odor, to provide a precise understanding and focused control for each facility to eliminate systematic issues and reduce sporadic cases in spoilage and odor

Measures against moldiness and broken wrappings

- Established a three-level analysis system of facility, business division and HQs, to analyze complaints case-by-case, every ten days and every month, formulated targeted control measures and special examination and support plan, and implemented rectifications as appropriate
- Improved equipment through key control enhancement programs to forestall hidden dangers in products

3.1.3. Facility Management

We employ advanced equipment and technology to improve the standardization level in the operation process and reduce unidentified hazards in food quality. WH Group benchmarks with the best practice in the industry and has introduced automated equipment with the latest technology to optimize quality management in the production process. We enforce tight control over environment sanitation with a standardized cleansing and disinfection process for equipment, utensils and containers, to further safeguard the quality and safety of packaged meats.



Measures for Product Quality Improvement of Shuanghui Development

Techniques	Achievements
Microwave-thawing of raw meat materials	We have introduced and tested microwave thawing machines for packaged meats processing to improve efficiency and ensure the quality of raw materials by shortening thawing time, lowering the risk of microorganism proliferation and reducing waste.
Promoting the use of water bath thawing equipment in trial raw material	 We advocate the use of water bath thawing equipment for defrosting raw meat used for trial production to improve thawing efficiency, reduce material wastage, and lower the risk of microorganism proliferation. This has changed the long-standing practice of natural thawing in trial raw materials and helps produce more accurate testing results.
Sterilization code scanning for packaged meat products	We have introduced systems that can automatically select the sterilization parameter with a scan of code to simplify operational process, improve the efficiency of parameter selection and minimize the likelihood of errors, thereby ensuring product quality.

3.1.4. Supplier Quality and Safety Management

Quality products start from a meticulous selection of quality materials. WH Group holds uncompromising standards on livestock, poultry and other raw materials purchased from suppliers. This ultimately contributes to our delivery of high-quality and nutritional protein options for consumers.



Our Commitment



We do not use genetically modified swine or poultry as raw materials, and ensure that all our own hogs are selected and cultivated through careful breeding, without manipulating animal genes.



Quality Control During Procurement and Delivery of Shuanghui Development

Livestock and Poultry Procurement

We ensure that the purchased livestock and poultry meet the quality requirements of the Group, including the use of feed and medicine in the breeding process

Procurement of Raw and Auxiliary Materials

We ensure that all raw and auxiliary materials, and the feed meet quality requirements where we operate and pass the inspections of pesticide residues, additives and other subjects to ensure input quality

Delivery

We have increased the qualified rate index of logistics partner's delivery temperature of purchased raw materials and urge them to check the temperature before loading and control it at a required level during delivery process to ensure the quality and safety of raw materials

By connecting the country-wide 25 cold chain logistics distribution companies with the smart logistics systems of Shuanghui, functions such as automatic temperature alarm and automatic storage of monitoring information are in place to ensure safe delivery of products

In China, strict approval procedures and inspections are in place to ensure the quality of raw material. For the procurement of hogs as our principal raw materials, we require each supplier to sign a *Statement on Live Hogs Supplied*, which validates supplier compliance with food safety requirements addressing feed, additives and drugs, including the prohibition of toxic and harmful substances such as clenbuterol (including but not limited to clenbuterol hydrochloride and ractopamine). In addition, we stepped up our unannounced inspections of suppliers. During the reporting period, 149 suppliers of raw, auxiliary and packaging materials underwent announced inspections. Any supplier who fails to meet the standards concerning drug residues, plasticizers or genetic modification will be suspended until compliance is confirmed. A second failure will lead directly to the cancellation of supply qualification.

The Procurement Principles of Shuanghui Development

Six Rejections			
Rejecting hogs not certified, not fully certified, or without matching certificates	Rejecting hogs dying from diseases or unknown causes		
Rejecting hogs found with toxic and harmful substances such as clenbuterol hydrochloride and ractopamine	Rejecting hogs fed with swill or infused with water or injected with other substances		
Rejecting hogs infected with or suspected of African swine fever or other epidemic diseases	Rejecting breeding boars and sows, late surgically castrated pigs, and free-range local pigs		

Hog Procurement Specifications in Shuanghui Development

The first line of defense	Clenbuterol sampling and body surface examination at suppliers' pig farms
The second line of defense	On-site animal inspection — animal origin inspection
The third line of defense	On-site animal inspection — ex-factory inspection
The fourth line of defense	On-site animal inspection — quality inspection before weighting
The fifth line of defense	One-by-one hog testing on production lines

In the U.S., Smithfield manages suppliers in accordance with its Supplier Policy. Our FSQA team also performs regular audits on Level 1 suppliers and quality inspections on local operation sites. Suppliers are also subject to annual Global Food Safety Initiative (GFSI) certifications or equivalent third-party food quality and safety audits. Smithfield has also developed a supplier scorecard to evaluate the product quality performance of suppliers on a monthly basis, with KPIs including HACCP compliance, quality planning, foreign material control and shelf-life performance. In addition, Smithfield uses product SKU and code date information to enact traceability across the supply chain.

3.1.5. Product Quality Training

Guided by the principle that "Product Quality is Our Top Priority", WH Group continuously reinforces a quality-focused training culture to enhance employee knowledge and skills. In China, Shuanghui Development maintains internal policies, such as the *Product Quality and Safety Training Plan* and the *Three-Level Training and Management Provision* for Production Facilities. Along with our training plan, we further improved the Product Quality and Safety Training Schedule during the reporting period. We deliver tailored training to managerial staff and frontliners and have organized quality and safety training workshops with external specialists that include tests on food safety knowledge. These steps have built a solid foundation for enhanced food safety management.

Food Quality and Safety Training System at Shuanghui Development

Training for Production Managers:

• Every production manager shall attend the quality and safety training and take a test before competing for an internal position and/or getting a promotion among others, and all production managers below the Vice President of the Production shall take the production quality and safety training once every year. They will not return back to work once failed the test and shall continue to take the training until obtaining a pass. In this way, we make sure every manager is proficient with the standards and able to act accordingly in operation.

Training Materials for Frontline Employees:

We formulate training materials on quality and safety for front-line employees in positions of meat products, fresh products, chemical business, comprehensive business development, chicken harvesting, feed manufacturing and livestock farming in a targeted manner, summarize key points of product quality and safety practices for various positions and conduct training correspondingly, so that it is more convenient and friendly for employees to learn, memorize and practice.

Random Test on Food Safety

• Every year, a food safety test is organized for randomly selected managers in charge of food safety, serving as a means to enhance their knowledge and managerial skills.

Training with External Specialists

• Specialists are invited for microbiological knowledge training and pest prevention and control measures training. Professional trainings covering diverse topics are organized to improve the quality management capabilities of employees at all levels.

ISO 9000 Quality Management System Training

• Professionals are invited to present the seven elements of quality management, ISO 9000 management system standards among others, to equip the employees with international standards.

"Quality Month" Training Activity in Shuanghui Development

To further enhance employee quality awareness and engagement, Shuanghui Development declared September as "Quality Month" with a theme of "Innovative Quality Management & Comprehensive Quality Improvement." Activities included training sessions aimed to improve the food quality and safety knowledge of managers at all levels. A test was implemented as part of our food safety culture building exercise.





Smithfield provides employees worldwide with comprehensive training in quality and food safety, covering HACCP compliance, product handling procedures, Good Manufacturing Practice (GMPs), Safe Quality Food Institute (SQF), British Retail Consortium (BRC) and the International Food Standard (IFS) as part of its food quality and safety culture.

Operational Location	Food Quality and Safety Training
China (Shuanghui Development)	A total of 1,123,784 training hours were recorded and the number of participants reached approximately 420,000.
The U.S. (Smithfield Foods)	A total of $2,646$ training sessions were organized, covering 95% of the employees.
Europe (Smithfield Foods)	In Poland, food quality and safety trainings cover $\frac{100}{6}\%$ of employees. Romania also conducted relevant trainings.

3.1.6. Product Recalls

WH Group's objective is zero recalls and zero quality incidents from its owned businesses. Should issues occur, our response always puts the interests of customers and consumers first. We have established policies and protocols for product recalls to ensure a rapid, proactive response and that includes root cause evaluation to prevent a recurrence of similar events.

In China, in accordance with the Food Recall Management Measures and the Standard Operating Procedures for Product Recall, we organize mock recalls twice a year in the production sites, in which we assess the severity of the recall event, simulate a recall announcement and track the product recalls and withdrawal. In 2022, we achieved 100% of mock-recalled products. Meanwhile, reporting recall results to the relevant authority was also simulated. We also have a product traceability platform that controls all aspects of product procurement, production, transportation and sales, and ensures accurate and rapid execution of recalls should they occur.

In the U.S., we utilize the product SKU and date code to ensure full traceability of products and ingredients, raw materials and packaging. Smithfield also conducts recall simulations. In Europe, our Product Recall Manual defines our response and product tracing protocols, including the appointment of person in charge, to ensure recalls are managed in a timely and effective manner.

During the reporting period, there were zero product recall in Shuanghui Development and a total of 8 recalls⁸ in Smithfield. All recalls were handled properly and did not result in food safety incidents. After the recall incident, we invested in testing equipment and optimized critical processes at relevant facilities. Special employee training on food safety and risk management were also conducted for production sites that had recalls to minimize human error.

3.2. Food Nutrition and Health

To meet the evolving needs of global consumers for more nutritional protein products, WH Group is committed to product innovation, particularly in the area of packaged meats, and to deliver authentic and nutritional products that the market anticipates.

3.2.1. Product R&D and Innovation

R&D and innovation serve as the most important drivers of the growth for WH Group. Our R&D team focuses on packaged meat, continuously creating new products and providing ever-improving experience for consumers. We expand our downstream capability, accelerating our deployment in the ready-meals segment, and explore the application of hog byproducts to maximum their value. During the reporting period, we invested US\$182 million in product R&D.

In China, Shuanghui Development employed more than 250 R&D professionals in 2022. We collaborated with the Institute of Food Science and Technology-Chinese Academy of Agricultural Sciences, Nanjing Agricultural University, Jiangnan University, Xi'an Jiaotong University and other scientific research institutes and universities to jointly undertake national scientific research projects.

Shuanghui Development participated in the formulation of the first group standards of ready-meals in Henan Province, in the areas of packaging, transportation, storage and shelf-life.

R&D and Marketing of Ready-Meals

Based on industry practice and own market surveys, Shuanghui Development drew inspiration from the eight classic cuisines of China, established a product library of more than 200 Chinese ready-meals, of which 29 have been brought to market. At the same time, we adopted the sales model with a mix of "regional distributor, regional franchise, single store franchisee and direct sales". We upgraded our deli stores, and created training process for shops and stores, to complement the strategic development of our ready-meals business.

Shuanghui Development will continue to contribute to the formulation of group standards for ready-meals, supporting the development in the areas such as terminology definitions, technical requirements, inspection rules, marks, labels, packaging, transportation, storage and shelf-life. We aim to introduce our high-quality standards to the entire industry, to ensure the quality and safety of ready-meals on each and every dining table.

¹ recall in the United States due to suspected metallic foreign objects, 5 recalls in Poland due to salmonella and doxycycline, and 2 recalls in Romania due to an African swine fever case and a Salmonella case respectively.

In the U.S. and Europe, Smithfield Foods remains committed to its guiding principles of Responsibility, Operational Excellence and Innovation (ROI) to encourage employees to continuously improve and innovate all aspects of its business. We have led breakthroughs in innovative R&D of porcine bioproducts, increasing the production capacity of heparin active pharmaceutical ingredients (APIs) tenfold and initiating heparin production capabilities at eight harvest facilities. In addition to heparin, we have explored innovations in other therapeutic areas, such as the commercialization of porcine-derived APIs and small intestinal submucosa extracellular matrix (SIS ECM). During the reporting period, we established partnership with BioCircuit Technologies to produce Nerve Tape®⁹ for seamless nerve repair on wounds. This product is expected to provide a more precise and reliable way to reconnect the injured nerves, simplify the surgical process and improve healing while delivering more value from porcine-derived products.

We value intellectual property right (IPR) and patent protection, and regulate our process with internal policies for the registration and application of trademarks, copy rights and patents in accordance with local laws and regulations. In the U.S., we require every supplier to sign a Non-Disclosure Agreement and set up a dedicated team to supervise IPR protection. In China, IPR provisions on suppliers are attached to our procurement contracts, and IPR related trainings are carried out both online and offline. By the end of the reporting period, Shuanghui Development accumulated 724 valid patents and trademarks and obtained 233 newly granted patents and trademarks, while Smithfield accumulated more than 1,216 valid patents and trademarks and obtained more than 20 newly granted patents and trademarks.

3.2.2. Leading the Trend of Nutritional and Healthy Diet

In response to the evolving trend of healthy diet, WH Group integrates market expectations into our product innovation by optimizing product formula, adding natural ingredients and increasing nutritious elements, to offer a variety of nutritious and tasteful food choices staying ahead in addressing consumer needs.

In the context of the "Healthy China 2030" national strategy, we brought to market new lines of products that are organic, and lower in the level of added sugar, fat and sodium. These features were achieved without interrupting the traditional flavors that our consumers prefer. By diversifying our product portfolio, we offer nutritional and healthy options to meet the evolving needs of consumers.

In the U.S. and Europe, Smithfield Foods is dedicated to healthy options that deliver quality, great flavor and convenience. We provide a wide range of products to meet different preferences and tastes and lifestyles, including low-sodium and low-sugar options.

Programs of WH Group's Subsidiaries

	Shuanghui Development
Optimize product formula	• We follow the principle of "the fewer ingredients, the better", and manage the number of ingredients with no more than 12 for premium lines:
	> The average number of ingredients in meat plants was reduced from 12.3 to 10.5.
	> The average number of flavors used in products over 5,000 tons was reduced from 2.26 to 1.35.
	> The variety of restructured meat protein was reduced from 5 to 1.
	> The variety of rehydrated textured protein was reduced from 3 to 1.
	> The variety of meat stuffing was reduced from 51 to 21.
Add natural ingredients	 We research on the application of natural ingredients, and reduce or remove synthesized additives, such as the application of sucrose fermentation with bacteriostatic elements to address odor- related issues.
Increase nutritious elements	We add calcium to meat products, such as the Shuanghui sausage plus calcium formula series, smoked sausage and grilled meat sausage.
	We add DHA to products such as cod sausage and "Run Kou Xiang Tian Wang" corn flavored sausage.

Nerve Tape® is an implantable product made of decellularized small intestinal submucosa (SIS), with microhooks for connecting tissues that can be quickly wrapped around the ends of the severed nerve to form a strong, reliable hold with distributed tension. They will be produced with fully traceable SIS that are sourced by Smithfield U.S.

Smithfield Optimize product · We simplify formula and reduce sodium and added sugars in products, with a pledge to reduce formula sodium and added sugar by 10% across the entire product line by 2025. We reduced sodium and added sugars in more than 25% of the entire brand line and are in the process to optimize sodium and added sugar levels in new product formulations. · We use non-genetically modified organism (GMO) soybeans to reduce saturated fat, and reduce the use of allergenic raw materials, such as wheat, sesame, oats, rye and rice flour. • During the reporting period, we removed monosodium glutamate and some of the dye additives from the products and worked with suppliers to advance the reduction of monosodium nitrite in the products. • We replace sodium nitrate and sodium isosorbide with cultured celery juice and cherry powder in Add natural ingredients all natural and unprocessed products. • We add natural ingredients to products in place of synthesized additives.



Featured Products of Shuanghui Development



Pao Mian Qing Yan Pai sausage

Compared with similar products, it reduces salt by over 25%. We proposed the health
concept of "Reduce Salt to Enhance Flavor of Chicken Soup" and maintained the "Same
Taste with Less Salt", fully upgrading our products.



Qing Ka Neng Liang sausage

• Featuring the health concept of "Zero Sugar, Reduced Fat and High Protein", with western-style natural spices applied to enhance the aroma, it meets the needs of people who pursue a healthy lifestyle and brings high-temperate meat products to another level.



Coobi cod sasuage

 Premium deep sea cod is selected. It is made of cod 100% with added DHA algal oil, containing no other ingredients.







Fresh meet ball series

Shuanghui pork, beef, cod and other premium ingredients are selected, which is safe, reliable
and reassuring. Following the health concept of zero additive (zero preservative, zero colorant
and zero sweetener), vacuum packaging is adopted to secure the freshness of quick-frozen
meats, meeting different consumer needs.



Chinese cuisine series

Instant ready-meals are developed for room-temperature product catergory. Popular tranditional
Chinese cusines are developed such as Shuanghui Jia Yan (Family Feast), Ba Da Wan (Eight
Bowls) and Ba Cai Yi Tang (Eight Dishes plus One Soup). With aseptic processing, we produced
preservative-free room-temperature products, creating delicious, safe and healthy dishes.

R&D of Nutritious Meals for Students

Shuanghui Development collaborated with the Global Health Institute (GHI) of Xi'an Jiaotong University to conduct research on nutrition diet across different age groups of children, students in primary school, secondary school and college in China. Currently, there are more than 20 professional dietitians with doctoral and master's degrees structuring students' nutritional recipes and calculating nutritional composition, to develop meals that are fresh, safe and balanced in nutrition for Chinese students.

3.3. Responsible Marketing

WH Group complies with all applicable laws and regulations where we operate and respects local consumer habits while promoting rational consumption concepts. We make sure that no unfair marketing of and misleading information about our products and services are delivered to the market.

Laws and Regulations

We abide by the Advertising Law of the People's Republic of China, the E-commerce Law of the People's Republic of China, the EU Regulation on Food Information to Consumers and other laws and regulations that are applicable to local business operations.

WH Group has established a stringent approval process for marketing and advertising campaigns, which is reviewed and updated every year to make sure that all marketing content complies with the laws and regulations in places where we operate. Our product labels are clear and we prohibit inaccurate or misleading information in our marketing materials.

In China, Shuanghui Development manages all marketing campaigns in accordance with the Advertisement Working Plan developed by the marketing center, and puts in place a thorough approval process for launching any marketing and advertising activity. The entire marketing process is supervised to make sure that there is no exaggerating, biased or misleading messages. Other than that, we introduce healthy diets in our marketing activities, advocating a lifestyle enabled by rational choice on diet with balanced nutrition.

We have adopted internationally or intergovernmental recognized labeling standards, and disclose and explain information about the raw materials and nutritious compositions of our products. As a practitioner of cleaner labels, our accurate and transparent product labelling help consumers make informed purchase decisions for healthy diets. In the U.S., all Smithfield products marked as "natural" have been approved by the U.S. Department of Agriculture (USDA) to use the "natural" label statement and meet the USDA definition of minimal processing with no artificial ingredients. Our products in Europe are also 100% compliant with EU product labelling and instruction requirements.

Smithfield Balanced Diet Project

In Romania, Smithfield has held workshops on International Food Day for the ninth year in a row to encourage students in local communities to adopt a balanced diet and a healthy lifestyle.

In this year's campaign, we promoted the role of balanced nutrition in healthy development to the students of Periam High School in Romania. To achieve better results, we invited the famous mountaineer Horia Colibăsanu — the only Romanian to have climbed the Annapurna, Chogori and Doraigiri peaks — to share with the students how a balanced lifestyle and dietary habits helped him become the most successful mountaineer in Romanian history.

Through our balanced meal awareness campaign, we contribute to community development by helping the young generation of our community prepare for healthy and nutritional choices.

3.4. Consumers and Customer Service

WH Group remains committed to providing the best products and service experience for our over tens of thousands of distributors and customers, and hundreds of millions of consumers around the world. With a well-established customer and consumer service system, we comply with applicable marketing and advertising regulations, promote rational consumption concepts and protect the privacy data of consumers.

Laws and Regulations

We abide by the *E-commerce Law of the People's Republic of China, Law of the People's Republic of China on the Protection of Consumer Rights and Interests*, the *EU General Data Protection Regulation (GDPR)*, the *U.S. California Consumer Privacy Statement (CCP)* and other laws and regulations that are applicable to local business operations.

3.4.1. Consumers and Customer Service

WH Group boasts an efficient after-sales service system. In China, Shuanghui Development formulated internal policies such as the Standard Operating Procedures for Processing Customer Complaints and Working Procedures for Product Quality Information Feedback, to ensure standardized management of customer complaints. We also have well-developed feedback channels allowing consumers to express their experience via "400" hotline or on social media platforms such as Sina Black Cat, Weibo and Tik Tok, and we provide immediate and effective responses.

Procedures for Complaints Processing of Shuanghui Development

Accept the case

Provide after-sale service via information system

Log the complaint with necesary details and dedicated personnels to follow up

conderned in person

In the U.S. and Europe, Smithfield maintains open communication with our customers via our toll-free number, email, social media, and mailing. We also set up a Food Safety and Quality Assurance (FSQA) team responsible for the timely handling of customers' complaints, tracking the progress of complaints to make sure each case is handled properly. Additionally, we log each complaint into a database and evaluate the overall customer satisfaction performance through data tracking, which allows us make customer service improvements. During the reporting period, Smithfield set targets on "speed to answer", "call abandonment rate" and "business days to resolve", and achieved satisfactory results thanks to our high customer service performance.



With tight control over product and service quality, the total number of complaints received by main operation sites of the Group in China and U.S. were 6.31 per 1,000 tons of sold product, with a handling rate of 100%. Among our control measures, the dedicated quality control programs launched by Shuanghui Development contributed to a year-over-year drop in product quality related complaints by 15.1% in the second half of 2022.

3.4.2. Privacy Protection

As digital communications gains momentum, the protection of customer and consumer privacy has become an expected element of customer service. Currently, WH Group has approximately more than 20 million online consumers and over 200 online customers. We continuously strengthen operational and technical measures to protect the customer and consumer information involved in our marketing activities and transaction handling.

We abide by local laws and regulations related to privacy protection and have put multiple privacy protection procedures in place. In China, Shuanghui Development established a double-verification protocol for data related to operations, with which all user-related data and information shall go through a strict access approval process before being used. In the U.S., Smithfield collects the minimum information from customers and consumers and adhere to the principle of "never selling personal information". Meanwhile, we provide employees with annual training on consumer privacy protection, to reenforce their awareness and sense of responsibility in daily actions, prohibiting unauthorized forwarding, sharing or disclosing any customer and consumer information.

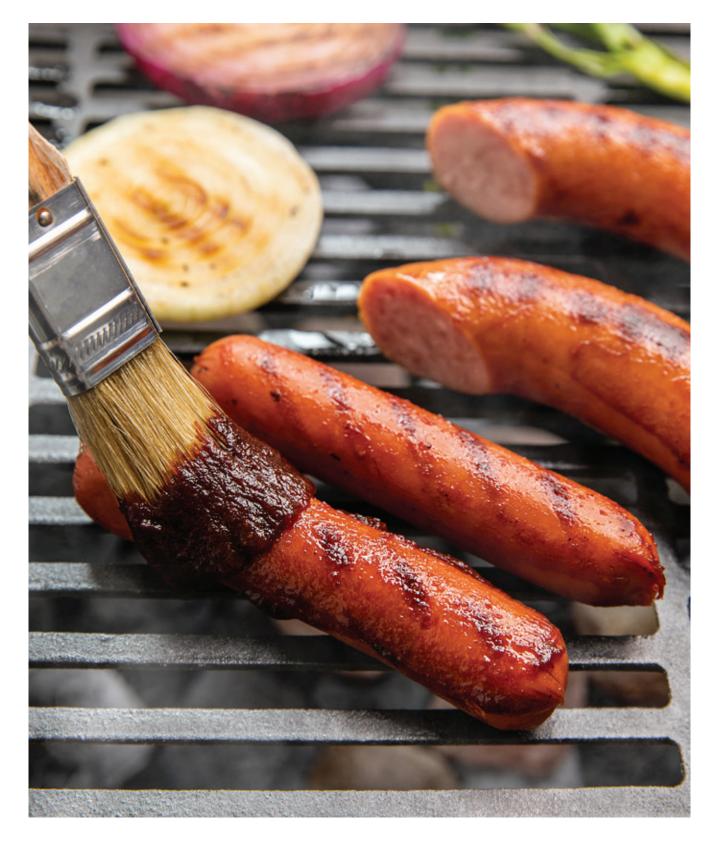
3.4.3. Satisfaction Survey

Consumer and customer satisfaction is our unwavering pursuit. We regularly conduct comprehensive satisfaction surveys and evaluations to gain insights from the markets and thus provide better services for our consumers and customers. We analyze items to which consumers and customers pay high attention in the survey, and develop improvement and action plans accordingly, and where appropriate we also integrate their suggestions into our product R&D, production and sales service.

During the reporting period, Shuanghui Development conducted customer and consumer satisfaction surveys in China respectively every six months. The customer survey covered six areas of our product in quality, price, packaging, distribution, support, and services. The consumer satisfaction survey entailed product quality, brand recognition, product packaging, flavor acceptability in respective local market, product price and after-sales service. The comprehensive customer satisfaction rate and consumer satisfaction rate was 83.3% and 84.4% respectively, well within the range of our set target.

The Smithfield Consumer Affairs team conducted consumer satisfaction surveys via phone and email. In the U.S., we scored 93.5 and 81.1 points, respectively, from these survey formats, exceeding the established targets. In Romania, the consumer satisfaction rate reached 90%.

ENHANCING VALUE CHAIN PARTNERSHIP



WH Group Corporate Principles

United Nations Sustainable Development Goals

Sustainable Supply Chain

We are committed to building a sustainable supply chain and delivering a positive impact, from sourcing livestock and raw materials to working downstream with logistics, distribution, and retailing partners to provide consumers with high-quality, nutritious protein choices.

Our suppliers have joined us in ensuring the safety and quality of our end products by meeting the procurement standards of WH Group and its subsidiaries. They are further encouraged to take initiatives in environmental conservation, labour standards, employee safety and animal welfare outlined in our Supplier Code of Conduct.

- Sustainable agriculture
- Supplier quality assurance
- Supplier Code of Conduct

Animal Welfare and Care

The Group takes pride in building a best practice and leads by example to make animal welfare a standard practice in the industry. We seek ways to make positive impact and collaborate with stakeholders to support and promote the development of animal welfare standards.

- Animal welfare principles
- Responsible use of antibiotics
- Implementation and review

6 CLEAN WATER AND SANITATION

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

AND PRODUCTION

17 PARTNERSHIPS FOR THE GOALS

WH Group is dedicated to making a positive impact on the entire industry chain, from livestock sourcing and raw material procurement to collaborations with downstream service providers in logistics, distribution and retail, aiming to build a sustainable supply chain that offers consumers high-quality and nutritious protein options. Furthermore, we take pride in our hog farming model whereby we set the standard for animal welfare.

4.1. Responsible Supply Chain

As the world's largest pork producer, WH Group operates a supplier management system that complements our business needs and integrates sustainability requirements. We encourage suppliers to take initiatives in the areas of environmental conservation, labour standards, employee health, and animal welfare for the building of a responsible supply chain.

4.1.1. Supplier Management

In China, Shuanghui Development has established management policies such as the Procurement Supplier Management System, the Supplier Code of Conduct, and the Shuanghui Procurement Supply Chain "Whistleblower" Management Policy. We also require our suppliers to sign the Food Safety and Quality Commitment Statement, the Supplier Code, and Environmental Protection Initiative, among other relevant documents. Suppliers are expected to follow standardized management processes that meet legal and regulatory requirements, apply ethical principles in their business practices, adhere to food quality and safety standards, and implement environmental protection initiatives. We evaluate suppliers through centralized and non-centralized methods, considering factors, such as the size of supplier contracts and quality risk in food contamination control and processing. We classify suppliers into four categories: key suppliers, key non-tier 1 suppliers, tier 1 suppliers, and non-tier 1 suppliers, and implement management specifications accordingly. At the end of the reporting period, we had a total of 172 key suppliers and 36 key non-Tier 1 suppliers.

In the U.S., Europe, and Mexico, Smithfield has established a Supplier Code of Conduct that all suppliers are required to sign and follow. This code covers our expectations for suppliers concerning environmental management and human rights. Additionally, Smithfield developed a Supplier Compliance Verification system to assess supplier compliance in operations and ensure that the suppliers we work with meet the necessary qualification requirements. In the U.S., Smithfield employs a supplier classification system that categorizes suppliers into three tiers based on the partnership scale. Additionally, Smithfield regularly conducts third-party reviews of Tier 1 suppliers to promote continuous quality management improvements in an effort to drive the overall competitiveness of the supply chain. In the U.S., Europe, and Mexico, the Food Safety and Quality Assurance team of Smithfield conducts routine audits of Tier 1 suppliers and carries out quality inspections in the respective local plants. At present, a number of Smithfield's Tier 1 suppliers are certified with a mix of standards, such as GMP ("Good Manufacturing Practice"), TUV Quality Assurance System, ISO 9001, HACCP, and BRC.

All of the Group's subsidiaries have established an effective mechanism covering supplier approval, evaluation, and removal as well as a scorecard system to effectively guide and evaluate suppliers' on-going performance.



Supplier Performance Evaluation Mechanism

Shuanghui Development

Smithfield

With reference to the management policies such as the Notice on Strengthening the Introduction Management of Suppliers (for Trial Implementation) and the Food Safety Risk Control System of the Procurement Center, Shuanghui Development evaluates potential suppliers based on their qualifications, production capacity, and source authenticity, to systematically carry out the supplier approval process. In addition, Shuanghui Development conducts supplier assessment and evaluation based on the risk of supplying materials that come into contact with food, the risk of quality control during processing, the annual cumulative purchase volume, and the contract value and its impact on the company's cost.

During the reporting period Shuanghui Development implemented an annual performance evaluation for suppliers, which assesses their performance based on supply and service, quality, and cost, with an outcome of a four-level rating of A/B/C/D. A-level suppliers are considered excellent, B-level suppliers are qualified, C-level suppliers require key follow-up and potential suspension, and D-level suppliers are to be terminated. We conduct a scoring system based on an approach of "daily control, weekly inspection, monthly coordination and annual evaluation", and perform unannounced inspections and routine audits. We provide incentives for out-performers, and take timely action to remove high-risk players.

Smithfield has established a scorecard system whereby suppliers are required to comply with relevant key performance indicators, including critical quality control points (Hazard Analysis and Critical Control Point HACCP), quality planning, foreign material control, and shelf-life performance. Our supplier grading, evaluation, and audit systems, which cover all our suppliers, enable us to ensure a stable supply and selection and identify non-compliant suppliers in a timely manner. In the event that suppliers fail to meet our standards, Smithfield employs strict tracking and monitoring procedures.

As of the end of the reporting period, the total number of suppliers of the WH Group reached 28,907, and the number of suppliers by geographical location is as follows.

WH Group's Suppliers

	2022
Total number of suppliers	28,907
China	11,977
U.S.	3,327
Europe ¹¹	13,545
Others	58

This does not include GCM Group acquired in 2021.

 $^{^{\}rm 11}$ $\,$ The Europe region includes Poland, Romania, and Slovakia.

4.1.2. Sustainable Supply Chain

Promoting sustainable development among its suppliers is crucial for WH Group to bolster a stable, safe, and eco-friendly value chain. To achieve this, we have integrated environmental, social, and governance considerations into our supplier management process. We also developed mechanisms for the identification and evaluation of ESG risks, and encourage our suppliers to take steps forward in their ESG management and practices.

During the reporting period, Shuanghui Development formulated and issued the *Supplier Code of Conduct*, encouraging its raw and auxiliary material suppliers to deliver better performance in fulfilling their social and environmental responsibilities. In addition, Shuanghui Development integrated ESG considerations into various policies such as the *Procurement Supplier Management System* and *Procurement Center Anti-Corruption Management System* to ensure suppliers continuously improve their sustainability practices. In particular, for the procurement of live hogs, suppliers are required to sign the *Statement on Live Hogs Supplied*, committing on their compliance with relevant national laws and regulations in the use of feeds, additives, drugs, and other aspects of the rearing process.

Shuanghui Development's Sustainable Development Requirements for Suppliers

Business ethics requirements

- Establishing and continuously broadening reporting channels, such as emails and telephones
- Signing the Anti-Bribery Statement, clearly stating the scope of procurement and the penalty standards for noncompliance

Environmental protection requirements

- Requiring suppliers to comply with all relevant environmental laws and regulations for waste management and pollution control
- Requiring suppliers to explore new energy sources, prioritize advanced environmental protection, energy-saving technologies, and efficient, low-pollution raw materials, and optimize transportation routes to reduce carbon emissions

Farming management requirements

- Implementing the *Hog Purchase and Sale Agreement*, clearly requiring suppliers to protect animal welfare in the process of livestock farming
- Requiring suppliers to sign the *Hog Purchase and Sale Agreement* and *Statement on Live Hogs Supplied*, ensuring that all feed, additives, and drugs used in the rearing process comply with the applicable laws and regulations and do not contain prohibited substances such as clenbuterol
- · Requiring suppliers to maintain a good barn environment, and ensure balanced feed nutrition for the animals

In China, Shuanghui Development established a risk identification and evaluation mechanism, which involves pre-assessment, on-site assessment, and an audit on suppliers' sustainability risks. We identify high-risk suppliers based on various factors such as (1) production features, application scope, application route, and potential risks; (2) common problems uncovered during flight inspections in recent years; and (3) historical risk issues on quality and delivery. As of the end of the reporting period, Shuanghui Development conducted flight inspections on 147 suppliers who provide raw materials, auxiliary materials, and packaging materials, of which 16 were discontinued due to failure in standard-keeping and non-compliant labeling. Shuanghui Development also conducted on-site audits on a total of 555 suppliers, of which 69 were removed due to compliance failure.

In the U.S., Europe, and Mexico, Smithfield's *Supplier Code of Conduct* outlines expectations for suppliers in the areas of business integrity, anti-corruption, human rights, equal treatment, occupational health and safety, and environmental protection. When identifying strategic suppliers, Smithfield considers their ability to assist in achieving its sustainable goals. In addition, Smithfield has formed a collaboration with its largest packaging suppliers to jointly explore recyclable solutions to improve resource efficiency. Smithfield has several photovoltaic projects underway; commissioning progress will be updated in future reports.

4.1.3. Supplier Biodiversity Conservation

In addition to expanding its product range, WH Group continues to promote sustainable actions in raw material procurement, advocating its upstream suppliers to conserve biodiversity and adopt green practice.

WH Group made a commitment to promoting biodiversity conservation in its *Corporate Principles* and prioritizes suppliers who demonstrate efforts to avoid direct or indirect harm to biodiversity. In China, Shuanghui Development is working with its upstream and downstream suppliers, construction contractors, and partners to uphold biodiversity conservation in various aspects such as environmental protection, construction, soil and water conservation, and energy conservation.

Shuanghui Development Biodiversity Protection Requirements for Construction Contractors

- Prioritizing the use of low-noise equipment, setting up on-site sewage collection and simple treatment facilities, and mixing mortar and concrete on site according to the dosage to avoid spillage, leakage, or disposal of excess materials. Preparing a soil and water conservation plan report and report form in accordance with the relevant requirements of the Water and Soil Conservation Law, designing, constructing, and using soil and water conservation facilities at the same time as the main project, conducting regular soil and water conservation monitoring, and promptly completing the completion inspection
- Requiring the construction contractor to continuously optimize energy consuming equipment, save energy, and reduce emissions to minimize the impact on local biodiversity

The Group recognizes that large-scale food production with raw materials sourced from biological resources may have irreversible impacts on climate change and the ecological environment, and has planned to develop a sustainable sourcing policy, incorporating raw material certification standards, and providing detailed guidance on the sourcing of raw materials such as seafood, palm oil, butter, and dairy products to further the Group's commitment to biodiversity conservation. As of the end of the reporting period, the major palm oil suppliers of the Group held valid certification issued by the Roundtable on Sustainable Palm Oil (RSPO).



4.2. Animal Welfare

WH Group is committed to animal welfare — an area where the Group takes lead in sustainable development in the industry. We shoulder our responsibility and implement measures in various areas, including animal feeding and feed safety, safe transport and harvest, and biosecurity management, to ensure the proper treatment of animals. The Group aims to make positive impact in shaping appropriate industry standard practices in animal welfare. As of the end of the reporting period, Smithfield's farming business met approximately half of its meat processing demand, while Shuanghui Development followed a strategy to expand upstream and progressed with an early stage animal farming capacity.

We strictly abide by all laws and regulations where we operate

China: Animal Epidemic Prevention Law of the People's Republic of China, Biosecurity Law of the People's Republic of China, Document No. 194 of the Ministry of Agriculture and Rural Affairs

Europe: European Convention for the Protection of Animals Kept for Farming Purposes, European Convention for the Protection of Animals during International Transport, Agreement on International Humane Trapping Standards

4.2.1. Animal Welfare Principle and Policy

WH Group sets its guideline in animal welfare and related practice in its *Corporate Principles*, and its subsidiaries have developed their own policies and action plans respectively referencing the global prevailing standards, including the Animal Welfare Standards of the World Organization for Animal Health, the Quality Standards of the U.S. National Pork Producers Council, the U.S. Transport Quality Assurance, and the EU Animal Welfare Quality Assessment System.

Animal Welfare Principles/Policy of WH Group

Animal Welfare Principles of Shuanghui Development

Maintain the nutritional needs and health and vitality of animals by making readily available water and food as well as other conditions that meet basic physiological needs

- Provide a safe and comfortable shelter where animals display healthy and comfortable behaviors (including activity, rest and social behavior) and are protected from harsh weather
- Provide required treatment to alleviate pain from diseases and implement appropriate pain management techniques if necessary
- Avoid unnecessary long-distance transportation
- Implement humane handling and harvesting

Animal Care Policy of Smithfield

- Design, maintain and operate the shelter to provide a physical environment that meets the animals' needs
- Ensure access to adequate water and high-quality feed to meet animal nutrition requirements
- Implement humane treatment of animals that ensures their well-being and complies with all applicable legal and regulatory requirements
- Identify and appropriately treat animals in need of care
- Timely use of humane methods to euthanize sick or injured animals not responding to care and treatment

In China, Shuanghui Development developed policies and manuals, including the *Animal Welfare Manual, Animal Welfare Guide for Harvesting*, and *Poultry Division Animal Welfare Program*, and conducts training for all employees in relevant positions to ensure conformity with the management procedures in daily operation, which are also enabled by the latest technology and equipment. Shuanghui Development's animal welfare management system is designed to manage the environment, facilities, equipment, and feeding behaviors from various perspectives such as physiological, environmental, hygienic, behavioral, and psychological well-being. During the reporting period, Shuanghui Development adopted a modern design for chicken coops where temperature and humidity are constantly monitored, providing animals with a safe and comfortable environment. Shuanghui Development conducts internal audits and facilitates on-site audits of animal welfare by its clients. Any potential issues revealed during these audits are duly addressed.

In the U.S., Smithfield established an Animal Care Committee as early as 2002, a pioneer in the industry. Over the years, Smithfield has operated a system of animal care with an evolving set of policies, representing industry leading animal welfare practices. Regular audits of animal production operations are conducted, in particular on its world-wide animal care management system, which was scored with excellence (97%–100%). Additionally, Smithfield requires its food ingredient suppliers to undergo annual Global Food Safety Initiative (GFSI) certification or equivalent. In the U.S., Smithfield's management system for animal welfare is in accord with the guidelines of the U.S. National Pork Board (NPB) Pork Quality Assurance® Plus (PQA® Plus) program, the Common Swine Industry Audit (CSIA), and the EU animal welfare standards, in addition to domestic laws and regulations. Furthermore, all U.S. suppliers are required to implement an animal welfare policy in their respective operations and hold valid PQA® Plus certification. Smithfield's operation in Mexico is certified by the Cloverleaf certification system.

Over approximately 70% of the Group's hog farming business is located in the U.S., while livestock farming in China undergoes an initial expansion. In this regard, we provide animal welfare guides to hog farming partners and contracted farmers, who are required to comply in areas such as disease prevention, routine veterinary care, biosecurity, and safe and comfortable housing. We also provide suppliers with training courses to ensure animal welfare is maintained across our production value chain.

4.2.2. Animal Production and Feed Safety

WH Group's Policies and Systems

China: Feed Processing Instructions, Feed Recycling Machine Handling Management Practices, Feed Material Quality and Safety Standards, Feed Accessories Quality and Safety Standards, Veterinary Drug Quality and Safety Standards, Poultry Division Veterinary Drug Safety Management Practices, Standard Operating Procedures for Nonconforming Feed in the Processing Process

Ensuring the safety of animal production and feed is essential for maintaining their well-being. Therefore, we have put in place a comprehensive feed safety management system and feeding safety assurance initiatives to maintain hygienic and safe housing of animals. Currently, both Smithfield and Shuanghui Development use self-produced feed to rear livestock and poultry.

In China, Shuanghui Development carries out a standardized management approach in animal production and feed safety. We only use materials for feed production from those regulated in the national *Feed Ingredients Catalogue* and *Feed Additives Catalogue*, and anti-coccidia and traditional Chinese medicine additives approved by the Ministry of Agriculture and Rural Affairs' Announcement No. 246. We conduct internal inspections on materials following established procedures before putting them to use. Furthermore, Shuanghui Development takes strict measures to eliminate prohibited drugs and compounds in accordance with the Ministry of Agriculture and Rural Affairs' regulations on prohibited drugs related to feed and animal feeding. Shuanghui Development conducts annual sampling and testing on prohibited additives to verify the quality and safety of feed. During the reporting period, raw material inputs for feed production sampling achieved 100% conformity.

We use automated farming technology and apply leading standards to provide comfortable environment for animals by closely monitoring lighting, temperature, humidity, and air quality. Our hogs are raised with science-based formula at appropriate feeding frequencies, with access to plenty of clean drinking water in hygienic housing. In doing so, we are able to reduce disease incidence and improve survival rates.

In addition to ensuring animal feed safety, Shuanghui Development has established a strict veterinary drug safety control system to ensure that the veterinary drugs to treat sick animals are safe and effective. We also maintain a list of commercial broiler drugs, each items are reviewed, filed and approved via our system to strictly regulate drug use in broiler feeding.

Shuanghui Development Veterinary Drug Safety Management Measures

Procuring veterinary drugs Receiving veterinary drugs Using veterinary drugs We have established We evaluate veterinary Licensed veterinarians are drug suppliers based on standard operating proceresponsible for clinical the Veterinary Drug Safety dures for testing and quality diagnosis and prescribing Management Code and identification of procured targeted treatment for have strict supplier veterinary drugs. Regular animals. WH Group strictly approval thresholds to sampling is conducted for follows the Veterinary ensure that only safe drugs different veterinary drugs Pharmacopoeia of the from various manufacturers, are procured People's Republic of China, and tests are conducted to Veterinary Drug Quality identify prohibited ingredi-Standard and other relevant ents and non-prescription regulations to ensure ingredients, to ensure that compliant drug treatment the quality of veterinary drugs is strictly controlled

In the U.S., Europe, and Mexico, we conduct regular reviews and appropriate amendment on food safety policies for all feed mills, which provide grounds for our food safety plan updates. We perform daily testing and reporting of trace ingredients and ingredient data for feed, as well as aflatoxin and vomitoxin in feed grains, to ensure safe feed in animal raising practice.

4.2.3. Antibiotic Use

In addition to providing safe feed for animals, we also place emphasis on the strict control of antibiotic drugs. We recognize the potential risks of improper use and residues of antibiotics to animal health and the safety of WH Group's meat products. The Group has made a clear commitment to the strict control of antibiotic drugs and requires all suppliers to comply with our relevant policies and use antibiotics responsibly for animal health and food safety. We conduct regular preventive health checkups on animals in our own facilities and follow veterinarians' prescriptions in using vaccines and antibiotics.



Our Commitment



Antibiotics and other drugs are used solely for the purpose of treating animal diseases, which follow strict veterinary approval procedures as required by laws and regulations.



During the reporting period, we have seen a decline in the antibiotics usage in hogs at our operations in China and the U.S.. The Group's antibiotic usage was 260 mg/kg in China, decreased by 4.4% from last year; usage in the U.S. business was 239 mg/kg, dropped by 3.3% from last year. Antibiotic usage in our farms in Poland, Romania, and Mexico was 218 mg/kg, 225 mg/kg, and 291 mg/kg, respectively.

In China, Shuanghui Development is actively responding to national veterinary drug residue monitoring programs for livestock and poultry and the monitoring program for bacterial resistance of animal origin. Shuanghui Development gradually reduces or discontinues the use of certain antibiotics per its internal *Veterinary Drug Safety Management Code*, and, in particular, implemented the Antibiotic Reduction Plan in the breeding of white-feathered broilers. Shuanghui Development has introduced the *Chicken Product Batch Traceability and Safety Control Code*, which strictly controls antibiotics across the aspects of purchase, inspection, storage, and use of veterinary drugs. It has also ceased using antibiotic drugs such as enrofloxacin, erythromycin thiocyanate, and ceftiofur. Shuanghui Development explores antibiotic alternatives, using substances such as acidulants and microecological preparations to replace antibiotics.

In the U.S., Europe and Mexico, Smithfield has developed an *Antibiotics Use Policy* that sets out guidelines on the use of antibiotics in terms of preventive management, veterinary oversight, limited use and strict compliance with all applicable laws and regulations. The policy aligns with the U.S. Food and Drug Administration (FDA) guidelines that require antibiotics to be used only when necessary for animal health and food safety and prohibit the use of antibiotics classified as important for treating human diseases for feed efficiency and growth promotion purposes. Moreover, Smithfield has established an Antibiotics Task Force, which is a cross-functional team comprising employees from different departments such as hog production, corporate affairs, food safety and quality, as well as sales and marketing. This team works together to find creative ways to maintain Smithfield's leadership position on responsible antibiotic use. Smithfield regularly tracks and publicly reports its antibiotic use, and continually promotes alternative products and new technologies to safeguard animal health and reduce antibiotic use.

4.2.4. Measures for Safe Transport and Harvest

Apart from using antibiotics responsibly, we also fully implement animal care initiatives during the transfer and harvest process.

Shuanghui Development

The Animal Welfare Manual and Animal Welfare Guide for Harvesting and Processing require keeping animals in a comfortable state during rearing, transportation, and harvest. Shuanghui Development practices humane harvest, and for pigs, we use advanced carbon dioxide stunning or electrical stunning technology to avoid as much distress as possible. For poultry, we set up holding sheds equipped with ventilation and spray cooling systems and harvest lines equipped with massage board to keep the chickens comfortable throughout the process.

Smithfield

In the U.S., all drivers who transport our animals must be trained and certified under the National Pork Board's Transport Quality Assurance program, which provides education and guidelines on all aspects of hog handling and transportation. Smithfield uses electrical stunning which is recommended by the National Alliance on Mental Illness (NAMI) as an effective method to comply with federal humane slaughter regulations, to ensure animal care.

ENHANCING VALUE CHAIN PARTNERSHIP (continued)

4.2.5. Biosecurity Management

Biosecurity plays a crucial role in ensuring the steady growth of the Group and maintaining the stability of global food supply. That is why we are continuously strengthening our standardized biosecurity management practices and investing in this critical area, taking responsibility as a leader in the industry.

WH Group's Policies and Systems

China: Poultry Division Biosafety Management Code, Poultry Division Epidemic Prevention and Animal Protection Program Management Code, Farm Biosafety Management Code, Hatchery Biosafety Management Code

Shuanghui Development

Smithfield

Shuanghui Development continues to follow up on the latest laws and regulations related to the prevention and control of African Swine Fever (ASF). The company requires all farming facilities to implement appropriate biosecurity measures according to its own prevention and control level, and to cut-off pathogen transmission routes. Taking into consideration the epidemic prevention and control pressure in different regions, it also tracks the effect of avian influenza prevention and epidemiological situation by testing the antibodies and pathogenic situation of avian influenza (H5, H7, and H9) to ensure that the reared animals have sufficient immunity. During the reporting period, Shuanghui Development issued a *Notice on Strengthening Prevention and Control of Highly Pathogenic Avian Influenza in Autumn and Winter* based on the *Notice on the Implementation Plan for the Inspection of Prevention and Control of Major Animal Diseases in Autumn 2022* issued by the China Center for Animal Disease Prevention and Control. The notice was distributed to all grassroots farms to strengthen prevention and control measures.

The Company tightly managed the five major risk sources: people, vehicles, objects, hogs and risk animals, to prevent both externally introduced risks and the internal spread of biological risks. It set up off-site pre-treatment points, hog transfer stations and reserve breeding pig isolation houses. It also had internal measures in place, such as building sealing and negative pressure ventilation, and implementing physical fences, zoning management and batch production.

Shuanghui Development has formed extensive collaborations with vaccine companies to investigate and stay informed about domestic and international outbreaks of avian influenza in birds, as well as the evolution of virulent strains, using external resources for research and epidemiological management. In addition, the company can use this information to update vaccine strains and adjust biosafety prevention and control levels promptly, among other measures, to effectively prevent and control avian influenza in birds.

Smithfield has implemented a comprehensive policy throughout the animal production process. In Mexico, Smithfield has established a veterinariansupervised animal health management program that includes biosecurity protocols to reduce the risk of disease transmission, vaccination programs for major pathogens, and programs for early detection of disease using advanced diagnostic techniques. To improve the living environment of animals and reduce biosecurity risks, Smithfield has also installed and used facilities such as dry shower systems, truck, and trailer cleaning systems, as well as ventilation and filtration systems.

MANAGING RESOURCE AND POLLUTION



UN Sustainable WH Group Corporate Principles Development Goals Climate Change and Environment WH Group is committed to monitoring and incorporating industry best practices and exploring relevant innovative technologies while allowing subsidiaries to steer priorities suitable to their local circumstances through upgrading equipment and processes underpinned by dedicated capital expenditures. We prioritize water efficiency by way of recycling and alternative water withdrawals through technological innovation and process modification, at the same time, lifting our capacity in automated monitoring over water discharge. We are committed to reducing both volume and/or intensity in wastewater, air emissions and solid waste through process innovation. We manage product packaging by way of reducing excessive wrap, replacing with lightweight materials and adopting recycle methods. Resource management Energy and emissions management

Resource and pollution management is a pivotal component of the Group's environmental management system, whereby environmental priorities of each regional operation are established, alongside resource management focus on water efficiency and the use of packaging materials. We drive optimal packaging efficiency by reducing usage and weight, while promoting recycling. We also work on reducing the volume and intensity of wastewater, waste gases and solid waste through process innovations, while ensure compliance to all emission-related regulations.

5.1. Environmental Management System

WH Group operates its environmental management systems with supporting organizational structure and clear division of responsibilities at each operation site, to perform scheduled tasks and deliver results. (Please refer to the 2022 Shuanghui Development ESG Report and the 2022 Smithfield Sustainability Impact Report for details).

Environmental Organization Structure

Shuanghui Development	Smithfield
Managed by: Shuanghui Development Safety and Environmental Protection Management Committee	Managed by: Smithfield's Regional Directors of Environmental Affairs
Executed by: Safety and Environmental Protection Leading Team on operation site	Executed by: Environmental officers of operation site
Remuneration of the management team is linked with the company's environmental performance. Managers, deputy managers and other managerial personnel are subject to appraisal covering KPIs on safety and environmental performance, with punitive measure in the event of environmental and pollution incidents.	

WH Group promotes internally the environmental management system ("EMS") certification at production sites to bring relevant practices at a consistent level, and encourages internal audit at the same time to ensure the reliability and effectiveness of the system.

Environmental Management System Certifications

China: by the end of the Reporting Period, 35 of Shuanghui Development facilities were 14001 certified. In addition, annual internal audit were carried out with a passing rate of 100%.

The U.S. and Europe: by the end of the Reporting Period, all of Smithfield's operation sites (except new acquisitions and those where certification is not applicable) and all companyowned farms had been ISO 140001:2015-certified.

5.2. Water Resource Management

Water efficiency management is an important initiative for the Group to limit impact on the ecological system while carrying out its production activities. We use water in livestock farming primarily for animal feeding and house cleaning, and in harvesting and processing for sterilization and cleansing. The Group's subsidiaries assess the impact of water risk on production to manage and control water risk. We promote the conservation and recycle of water resources by using water-saving equipment and recycling technologies.

We abide by all laws and regulations where we operate	WH Group Internal Policies and Systems		
China: The Water Law of the People's Republic of China	China: Shuanghui Development Environmental Protection		
U.S.: Clean Water Act	Management Regulations		
Europe: Water Framework Directive	U.S.: Smithfield Environmental Policy, Water Policy		

The Group's subsidiaries have set water management targets respectively and taken multiple measures to save water and improve water efficiency.

Shuanghui Development	Smithfield	
By 2030, reduce water consumption by 10% per unit of main product compared to a 2019 baseline.	Reappraise its entire U.S. water supply footprint and adopt internationally recognized water management standards by 2025.	

5.2.1. Risk Management

In the U.S., Smithfield has been utilizing the World Business Council for Sustainable Development's (WBCSD) Global Water Tool and the GEMI Local Water Tool developed by the Global Environmental Management Initiative (GEMI) since 2010, to assess its water impact. In 2021, Smithfield further optimized the water footprint assessment tool using a total cost of water model and completed a comprehensive water analysis, which helped better understand the current and future groundwater demands across the U.S. company-owned locations, contracted hog farms and grain suppliers, as a way to predict potential water risks more accurately and implement more targeted water conservation actions.

In China, Shuanghui Development put in place water management mechanisms at different levels to monitor and manage water risks and enhance water management.

Water Resource Management Structure at Shuanghui Development

Headquarters at Shuanghui Development

- The Equipment Management Center revises for a tighter water target per product made for each operation site annually, conducts comprehensive inspection on equipment management and energy consumption twice a year, and reports any issues uncovered.
- The audit and inspection departments lead water audit on each operation site, report relevant issues and where necessary, supervise the factories concerned to carry out rectifications.

Business Divisions at Shuanghui Development

- Implement and track water standards in production activities
- Develop water conservation plans for newly-built, expanded and renovated factories projects, ensuring that water-saving facilities are designed, constructed and launched simultaneously with the main site

Production Facilities of Shuanghui Development

- Implement the water resource consumption standard and enhance the process control to avoid waste of resource and reduce water consumption
- Maintain communication with regulators to assess the Company's risk in water source

Shuanghui Development has formulated water management policies and plans, and regularly assesses water utilization risk based on data tracked. It has made an Emergency Plan addressing possible water risks and set up a taskforce to lead emergency responses. In addition, Shuanghui Development has constructed water storage tanks and pumping stations equipped with double-loop water supplies 24-hours on duty to pre-empt risks in water usage at operation sites.

5.2.2. Water Conservation and Efficiency Improvement

We manage water consumption by way of reducing the use of freshwater and using recycled water in our production activities. During the reporting period, our subsidiaries have carried out several water conservation projects, however, additional water demand has been recorded resulting from the Group's business expansion.

Operation Location	Measures of Water Conservation and Efficiency Improvement
China	Replace the hogs' drinking water equipment in farms with drinking bowls, saving 1,800 tons of water per year.
	Use the boiler softening backwash water and boiler discharge water to clean pigsties, reducing water consumption by 760 tons per year.
	 Use water-saving sprinkler replacing current equipment in hog harvesting production, saving on average more than 30 tons of water per day per plant, for 2022, saved a total of 160,000 tons of freshwater.
	 Install the EST system of electrolysed water to refrigeration systems to descale the minerals adhered to the evaporation pipe, reducing the replacement frequency of water coolant and saving water consumption by 40%.
	Use pre-cleaner drainage instead of water for pig hair blowing, saving 280 tons per month, an equivalent of approximately 3,300 tons per year.
	 Reduce the power of circulating pumps, saving freshwater by 38 tons per day, an equivalent of approximately 11,000 tons per year.
	• Installed vacuum pumps with throttling devices, reducing water consumption by approximately 571,000 tons in 2022.
The U.S.	Installed "smart valves" at Monmouth facility reducing water use by up to 840 metric tons per year.
Poland	 Installed water meters to monitor consumption at Morliny plant, collected data serve as a reference for targeted water conservation actions. approximately 5,800 cubic meters of water per month can be saved.
	Added closed water circuit in packaging machines at the Animex Kutno K2 plant, reducing water consumption by 14,400 cubic meters per year.

In addition to its own water conservation and efficiency improvement, WH Group also follows the water performance of its partners in the value chain. In the U.S., Smithfield pressed ahead with the SmithfieldGro project, working with upstream farmers to reduce pesticide pollution to water resources as well as soil erosion.

During the reporting period, the types of water resources consumed by WH Group are as follows. In addition, WH Group continued to promote water reuse with an approximate of 6.50 million cubic meters of water reused.

WH Group's Water Consumption

Water consumption	Unit	2020	2021	202212
Consumption of freshwater	Million cubic meters	67.95	67.81	75.14
Municipal water	Million cubic meters	34.59	36.50	39.24
Surface water	Million cubic meters	4.53	3.46	3.48
Ground water	Million cubic meters	28.82	27.85	32.43
Freshwater consumption intensity	Cubic meters per metric ton of products produced	7.85	7.28	8.37



The coverage of this data has been expanded compared with the 2021 report, adding the Mecom Group acquired in 2021, GCM Group majority-held in 2021 and Nantong Huifeng New Material Co. Meanwhile, the livestock farming business in Fuxin and Xihua in China have been undergoing considerable growth following the strategy of upstream expansion during the reporting period. The horizontal and vertical industrial expansion led to an increase in both the total volume and intensity of our water consumption. The Group plans to provide granular data reflecting each segment going-forward and explain data fluctuations accordingly if any.

5.3. Discharge Management

5.3.1. Wastewater Management

WH Group does not tolerate any non-compliance on discharge and emission performance, and seeks to reduce the volume and intensity of wastewater discharge to mitigate our impact on the environment.

We abide by all applicable laws and regulations where we operate

China: The Water Law of the People's Republic of China, Cleaner Production Promotion Law of the People's Republic of China

U.S.: Clean Water Act

Europe: Water Framework Directive

In China, Shuanghui Development's primary sources of wastewater include cleaning in packaged meat processing production facility cleansing, and domestic wastewater. While ensuring full compliance, Shuanghui Development follows internal policies such as Standardization of Wastewater Discharge Stations Safe Operations to closely monitor and effectively control wastewater discharge in each plant, particularly on pollutant concentration such as chemical oxygen demand (COD), phosphorus, nitrogen, and suspended solids.

In the U.S. and Europe, apart from reducing wastewater generation and discharge, Smithfield also makes investment in wastewater treatment facilities to meet the ever evolving local regulations in various locations. For example, the wastewater treatment facility for production site in Sioux Falls will be completed by 2023, which adopts state-of-the-art technology for additional water treatment in order to mitigate the impact of production operations on the surrounding waters.

During the reporting period, WH Group discharged a total of wastewater as follows.

WH Group's Wastewater

Wastewater	Unit	2020	2021	202213
Wastewater	Million cubic meters	57.80	54.97	45.10

5.3.2. Air Emissions Management

Air emissions from the Group's operating activities have impact on air quality, contributing to an already weakened ecosystem, and might even affect the nearby residents. Hence, WH Group strictly abides by applicable laws and regulations where it operates, and continues to exert rigorous management measures on emissions, bringing consistency in management skills and standards.

We abide by all laws and regulations where we operate.

China: Air Pollution Prevention and Control Law of the People's Republic of China, Cleaner Production Promotion Law of the People's Republic of China

Europe: Clean Air Act, the Industrial Emission Directive

The scope of this data collected and shown in this table are expanded from those in 2021. Additional information includes Mecom Group acquired in 2021, GCM Group became majority-held in 2021, and Nantong Huiyufeng New Material Co. acquired in 2022.

WH Group's subsidiaries require all operation sites to systematically monitor, collect and analyze emission-related data, and respond to irregular situation promptly. In China, Shuanghui Development has engaged a third party professional service for the monitoring of emissions data, which are reviewed on both completeness and accuracy before submitting to relevant government authorities on a regular basis. In the U.S. and Europe, Smithfield optimizes the production process of packaged meat and energy mix in an effort to reduce air emissions. For major pollutants such as nitrogen oxides (NO_x) and sulfur oxides (SO_x) , Smithfield regularly reports to regulators for environmental protection and makes public disclosure in its annual *Sustainability Impact Report*.

Emissions Management of WH Group

Smithfield Shuanghui Development Apply vacuum hot water boilers with higher vacuum In the U.S., Smithfield shortened the product cook time thermal efficiency to reduce natural gas consumption by replacing clear casings with pre-smoked casings. and exhaust emissions. In the U.S., Smithfield reduced the use of wood chips as Replace conventional coal-fired boilers with biomass fuel to lower emissions from the source. gasification boilers to reduce exhaust emissions. In Poland, Smithfield introduced a new type of power saver Use central heating to reduce emissions from boilers. at the Morliny plant that reduces emissions as well as gas consumption. Replace offset printing with watermark printing technology to reduce exhaust emissions. In Poland, Smithfield modernized some boilers to reduce exhaust emissions. Install biological deodorization devices to reduce odor gas emissions.

The air emissions of WH Group in China during the reporting period are shown in the table below. For additional regional air emissions, please refer to Smithfield Foods' Sustainability Impact Report 2022.

WH Group Air Emissions in China

Type of emissions	Unit	2022
SO _x emissions	Metric ton	17.85
NO _x emissions	Metric ton	80.99

5.3.3. Solid Waste Management

WH Group complies with applicable laws and regulations in regions where it operates and has established internal policies and systems on solid waste management. We have defined our position on solid waste management in our *Corporate Principles*, emphasizing to minimize the volume generated and optimize the recyclable amount for re-utilization.

We abide by all applicable laws and regulations where we operate

China: The Law of the People's Republic of China on Prevention and Control of Solid Waste Pollution (2020 Revision), Cleaner Production Promotion Law of the People's Republic of China

U.S.: Solid Waste Disposal Act

Europe: Waste Framework Directive

WH Group has set targets for solid waste management¹⁴ in all operating regions who deliver respective progress accordingly.

WH Group Solid Waste Management Targets

Shuanghui Development: the comprehensive utilization rate of waste at 95% or above by 2030



zero-waste-to-landfill certification at 0 9 our U.S. facilities by 2025

In China, to meet the legal requirements, Shuanghui Development's operation sites have carved out dedicated storage place for solid waste which is manned with a log system, recording details such as type, volume and receiving party. All solid waste is collected by qualified third party service companies for treatment required by law and regulation.

In the U.S., Smithfield implements waste reduction initiatives through external cooperation. It set a goal to achieve zero-waste-to-landfill certification at 75% of the U.S. facilities by 2025. By the end of the reporting period, 18 facilities achieved zero-waste-to-landfill (ZWTL).

Food Loss and Waste

WH Group puts control measures in the production process to ensure product quality while reducing the waste generated, in particular food waste. Meanwhile, we collaborate with partners to put in use certain typical by-products of food industry.

- Food loss: In China, Shuanghui Development sets KPIs of comprehensive product yield to gauge the recyclability of raw materials, such as by-products and scraps; In the U.S., Smithfield conducts a prevention evaluation on Food Loss and Waste (FLW) in operation sites and formulates action plans correspondingly.
- Food waste: In the U.S., Smithfield joins hands with renowned manufacturers to recycle the breadcrumbs generated during
 production and convert it to hog feed with confirmation from nutritionists. Such conversion provides alternative raw
 materials for feedstuff reducing resource consumption, and also helps lower the overall weight of waste sent to the landfill.

Smithfield plays an active role in reducing food loss and waste in the U.S. Smithfield has joined a variety of organizations and initiatives to relieve the burden caused by food production and consumption on the natural environment together with partners sharing the same ambition.

Key Initiatives that Smithfield Joined

U.S. Food Loss and Waste 2030 Champion

• By 2030, the member companies aim to reduce food loss and food waste caused by corporate business operations by 50% in the U.S.

The 10x20x30 Initiative

• The organization advocates halving food loss and food waste by 2030.

Farm Powered Strategic Alliance (FPSA)

- The organization is devoted to promoting the reduction and recycling of food waste and expand the production of renewable energy in the U.S.
- In China, domestic waste disposal facilities are municipal infrastructure, and enterprises cannot choose the method of domestic waste disposal on their own, so the waste mentioned in Shuanghui Development's target only refers to the waste generated during production and operation, excluding domestic waste. In addition, the waste in Shuanghui Development's target does not include livestock and poultry waste.

Manure as Resource

As we move forward with our vertically integrated business strategy, it has become apparent that livestock manure in our farming business is one of the most significant wastes. The reuse and disposal of manure resource contribute to a lower carbon footprint and produce economic benefits. Currently, WH Group promotes manure resource utilization from the following two perspectives:

- Manure to fertilizer: Working with fertilizer suppliers to utilize manure as a resource. In the U.S., Smithfield reached a strategic
 partnership with Anuvia™ utilizing organic matter in hog manure on farms to create sustainable, commercial-grade
 fertilizers. In China, Shuanghui Development promotes the circular economy featuring regional crop production and
 farming, using manure produced from farms as an organic fertilizer with a conversion rate of 100%.
- Manure to energy: Converting manure to energy constitutes a critical path toward a low-carbon society. In the U.S., Smithfield
 collaborates with carbon recycle energy companies to produce RNG through manure fermentation, which not only reduces
 the expense of waste disposal but also gradually reduces our reliance on fossil fuels. In China, Shuanghui Development is
 conducting feasibility study of a manure-to-energy project, which will be launched once the plan is mature.

During the reporting period, we had 100% resource utilization of organic waste such as pig manure. Other solid waste are as follows:

WH Group Recycled Non-hazardous Waste

Volume of recycled non-hazardous waste	Unit	2020	2021	202215
Scrap metal	Metric ton	18,605	12,146	13,356
Waste plastic	Metric ton	7,892	7,845	7,340
Wastepaper	Metric ton	37,265	48,591	41,907
Coal cinder	Metric ton	4,900	5,003	162

WH Group Disposed Non-hazardous Waste

Volume of disposed non-hazardous waste	Unit	2020	2021	202216
Total	Metric ton	53,736	59,798	80,250
Intensity of non-hazardous waste disposal	Kilogram per metric ton of products produced	6.2	6.4	8.9

WH Group Disposed Hazardous Waste

Volume of disposed hazardous waste	Unit	2020	2021	202217
Total	Metric ton	799	508	1,408
Intensity of hazardous waste disposal	Kilogram per metric ton of products produced	0.09	0.05	0.16

The coverage of this data does not include the GCM Group acquired in 2021.

The coverage of this data has been expanded compared with the 2021 report, adding the Mecom Group acquired in 2021, GCM Group majority-held in 2021 and Nantong Huifeng New Material Co. Meanwhile, the livestock farming business in Fuxin and Xihua in China have been undergoing considerable growth following the strategy of upstream expansion. The horizontal and vertical industrial expansion led to an increase in the total volume and intensity of our non-hazardous waste. The Group plans to provide granular data reflecting each segment going-forward and explain data fluctuations accordingly if any.

The coverage of this data has been expanded compared with the 2021 report, adding the Mecom Group acquired in 2021, GCM Group majority-held in 2021 and Nantong Huifeng New Material Co. Meanwhile, the livestock farming business in Fuxin and Xihua in China have been undergoing considerable growth following the strategy of upstream expansion. The horizontal and vertical industrial expansion led to an increase in the total volume and intensity of our hazardous waste. The Group plans to provide granular data reflecting each segment going-forward and explain data fluctuations accordingly if any.

5.4. Packaging Material Management

Packaging material is one of the resources we consume in the Group's operations. WH Group has been persistently looking for ways to reduce the consumption of packaging materials, while at the same time using recyclable packaging materials where possible to replace the traditional ones to improve resource efficiency. In the U.S., Smithfield has already set an action goal of achieving 90% recyclable, reusable, or industrially compostable consumer packaging by 2030, while also reducing the use of virgin petroleum-based plastic by 50% by 2030 compared to a 2019 baseline. In Poland, Smithfield has set 2020 as a baseline and aims to reduce plastic consumption in packaging materials at an annual rate of 5% by 2025.

Green Packaging Initiative

Consumption reduction

- Shuanghui Development reduced the size of gift packages
- Shuanghui Development introduced high-grade low-grammage base paper to reduce the consumption of base paper
- Smithfield has set up a research team to identify and test alternatives to polystyrene (PS) plastic boxes

Weight reduction

- Shuanghui Development introduced high performance film resin, reducing the thickness and increasing the performance of thin film to lower material consumption, with an estimated decline of 50 tons annually
- In Poland, Smithfield has reduced the weight of plastics in packaging material

Recycling

- Shuanghui Development prioritized the use of single material and biodegradable materials for product packaging
- In 2022, Shuanghui Development put an end to the use of structural composite packaging film for quick-frozen food and other products, as a way to increase the proportion of single-material packaging and the recycle rate of plastic composite film
- All chain stores of Shuanghui Development have introduced biodegradable and starch-based degradable shopping bags to replace nondegradable ones
- Smithfield has established collection and recycling facilities in-house and collaborates with external organizations to provide more consumer-friendly channels to collect and recycle materials

WH Group's consumption of packaging materials during the reporting period is shown below:

WH Group Packaging Material Consumption

Packaging material consumption	Unit	2020	2021	202218
Total	Metric ton	593,242	630,222	682,741
China	Metric ton	226,695	192,315	242,975
The U.S.	Metric ton	213,916	306,628	312,182
Europe	Metric ton	152,631	131,278	127,584
Intensity of packaging material use	Metric ton per metric ton of production	0.07	0.07	0.08

The coverage of this data does not include the GCM Group acquired in 2021.

EMPOWERING EMPLOYEE



WH Group Corporate Principles

UN Sustainable Development Goals

Labor Standards and Employee Rights

We value respectful relationships and encourage enterprising work ethics; we nurture an inclusive culture and provide a safe workplace. Guided by the principles of the United Nations Sustainable Development Goals (UNSDGs) and the United Nations Global Compact (UNGC), we respect and protect individual rights within our operations and across our value chain, supported by a fair and efficient human resources team.

- Employee rights and development
- A culture of mutual respect
- Labor standards

Working Environment and Safety

Most of our employees work in the production lines, where they frequently come into contact with livestock and poultry, and some operate machines. As a result, employee occupational health and safety has always been of the utmost importance to the management team. We focus on enhancing preventive measures to reduce accidents, with an aim to maintain a safer and more comfortable work environment in close alignment with the goal of "good health and well-being", among other United Nations Sustainable Development Goals.

- Management system and targets
- Workplace safety and occupational health
- Emergency response and drills





WH Group considers its employees as an important force to power its sustainable development. We value respectful relationships and encourage enterprising work ethics. With employees' well-being in mind, we respect and protect individual rights within our operations and across our value chain in alignment with UNSDGs and UNGC. We nurture an inclusive culture and provide a safe workplace while building a fair and efficient human resources system. At the same time, we offer multiple communication channels for our employees, carry out various training and talent programs, and provide opportunities for their personal development, enabling each and every one to grow with the Group for a shared future.

6.1. Value-Based Employment

Adhering to the "people-oriented" employment principle, WH Group closely abides by the applicable laws and regulations where we operate and regulates the employment practice with a set of policies. We have been consistently nurturing a positive and healthy workplace culture, facilitating ample protection of the legitimate rights and interests of our employees and supporting their personal development along with the Group.

We abide by applicable laws and regulations where we operate

China: Labor Law of the People's Republic of China, Labor Contract Law of the People's Republic of China

United States: The Fair Labor Standards Act, Americans with Disabilities Act

Europe: Polish Labor Law

6.1.1. Diversity, Equity and Inclusion

WH Group continues to invest in bolstering its employer brand so as to attract and retain talents. Respecting and valuing every employee, we treat people equally regardless of cultural background, gender, nationality, or race. We believe that a corporate culture of diversity, equity and inclusion propels the generation of business solutions from different perspectives, which allow us to pre-empt risks for steady growth.

In China, Shuanghui Development supports gender equality and respects women's right to work, running a merit-based promotion and succession planning system regardless of gender. We have also formulated the Regulations on the Labor Protection of Female Employees and signed the Special Collective Contract for Female Employees to protect the legitimate rights and interests of all female employees. As a partner of the employment services for veterans at the provincial and municipal levels, Shuanghui Development runs a dedicated recruitment service for veterans, in addition to offering appropriate positions for the disabled who holds a disability certificate.

In the U.S., we maintain diversity in our leadership team and workforce through a combination of internal promotions and external recruitment. We are committed to increasing the diversity of our leadership team by promoting and hiring black, Hispanic and other underrepresented groups to reflect at least 30% of supervisors and above as well as female leaders to represent at least 35% of supervisors and above. To implement the Company's employment policy encouraging equity and diversity, Smithfield invested approximately US\$15 million to launch an internal company-wide Unity & Action initiative. By promoting Helping Our Heroes program since the beginning of 2020, Smithfield has made phased progress in delivering its commitment to recruit 4,000 veterans by 2025 to help them integrate into society and return to their families. As of the end of the reporting period, Smithfield has recruited a total of 772 veterans in 2022.

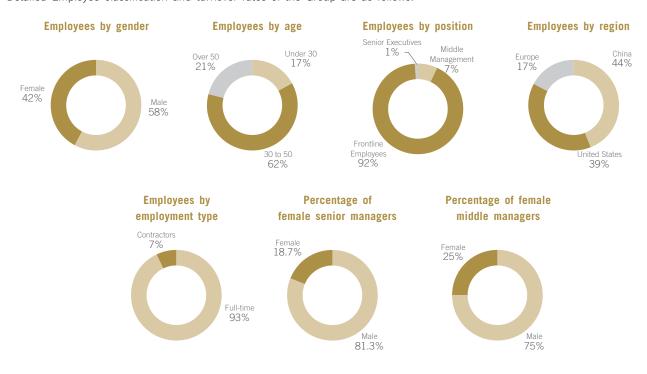
During the reporting period, Smithfield continued to develop four employee-organized business resource groups (EBRGs), including Black Professional Network (BPN), Women's Connect, Smithfield Next, and Smithfield Salutes to strengthen employee connections through interaction, enhancing its culture of diversity, equity and inclusion.

As of the end of 2022, WH Group has a total of 104,739 employees. We have maintained a good gender balance, with female senior executives¹⁹ rising to 18.7%, from 16% last year. Employee turnover increased compared with that of last year, mainly due to the high turnover of front-line employees in the U.S. According to the Bureau of Labor Statistics in the U.S., amidst the Covid-19 pandemic and inflation, the unemployment and resignation rates in the U.S. in the first half of 2022 remained at a high level.



In response to the radical changes in the labor market, Smithfield maintains an equitable and inclusive employment policy. Through a variety of recruitment channels, Smithfield is strengthening its recruitment efforts to meet production needs; in this process it also aims to gradually enlarge the proportion of female, veteran and other minority employees.

Detailed Employee classification and turnover rates of the Group are as follows:

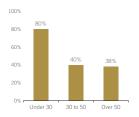


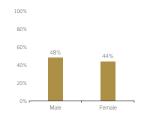
Senior managers generally refer to those who hold important positions in the company's management, are responsible for the company's operation and management, and have access to important information of the company. They mainly include the manager, deputy manager, financial officer, secretary of the board of directors of the listed company, and other personnel as stipulated in the company's articles of association.

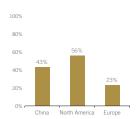
Employee turnover by age

Employee turnover by gender

Employee turnover by region







6.1.2. Recruitment

Strictly abiding by the applicable laws and regulations where we operate, the Group recruits through on-line and off-line channels from campus and the public following our established policies, which prioritize the assessment of candidate's competency desired by the position offered. We are sensitive in the interviewing process, particular in areas where unintended language could give rise to misunderstanding as discrimination. We make employment and promotion decisions regardless of ethnicity, race, gender, sexual orientation, religious belief, cultural and family background. In addition, we support people with disabilities, veterans and ethnic minorities, whose joining helps us create a more diverse workforce.

WH Group's Policies and Systems

China: Standardization of Human Resource Management, Handbook for Shuanghui's Employees, Handbook for Shuanghui's Leaders

United States, Europe and Mexico: Equal Opportunity Employment Policy

Recruitment policy, Employee Handbook

Anti-Harassment Policy

In the U.S., Smithfield makes use of online recruitment through social media and third-party recruitment websites. Meanwhile, data analysis along the recruitment process are conducted in order to enable higher success rate in finding candidate with appropriate profile. In China, Shuanghui Development has been in search for management talents as part of its succession plan, for that aim the Management Rules for the Introduction and Training of University Students was introduced during the reporting period, with specific requirements with transparency including position and profile, process and procedure, remuneration, training content and duration. Shuanghui Development has signed cooperation agreements with 46 universities so as to build a talent pool to fulfill its pipeline. In addition, agencies were engaged to create a dedicated on-line platform for campus recruitment to sustain further efficiency.

WH Group offers competitive remuneration packages following the principle of equal pay for equal work, ensuring same position holders within the same performance grading and similar experience are remunerated consistently regardless of gender. We regularly benchmark and review remuneration indicators based on market dynamics. In China, Shuanghui Development incentivizes employees with a package mix of fixed salary, performance bonus, equity scheme and retirement benefit plan. In the U.S. and Europe, Smithfield offers performance bonus, equity scheme and retirement benefits. It also offers an annual incentive plan and additional rewards for all employees and senior executives on the books.

6.1.3. Labor Rights

WH Group sets store by the protection and maintenance of employees' legitimate rights and interests. Strictly abiding by the applicable laws and regulations where we operate, WH Group has formulated a relevant internal management system to safeguard employees' rights and interests in health, safety, and equal development, and eliminates any workplace discrimination, harassment, and other misbehaviors. At the same time, the Board of directors pays attention to topics relevant to employee rights and interests, and evaluates the effects of related risks and measures.

We abide by applicable laws and regulations where we operate

The United Nations (UN) Guiding Principles on Business and Human Rights

The Universal Declaration of Human Rights (UDHR)

WH Group's Policies and Systems

China: Employee Handbook, Human Rights Policy, Employment Policy on Equal Opportunity, etc.

United States, Europe and Mexico: Equal Opportunity Employment Policy

Human Rights Policy

Work Regulations

Remuneration Regulations

Employee Handbook

We have clearly stipulated in the *Group's Corporate Principles* that the employment of child labor is strictly prohibited. We respect mutual choice between the Group and the employee, and act against any form of forced labor. In China, Shuanghui Development verifies the age and background of new employees through the verification of ID documents, and further confirms the ID's authenticity and consistency through identification device. The Company encourages employees to report any under-aged employment or forced labor through various channels including its audit center hotline, factory employee forums, and human resources management hotline.

WH Group attaches great importance to human rights and respects each employee's right to freedom of association and collective bargaining. We sign and perform employment contracts in line with the applicable laws and regulations in the regions where we operate. In China, all employees of Shuanghui Development have signed a Collective Contract and Wage Collective Negotiation Agreement, which clearly includes measures to effectively protect the rights and interests of employees such as the standard amount of social insurance payment and its contribution ratios, the implementation of irregular working hours management and comprehensive calculation of working hours.

In the U.S., Smithfield commissions third-party audits every year on approximately 25 to 30 factories about their human rights situations in accordance with the four-pillar (Labor Standards and Health, Safety, Environment and Business Ethics) standards of the Sedex Members Ethical Trade Audit (SMETA). In Europe, we also hire external third parties to conduct human rights-related audits as appropriate.

In the U.S., Collective Bargaining Agreements protect Smithfield's union-eligible employees who are employed on the basis of their free will. The Company maintains an open channel with labor unions to support employee rights. In areas absent of labor unions, Smithfield provides a third-party ethics hotline and related procedures to address and resolve employees' concerns. During the reporting period, the coverage rate of employees who signed Collective Negotiation Agreement at Smithfield was 100% in Romania, 59% in the United States, and 15% in Poland. In Mexico, there are two labor unions who hold respective meetings regularly to discuss issues relating to salaries, working conditions, social security and health care. We have not been informed of any violations of employee rights and interests, based on reported and sorted information available per the *Group's Corporate Principles*.

6.2. Occupational Health and Safety

WH Group always regards the health and safety of employees as priorities of our business activities. Aligned with the UNSDGs, we incorporate the concept of "safety-first, prevention-oriented and integrated management" into the details of our operation. We continue to enhance our occupational health and safety system with a prevention-oriented approach, striving to prevent safety accidents and optimize emergency responses, ensuring the compliance of operational activities, and providing employees with a safe, comfortable and healthy workplace.

6.2.1. Health and Safety Management

We abide by applicable laws and regulations where we operate

China: Law of the People's Republic of China on Work Safety, Law of the People's Republic of China on Prevention and Control of Occupational Diseases, Occupational Health Management Regulations in the Workplace

United States: Framework Directive on Safety and Health at Work

The Occupational Safety & Health Act

With strict compliance with the applicable laws and regulations in places where we operate, we improved and revised corresponding internal policies and rules. We identify safety risks, develop and regularly update safety risk lists and strengthen supervision and inspection in production activities to effectively protect the safety and health of employees. The health and safety principles also serve as a model to guide our contractors, who play vital roles in our stable operations and business success.



In the U.S. and Europe, to enhance capabilities in risk identification and accident prevention, Smithfield has adopted Hazard Identification and Risk Assessment (HIRA) in all factories, requiring a comprehensive safety risk assessment for every new production task and new equipment installation or adjustment. In addition, to better prevent risks, Smithfield has set up the "On Guard" Alarm System and established System Integrity Protection Schemes (SIPS), an injury prevention system based on ISO 45001 Occupational Health and Safety Management Systems covering all employees and contractors. The system will collect information about employee health and safety at all workplaces in the U.S. into one database, including audit results, investigations, training, and evaluation to accurately improve injury prevention through digital control means. Smithfield created the position of Corporate Medical Manager, who works closely with on-site nurses and coordinates with the Company's Benefits and Wellness team to improve the efficiency of incident resolution. Smithfield has also established a series of near-term safety management goals, aiming to score 90% minimum in SIPS audits at all places of operations around the globe by 2025.

Smithfield's 2025 Safety Management Targets

- Smithfield's all places of operations around the globe shall score 90% minimum in SIPS audit
- All facilities worldwide have obtained the certification of ISO 45001
- Keeping accident rates consistently lower than that of the global average
- Increasing global workforce safety engagement to 50% and above

In 2022, Smithfield achieved and surpassed safety management goals with a 91% SIPS audit score at all locations worldwide where it operates.

In China, Shuanghui Development has set up a Safety Management Committee chaired by the President of the Company and Safety Production Leading Groups headed by the General Manager in each factory to execute the safety and environmental protection related measures. In this way, responsibilities are assigned to individuals and implementation efficiency is therefore accelerated. At the same time, in order to protect the health of employees in workshops, machine rooms and other places where occupational hazards may occur, Shuanghui Development is equipped with first-aid medicines and emergency supplies. For employees exposed to occupational hazards, annual occupational health checkups are guaranteed. For positions with risks of occupational hazards, Shuanghui Development completes occupational health inspections as required by the relevant laws and regulations, and evaluates the status quo of occupational hazards every three years. For contractors, Shuanghui Development requires the signing of the Construction Agreement on Safety and Civility before their entry into the factory site and clarifies the rights and responsibilities of each party, whereby operation management and internal inspections to be delivered accordingly. Shuanghui Development has made solid steps toward safety management certification with four factories ISO 45001 certified as of the end of the reporting period, completing its annual target successfully. The Company is crafting a plan rolling out the certification program for additional factories.

During the reporting, WH Group recorded a work injury rate of 1.33 per 200,000 working hours, down by 14% year-over-year, with three work-related deaths occurred in Smithfield. Smithfield investigated the fatal accidents and filed with government agencies in a timely manner. After determining the cause of the accidents, the company took tighter preventive measures and optimized safety-related processes. Employee trainings were carried out therefore emphasising precautions as well as self-protection at all times during work.

WH Group's Health and Safety Index

Number of accidents	2020	2021	2022
Work injury rate per 200,000 working hours	1.42	1.54	1.33
Number of (direct) work-related fatalities	1	1	3

6.2.2. Health and Safety Training

WH Group attaches great importance to raising employees' safety awareness. To prevent accidents, we continuously improve the emergency response system, implement targeted safety training measures, enrich the content of safety training, and effectively improve employees' safety awareness and skills by combining theoretical knowledge with practical operation.

In China, Shuanghui Development conducts trainings for persons-in-charge and safety management teams at all levels, and contractors, covering training of three-level safety within all factories of Shuanghui Development, training of special equipment and operation (namely licensed induction training for special equipment such as high-voltage electrician, refrigeration worker, and forklift license), training of occupational health and safety at factories. In 2022, considering the status quo of the factory and management requirements, Shuanghui Development organized legal and regulatory training for safety and environmental professionals and guided factories to troubleshoot potential safety hazards with the highest standards. A total of 215,892 people have been trained throughout the year, with accumulated training hours of 405,642; 1,465 safety emergency drills were conducted with a total of 255,670 participants.

In the U.S. and Europe, Smithfield has developed policies and regulations related to safe operation on farms, including safe manure removal policies, barn safety regulations, deep-pit pumping, sign identification and pre-inspection checklists for deep-pit barns. It also formulated Standard Operating Procedure (SOP) for barn preparation which was sent to farm operators to ensure the safety of farm workers. In addition, online safety courses on production process safety have been developed for all employees, contractors and other related parties. Smithfield also provides training activities other than production topics for employees, such as first aid or cardiac resuscitation and safety drills, to improve employees' emergency aid skills.

During the reporting period, Smithfield conducted a total of 124 safety drills in Mexico, Poland and Romania.

WH Group's Safety Training

Index	Unit	Data
The safety training attendance ²⁰	Person-times	234,587
Total safety training hours	Hour	566,593
Total investment in safety training ²¹	US\$	6,362,702

6.3. Employee Development

The Group encourages its subsidiaries to help employees plan their career paths supported with needed trainings, and conduct promotions emphasizing fairness following relevant policies. We are keen to help maximize the potential of employee and cultivate high-quality talent groups safeguarding our long-term and stable development.

 $^{\,^{20}\,}$ $\,$ The scope of data does not cover the U.S. and Poland.

The scope of data does not cover the U.S. and Slovakia.

6.3.1. Employee Training

WH Group is committed to enabling the development of employees. In view of the differences in cultural backgrounds and business specializations across our various operating locations worldwide, we have set up internal training principles and systems accommodating local needs, and develop training plans emphasizing capability enhancement. We further leverage incentive schemes and management succession planning policy to deliver results on people development.

Indicator	Unit or Description	Data
Total training hours	Hour	4,460,398
Training coverage	%	100
Average number of training hours	Hour per employee	43
Average number of training hours per male employee	Hour	42
Average number of training hours per female employee	Hour	46
Average number of training hours per Senior executives member	Hour	36
Average number of training hours per middle management member	Hour	27
Average number of training hours per frontline employee	Hour	45

In China, Shuanghui Development implements a three-level training system which provides targeted training for all employees at each level. We encourage employees to become interdisciplinary talents and capable of multi-tasking. Along with growing employees' skills, we aim to shape ourselves towards a learning organization that celebrates organizational learning as part of our culture.

During the reporting period, Shuanghui Development established an integrated training center — an effort to internally professionalize its training system. It has also newly introduced a policy for internal trainers and immersion training for new joiners. For senior management team, it launched a series of external training programs including visits to exemplary companies and educational advancement programs.

Training System at Shuanghui Development





Level I training is organized and implemented by integrated training center: organizing a series of leadershiprelated marketing and production courses for the middle and senior management team of the group and business divisions; conducting targeted training sessions on general management capablity and skills for all positions; conducting professional skill training for individuals of higher potential to facilitate their transition and sharpen comprehensive ablity; and conducting special training for college students.

Level II training



Level II training is organized and implemented by each functional center and business division: conducting training sessions on professional skills, laws and regulations, and standardized documents for personnel at all levels of the business division to improve employees' work performance and consolidate their business capabilities with higher competitiveness.

Level III training



Level III training is organized and implemented by each project company: conducting basic business knowledge and skill-related training sessions on laws and regulations, quality management, safety production, and skills for new employees and current employees of the project company, so as to help employees in various positions improve work efficiency with higher competitiveness.

In the U.S., Operation Employee Retention remains the responsibility of a dedicated leadership team comprising Smithfield's Operations and Human Resources teams. The project focuses on three areas, namely engagement & communication, onboarding and soft skills development, to better respond to the training needs of employees, while efficiently managing human resources and improving employee satisfaction.

In Europe, Smithfield's training system covers all employees. It provides appropriate training and skill checks for employees at different levels to close capabilities gaps as appropriate. For employees holding key production positions, special internal training plans are made accordingly. For technical personnels, trainings are designed based on results from Skill Models; and for administrative employees, Competence Models are applied in assessing their gaps for training. In addition, we organize regular one-on-one interviews to understand employees future development plans, and among them we engage high performers in the process of corporate future planning.

6.3.2. Talent Promotion

WH Group has an established promotion management system to ensure the development of talents through fair, just, smooth and sound process. In China, to build a high-quality talent team, we conduct performance appraisal of senior executives and front line employees in the areas including business ethics, performance indicators, and future planning. During the reporting period, Shuanghui Development further updated the Shuanghui Handbook for Managerial Personnel, reflecting revisions on the minimum scoring requirements for management position appointments, selection criteria for management candidate pool, and the principle of promotion, thus strengthening the fairness and transparency of the appraisal system. In the U.S. and Europe, Smithfield conducts fair performance appraisals and provides employees with ample opportunities for career development and promotion through collective training on essential skills.

6.4. Caring for Employees

WH Group has all along listened to the voice of employees and timely responded to their appeals. In light of our thoughtfully developed welfare principles, WH Group helps employees solve practical problems and provides needed welfare program, all these have contributed to a good sense of belonging and higher morale among our teams.

6.4.1. Employee Benefits

WH Group has established an employee welfare system allowing maximized accommodation to local customs. In addition to the basic statutory welfare, we provide additional benefits, such as housing purchase support, commercial insurance, family care leave, flexible office time and work-from-home arrangement based on the circumstances of the operating locations. Every year, we carry out a variety of cultural exchanges and employee support activities at each operation site to groom and boost vitality of our teams.

Over the last 12 years Shuanghui Development organized sponsorship to reward employees' children in their pursuit of higher education, benefiting a total of 10,663 children with a cumulative amount of US\$4.1 million. In 2022, Shuanghui Development launched its annual educational sponsorship named Golden Autumn, which helped 1,510 children of employees, with a total amount of US\$579,331.

Amid the resurging pandemic in 2022, we strictly abided by the pandemic prevention requirements where we operate, and adopted a series of preventive measures in order to ensure maximum protection of our employees and production operations. In China, Shuanghui Development paid employees who were unable to attend work due to pandemic quarantine at the same rate as if they were at work. We offered alternative way of working for employees who preferred to work remotely. For those present on duty, masks, disinfectants, antigen detection kits and other materials were provided. For those in need, medicines and food including traditional Chinese medicine and ginger soup were procured and delivered. In addition, we are mindful of the psychological wellbeing of employees during this special period of time, and provided counseling and communicated frequently with team members to ease panic and anxiety.

While abiding by local pandemic prevention controls, Shuanghui Development organized, wherever possible, various cultural-themed and sports activities. It always makes available facilities such as activity rooms and gyms to help employees enjoy their leisure time. During the reporting period, Shuanghui Development held more than 230 activities, including operator and skill competitions, safety contests, firefighting skills and quality knowledge competitions among other popular cultural and sports activities. Altogether 156 competitions were organized that attracted participants accounting for 11% of the total employees.

Support for Employees in Difficulty

During the reporting period, Shuanghui Development helped employees in need and their families under the themed activity of "Solving practical and difficult problems for employees' work and life", a total of 261 cased were handled, and a total of US\$123 thousands employee relief funds were recorded.



In the U.S., we fulfill our commitment to promote education by providing educational scholarships worth more than \$1 million to the children of our employees so as to ease their financial burden. In addition, we provide employees with holiday benefits including paid parental leave, sick leave, and disability leave. Options such as flexible working hours and work-from-home are available to help achieve full work-life balance. During the reporting period, Smithfield Poland had 100% employee satisfaction survey coverage and an employee satisfaction rate of 76%.

6.4.2. Employee Communication

We firmly believe that sound communication between employees and the Group is one of the core elements that delivers corporate sustainability. To enable employees to voice their expectation and grievance under different circumstances, we have established a variety of communication channels in each operation site that suit local customs, and encourage employees to openly express their opinions, thus help continuously optimize the Group's work safety standards and workplace culture.

WH Group's internal policies and systems

China: Provisions on Collective Contracts

Mexico: Ethics Code

United States and Europe: Code of Conduct

Shuanghui Development closely follows relevant laws and regulations in China, and has established labor unions at all levels to provide platforms for employees to communicate. In addition, senior executives of Shuanghui Development participate in activities such as Meet & Greet events organized for new employees and interns to listen to their opinions, and provide honest and direct answers to questions raised, such engagement style has been welcomed and considered helpful by employees.

Communication Channels for Employee at Shuanghui Development

Communication Response	Communication Channel
Response by management team	President Express (available 24/7)
	Manager opinion mailbox (available 24/7)
Response through Conference	Employee Representative Assembly
	New Employee Meet & Greet
	College Student Meet & Greet
	Symposium
Response on opinion platform	Whistleblowing hotline (available 24/7)
	Whistleblowing mailbox (available 24/7)
	Manager opinion mailbox (available 24/7)

During the reporting period, Shuanghui Development held an employee representative assembly both on-site and online. During the assembly, proposals and appeals put forward by employees were discussed and deliberated on topics such as living conditions, education advancement, employees' salaries and benefits, workplace innovation, and management improvement. Agenda items were duly voted and approved by employee representatives, issues raised are to be followed up by various parties.

Proposals on Employee Representative Assembly of Shuanghui Development (Excerpt)

General Assembly Proposals	Implementation by Shuanghui Development
Categorization on working hours recording	Formulating and implementing the system of flexible working hours and comprehensive calculation of working hours
Further trainings for management team	Further learning and training sessions are recommended for office managers and above in the sales system as well as workshop supervisors in the production system who are interested in advancing their professional skills and education

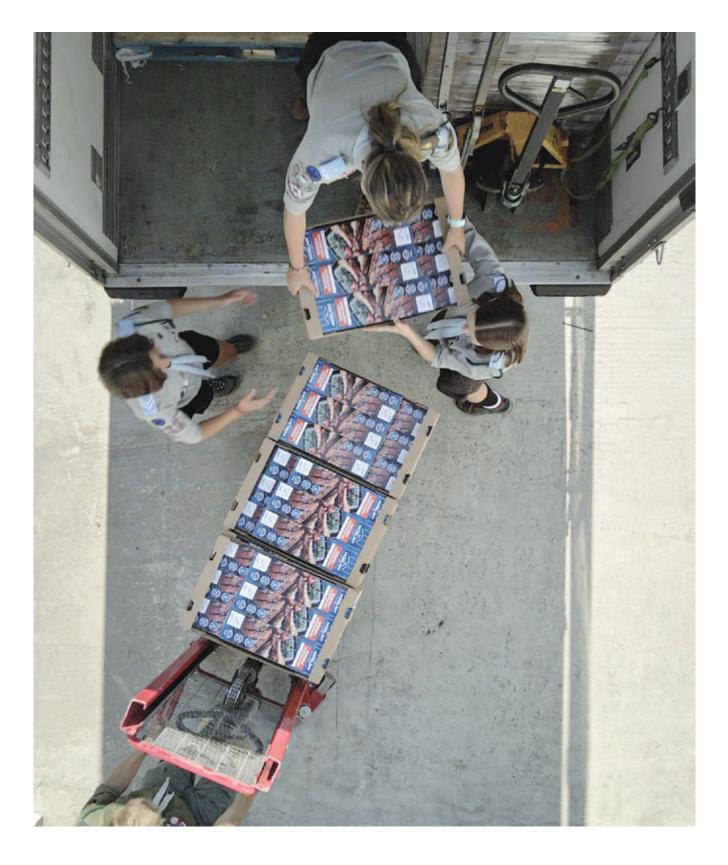
In the U.S., Smithfield provides support where needed to the unions and encourages full-time employees, part-time employees and contractors to speak out, and report unethical, inappropriate, illegal or unsafe behaviors observed. We have set up Thrive Everyday, an anonymous communication hotline to respond to the difficulties and needs raised by employees and make corresponding rectifications for specific problems. During the reporting period, we have helped more than 600 employees and their relatives who communicated with us via the hotline.

To further assess the effectiveness of existing reporting and feedback mechanism, our employees also have the following opportunities to provide feedback and appeals:

- For new employees, a questionnaire completed within the first 90 days since their onboarding and weekly one-on-one meetings with a member from the management team are available
- Retention and exit interviews are conducted
- At all non-union locations, regular Employee Advisory Council meetings are held; At union locations, regular joint Labor Management meetings are held

During the reporting period, Smithfield received hotline feedback on a variety of topics including health and safety, discrimination and harassment, animal welfare, company policies, and human resources. The information and veracity of the feedback have been analyzed and summarized so that each hotline feedback would be responded to and resolved accordingly.

CO-BUILDING OUR COMMUNITY



WH Group Commitment

Giving back to society alongside our business development is part of who we are. WH Group is concerned about the phenomenon that food waste and starvation co-exist in today's society, for which we take actions where we can to reduce waste and offer donation. We believe that equity in education fosters a positive drive for good, therefore, we help the vulnerable groups gain access to educational resources. We encourage and deliver voluntary services for social welfare contributing to a vibrant and prosperous community.

UN Sustainable Development Goals



WH Group assumes its social responsibilities and delivers themed programs serving public interests and benefiting the communities where we operate. As we are in the business of protein processing and production, it is our conscious decision to take actions on hunger relief helping make positive social advancement. Meanwhile, we are aware there are unsatisfied social needs for education and development, and consequently we advocate education equity and marshal resources donating for causes of public interest including disaster reliefs. By doing so we contribute to the building of vitality in our communities and society at large.

During the reporting period, WH Group donated a total of US\$34 million in cash and in-kind contributions. In addition, our employees volunteered for a total of 4,900 hours working for social programs.

7.1. Combating Food Insecurity

At WH Group, "good" does not stop with our products — it's everything we do. From donating tens of millions of protein servings to combat food insecurity each year, we are not just producing good food — we're also doing good to support our communities.

Our goals and targets in food donation: donating a total of 200 million servings of protein by 2025.



Smithfield Foods has donated hundreds of millions of protein servings to food banks, disaster

relief efforts and community outreach programs through our signature hunger relief program, "Help Hungry Homes", in all 50 U.S. states since 2008. In 2022, we donated 24.56 million servings of protein through our program.

Smithfield in the U.S.

- Smithfield Foods donated 30,000 pounds of protein, which included hams, bacon, lunch meat and smoked sausage, enough for 120,000 servings, to the Foodbank of Southeastern Virginia and the Eastern Shore to help fight food insecurity in Hampton Roads during the holidays.
- Smithfield Foods, the Utah Pork Producers Association (UPPA) and the Fredette Family Foundation delivered nearly 30,000 pounds of protein to Utah Food Bank. The parties are committed to donate one serving to Utah Food Bank for each point scored by Brigham Young University and Utah State during the 2022-2023 football season.

Smithfield in Mexico

Smithfield Foods provided pork to sponsor local celebrations and donated food for local rugby league.

Smithfield in Poland

- Smithfield Foods supported local cultural and sports activities through food donation in towns in close proximity to our operation sites.
- In 2022, Smithfield Foods, Inc. partnered with foodbanks and organizations providing food to aid hungry people, especially those refuges from Ukraine.

Smithfield in Romania

• Smithfield Foods supported a wide array of unique customs and festivals in Timis County and Arad villages through "Be One of Us Program".

Community Support and Food Donation





7.2. Advancing Education Equity

We believe that quality education for future generations is the foundation for sustainable community development, resulting in profound positive changes to the countries and regions where we operate. WH Group provides educational support for students and strives to cultivate the talents of the next generation with scholarships and educational grants for coordinated development of education in different regions.

Educational Support Initiatives of Shuanghui Development (China)

Donating to Child Education

• In May 2022, Shuanghui and Chongde Dongman initiated the "Flying with You - Help Rural Children" Charity donation. Charitable packages of a total value of US\$1.49million was donated to support the development of preschool children in under developed areas and improve the quality of teaching for left-behind children whose parents work in big cities to support the family.

Educational Support Initiatives of Smithfield Foods (in the U.S.)

Scholarship Programs

- Smithfield Foods Scholarship Program: Smithfield Foods continues to provide scholarships for eligible dependents of Smithfield employees in partnership with 20 colleges and universities across the United States.
- Future Leaders Program: Based on the programs of Smithfield's DEI team, Smithfield Foods launched scholarship and early career program for diverse students.

Education Support for Minorities

• Science Bound: This program is a partnership between Iowa State University, Denison Community School District and Smithfield Foods to support STEM education enrichment program for underrepresent students. Funding provided by Smithfield has always been the main fund source of the program which has spanned for a decade.

K-12 School Support

• An Achievable Dream: Smithfield Foods works with public schools through NGOs to provide extra education resources for a fair competitive environment for students. This year Smithfield Foods continued to support programs for equity in education at K-12 schools in Newport News, VA.

Educational Support Initiatives of Smithfield Foods (in Romania)

Academic Program

• Smithfield Academics Program: Through Smithfield Academics Program, we support an educational process in collaboration with educational institutions in Banat, Romania. We support research on various topics including veterinary, livestock and food industry and exposition visits, seminars and conferences.

Education Support

- Back to School Program: We support access to education and encourage school performance, addressed to school children in local communities of Timis and Arad Counties.
- Adopt a School Program: We improve the basic infrastructure, educational process and learning conditions in Timis and Arad Counties through Adopt a School Program.

Internship Opportunities

• Smithfield Foods Internship Program: Since 2009, Smithfield Romania has developed its own internship program. Through this educational program, the Company opens its doors to students interested in understanding and experimenting the practical side of animal husbandry and pork production, and their related activities. It is expected to shape an educational process in which theoretical concepts are interwoven with practical experience to create an academic environment where students become future specialists in the field.

Educational Support Initiatives of Smithfield Foods (in Poland)

Education Foundation

• We have been running the Zygmunt Piwoński Foundation whose statutory aim is to support outstanding students from families of our employees and cooperating growers. Under the Foundation program, the students may apply each year for a scholarship.

We explore and pioneer long-term solutions to decrease our environmental footprint by actively leveraging exchange opportunities in education. We are continuously researching impactful and innovative solutions by sponsoring environmental protection activities. The drive to create a more sustainable future shown by students is inspiring.

Smithfield Foods provides scholarship funds to support the 2022 National Conservation Foundation (NCF)-Envirothon Competition

On August 2, 2022, Smithfield Foods announced a donation of US\$30,000 in scholarship funds to support the 2022 National Conservation Foundation (NCF)-Envirothon Competition. The 2022 NCF-Envirothon is North America's largest environmental education program and international competition that impacts more than 25,000 high school students annually across the U.S., Canada and China. The national champion event, held in Oxford, Ohio, this year, saw 40 teams of students compete to demonstrate their knowledge of soils and land use, aquatic ecology, forestry, wildlife and the current environmental issue of waste to resources to demonstrate their environmental knowledge and problem-solving skills.

Along with Smithfield's financial support to provide scholarships to competition winners, Smithfield employees across the country also donated their time and expertise to the program. During regional, statewide and international competitions held throughout the year, Smithfield employees served as volunteer advisors to lead training sessions, facilitate program curricula and coordinate activities to further students' environmental knowledge and problem-solving skills.

7.3. Supporting Social Welfare

As a corporation that bears social responsibilities, we are prepared to contribute to community building at any time. In 2022, it is our priority to take actions in the fight against Covid-19 and support community needs.



In China, Shuanghui Development has been an active promoter of community activities. Charitable donations and voluntary services were delivered for pandemic prevention and control where local communities need help.

Supporting Hunger Relief

Given the lasting impact of the Covid-19 pandemic in 2022, Shuanghui Development participated in the pandemic prevention and control programs. In January, it donated 47,000 boxes of meat products to Xi'an Jiaotong University. In April, it donated 2,000 servings of packaged meat to Linying and Shanghai respectively. In May, it donated 500 servings of packaged meat to Henan University of Animal Husbandry and Economy.

Charitable Donation

In September 2022, in response to "99 Giving Day Plan" issued by the Luohe City Government, Shuanghui Development promoted internally for the online donation programs "Courage for a Just Cause" and "Charity in Luohe City", with a total of 8,735 employees donating an equivalent of US\$ 44,583.

Volunteer Activities

Shuanghui Development has a passion for community activities, from providing voluntary services, supporting communities for the pandemic prevention and control, to building civic society and providing community cleaning services. In 2022, a total of 570 volunteers from Shuanghui Development were recorded, with a total of 1,338 hours, including 111 hours for snow removal, 1,119 hours for security service to prevent Covid-19 in communities, and 108 hours of city cleaning services.



Meanwhile, Shuanghui Development also invested in upgrading facilities of the industrial park where the Company is located. Such efforts help provide local employment and promote the local value chain, achieving shared prosperity with the community.

Shuanghui paid visits to local schools for Teachers' Day celebration

On September 5, Shuanghui representatives paid visits to the teachers in Luohe High School, Luohe Experimental Middle School, and Luohe Primary School to participate in the celebration of national Teachers' Day.



Shuanghui (Luohe) Third Industrial Park

Shuanghui (Luohe) Third Industrial Park started construction in September 2022. It is to be constructed in accordance with higher standards to facilitate higher operational efficiency needed after the commission. The new site is equipped with central kitchens to cater the production of new lines including ready-meals and starchy foods for consumers. It will also accommodate functions including research and development, logistic and delivery, customer service and an experience center. We aim to make it a demonstration project of green concept enabled by technology, providing the employment opportunities for around 500 people.





In the U.S., Smithfield has expanded its community development team to better respond to the needs of local communities. We care for the community through a series of initiatives including disaster relief, volunteering, helping disadvantaged communities and community medical services.

Smithfield Foods' Charitable Giving to Support Disaster Relief

In October 2022, Smithfield sent more than 37,000 pounds of food, the equivalent of 150,000 servings to Fort Myers, Florida in response to the devastation caused by Hurricane Ian. The protein was delivered to Mercy Chefs, a Portsmouth, Virginia-based non-profit that deploys to disaster zones across America, to serve free, chef-prepared, restaurant-quality hot meals to victims, volunteers and first responders in Fort Myers.

In August 2022, Smithfield donated more than 20,000 pounds of protein to help the victims of floods in Eastern Kentucky. Partnering with Mercy Chefs, a non-profit disaster relief organization, the donated products were professionally prepared as restaurant-quality meals for victims, volunteers and first responders impacted by the historic floods.

During the reporting period, Smithfield initiated internal programs including Smithfield Romania Friends to encourage volunteering activities among Smithfield Romania colleagues. In addition, we have developed CSR software to increase visibility and reporting capability for grant management and are launching a new employee volunteerism and giving portal.

Meanwhile, we continue to develop our Minority Farmer Program to support Black and other minority farmers and diversify our supply chain. Smithfield is committed to increasing its production-facility spend with minority-owned businesses by 14% by 2025. We are now partnering with the National Minority Supplier Development Council and working with local small enterprises to build a stronger agricultural future.

With the outbreak of the pandemic, we have realized that health and well-being of community residents are key elements for community vitality. We have initiated a wide range of medical support programs in communities we serve worldwide to enhance the capability to reduce medical risks in communities.

Smithfield's Initiatives to Support Community Medical Service

Smithfield in Mexico

• We established the Granjas Carroll de Mexico (GCM) Foundation and provided services including community medical consultation, free cervical cancer screening, breast cancer screening, dental examination for preschool children. Besides, informative lectures have been conducted to disseminate high-quality food and nutritional diet knowledge.

Smithfield in Romania

• Smithfield Romania launched Solidarity with the Medical system to provide fast diagnosis and necessary treatment and security care in line with European standards. The financing program could be assessed by NGOs providing medical assistance and public care centers for the elderly recognized by local medical and public health institutions.

Smithfield in Poland

• Smithfield provides financial support and needed personal protective equipment for local hospitals and promoted flu vaccination in communities.



FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements. It includes statements regarding our outlook for the future and other statements regarding our beliefs, plans for the future and strategies or anticipated events and relevant statements. Our forward-looking statements involve inherent risks and uncertainties. A number of factors could cause actual results to differ from any of those described in forward-looking statements.

These risks and uncertainties include, but are not limited to, fluctuations in the prices of raw and auxiliary materials, changes in laws, changes in the economic environment, competitive market uncertainties, uncertainty about extreme natural events and other risks and uncertainties disclosed in periodic reports of WH Group.

The forward-looking statements made in this report speak only as of the date the statements are made and are based on current expectations, assumptions, estimates and projections. WH Group undertakes no obligation to update any forward-looking statements to reflect events or circumstances after the date on which the relevant statements are made or to reflect the occurrence of unanticipated events, except as required by applicable law. For more comprehensive information about our financial results and operations, including the risks that could adversely affect our results of operations and financial condition, please refer to our annual report and announcements posted on our official website.

ABOUT THIS REPORT

Overview

This report is the annual environmental, social and governance (ESG) report published by WH Group Limited (hereinafter referred to as the "the Company" or "WH Group"). We have reported on ESG issues annually since 2016. This report details the Company and its subsidiaries' (hereinafter referred to as "the Group" or "We") management measures and performance concerning ESG issues from January 1, 2021 to December 31, 2021 (hereinafter referred to as the "reporting period").

Definition of Names

Shuanghui Development Smithfield

Refers to Henan Shuanghui Investment & Development Co., Ltd.

Refers to Smithfield Foods, Inc.

Subsidiaries of WH Group Subsidiaries of Shuanghui and

Project Company

Refers to WH Group and its subsidiaries

Refer to subsidiaries of Henan Shuanghui Investment & Development Co., Ltd.



Basis of Preparation

This report is prepared in accordance with Appendix 27 Environmental, Social and Governance Reporting Guide to the Rules Governing the Listing of Securities of The Stock Exchange of Hong Kong Limited ("HKEX"). Appropriate references are made to the MSCI ESG ratings, Hang Seng Corporate Sustainability Index Series and Research Evaluation Survey, Dow Jones Sustainability Index Questionnaire, and the Institutional Shareholder Services (ISS) ESG ratings. In addition, subsidiaries of the Company Shuanghui and Smithfield also published their Environmental, Social and Governance Report and Sustainability Impact Report, respectively. The information mentioned in the reports can be regarded as supplemental to this report. The report follows the principles of Materiality, Quantitative, and Consistency in the ESG Reporting Guide. The related processes include identification of significant stakeholders, identification and classification of material ESG-related issues, determination of the ESG reporting boundary, collection of relevant materials and data, preparation of the report based on data, and review of the data in the report.



Report Scope and Boundary

The scope and boundary of this report is consistent with the one in 2022 annual report of WH Group.



Report Data

Unless otherwise indicated, all financial data in this report is in USD. The average exchange rate of 6.7319 in 2022 was chosen for the US dollar to RMB exchange rate. In addition, unless otherwise indicated, production data in metric tons only refers to packaged meats and pork, and does not include poultry meat, production of hogs and production of poultry.



Data Reliability Assurance

The data sources used in this report include publicly available government data sources, relevant statistical reports of WH Group, stakeholder communication materials, administrative documents and reports, third-party evaluations and interviews, etc. The data calculations are marked in the corresponding chapters with the calculation method. The Board of Directors of the Company confirms that the contents of this report contain no false records, misleading statements, or material omissions, and assumes responsibility for the truthfulness, accuracy, and completeness of the contents of this report.



Report Confirmation and Approval

This report was approved by the Board of Directors on 21 April 2023, following the confirmation by management.

If there are any questions about the contents of this report, please call or write to us for consultation. Our contact information is as follows:

WH Group Limited

Address: 7602B, Global Trade Plaza, 1 Austin Road West, Kowloon, Hong Kong

Tel: +852 2868 2828

E-mail: ESGTeam@wh-group.com

APPENDIX 1: MAJOR APPLICABLE LAWS AND REGULATIONS

China

Anti-unfair Competition Law of the People's Republic of China

Anti-Monopoly Law of the People's Republic of China

Civil Code of the People's Republic of China

Criminal Law of the People's Republic of China

Anti-Money Laundering Law of the People's Republic of China

Interim Provisions on the Prohibition of Commercial Bribery

Law of the People's Republic of China on Network Security

Measures for the Administration of Internet Information Services

Law of the People's Republic of China on the Protection of Consumer Rights and Interests

Food Safety Law of the People's Republic of China

Animal Epidemic Prevention Law of the People's Republic of China

Advertising Law of the People's Republic of China

Consumer Protection Law of the People's Republic of China

Cybersecurity Law of the People's Republic of China

Water Pollution Control Law of the People's Republic of China

Air Pollution Prevention and Control Law of the People's Republic of China

Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution

Water Law of the People's Republic of China

Energy Conservation Law of the People's Republic of China

Environmental Protection Law of the People's Republic of China

Environmental Protection Tax Law of the People's Republic of China

Biosafety Law of the People's Republic of China

Labor Law of the People's Republic of China

Labor Contract Law of the People's Republic of China

Safety Production Law of the People's Republic of China

Regulations on Work Injury of the People's Republic of China

Prevention and Control of Occupation Diseases Law of the People's Republic of China

E-commerce Law of the People's Republic of China

APPENDIX 1: MAJOR APPLICABLE LAWS AND REGULATIONS (continued)

America and Europe

Federal Food, Drug, and Cosmetic Act

Sherman Antitrust Act

EU Antitrust policy

Foreign Corrupt Practices Act (FCPA)

Criminal Law Convention Against Corruption

Civil Law Convention Against Corruption

Twenty Guiding Principles on Combating Corruption

General Data Protection Regulation

California Consumer Privacy Act

Clean Water Act

Water Framework Directive

Clean Air Act

The Industrial Emission Directive

Solid Waste Disposal Act

Waste Framework Directive

European Convention for the Protection of Farm Animals

European Convention on the Protection of Animals in International Traffic

International Agreement on Humane Trapping Standards

European Treaty on Human Rights

Employment Information Directive

Americans with Disabilities Act (ADA)

Fair Labor Standards Act

Occupational Safety & Health Act

Framework Directive on Safety and Health at Work

Energy Policy Conservation Act of 1975

Provision of Food Information to Consumers

Aspects, General Disclosures and KPIs	Description	Disclosure Paragraph	Remarks
A. Environment			
Aspect A1:	Emissions		
A1	General Disclosure	Addressing Climate Change	
	Relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. Information on:	Managing Resource and Pollution	
	(a) the policies; and		
	(b) compliance with relevant laws and regulations that have a significant impact on the issuer.		
A1.1	The types of emissions and respective emissions data.	Managing Resource and Pollution- Discharge Management	
A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions in total (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Addressing Climate Change-Calculating GHG emissions	
A1.3	Total hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Managing Resource and Pollution- Discharge Management	
A1.4	Total non-hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Managing Resource and Pollution- Discharge Management	
A1.5	Description of emission target(s) set and steps taken to achieve them.	Addressing Climate Change — Our Responses to Climate Change	
A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Managing Resource and Pollution- Discharge Management	

Aspects, General Disclosures and			
KPIs	Description	Disclosure Paragraph	Remarks
Aspect A2:	Use of Resources		
A2	General Disclosure	Addressing Climate Change	
	Policies on the efficient use of resources, including energy, water and other raw materials.	Managing Resource and Pollution	
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in'000s) and intensity (e.g. per unit of production volume, per facility).	Addressing Climate Change — Calculating GHG emissions	
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Managing Resource and Pollution-Water Resource Management	
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Addressing Climate Change — Our Responses to Climate Change	
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Managing Resource and Pollution-Water Resource Management	
A2.5	Total packaging material used for finished products (in tons) and, if applicable, with reference to per unit produced.	Managing Resource and Pollution- Packaging Material Management	
Aspect A3:	The Environment and Natural Resources		
A3	General Disclosure	Managing Resource and Pollution	
	Policies on minimising the issuer's significant impacts on the environment and natural resources.		
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Managing Resource and Pollution	
Aspect A4:	Climate Change		
A4	General Disclosure	Addressing Climate Change	
	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.		
A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Addressing Climate Change — Climate Risk Identification and Potential Opportunities	
		Addressing Climate Change — Our Responses to Climate Change	

Aspects, General Disclosures and KPIs	Description	Disclosure Paragraph	Remarks
B. Social			
Employment and Labor Practices			
Aspect B1:	Employment		
B1	General Disclosure	Empowering Employee	
	Information on:	Empowering Employee	
	(a) the policies; and		
	(b) compliance with relevant laws and regulations that have a significant impact on the issuer.		
B1.1	Total workforce by gender, employment type (for example, full or part-time), age group and geographical region.	Empowering Employee — Value-Based Employment	
B1.2	Employee turnover rate by gender, age group and geographical region.	Empowering Employee — Value-Based Employment	Employee turnover rate = number of departures during the reporting period/number of employees at the end of the reporting period
Aspect B2:	Health and Safety		
B2	General Disclosure	Empowering Employee	
	Information on:		
	(a) the policies; and		
	(b) compliance with relevant laws and regulations that have a significant impact on the issuer.		
B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Empowering Employee — Occupational Health and Safety	
B2.2	Lost days due to work injury.	Empowering Employee — Occupational Health and Safety	WH Group uses an internationally accepted injury rate per 200,000 hours worked as an occupational safety KPIs.
B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	Empowering Employee — Occupational Health and Safety	

Aspects, General Disclosures and	Description	Dioclosure Dayovenh	Domarko
KPIs Aspect B3:	Description Development and Training	Disclosure Paragraph	Remarks
B3	General Disclosure	Empowering Employee	
	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.		
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Empowering Employee — Value-Based Employment	
B3.2	The average training hours completed per employee by gender and employee category.	Empowering Employee — Employee Development	
Aspect B4:	Labor Standards		
B4	General Disclosure	Empowering Employee	
	Information on:		
	(a) the policies; and		
	(b) compliance with relevant laws and regulations that have a significant impact on the issuer.		
B4.1	Description of measures to review employment practices to avoid child and forced labor.	Empowering Employee — Value-Based Employment	
B4.2	Description of steps taken to eliminate such practices when discovered.	Empowering Employee — Value-Based Employment	No violations were found this year.
Operating Practices			
Aspect B5:	Supply Chain Management		
B5	General Disclosure	Enhancing Value Chain Partnership	
	Policies on managing environmental and social risks of the supply chain.		
B5.1	Number of suppliers by geographical region.	Enhancing Value Chain Partnership — Responsible Supply Chain	
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Enhancing Value Chain Partnership — Responsible Supply Chain	

Aspects, General Disclosures and KPIs	Description	Disclosure Paragraph	Remarks
B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Enhancing Value Chain Partnership — Responsible Supply Chain	
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Enhancing Value Chain Partnership — Responsible Supply Chain	
Aspect B6	Product Responsibility		
B6	General Disclosure	Providing Quality Products	
	Information on:		
	(a) the policies; and		
	(b) compliance with relevant laws and regulations that have a significant impact on the issuer.		
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Providing Quality Products — Product Quality and Safety	Considering the relatively small percentage of recalled products, we track the number of recall events
B6.2	Number of products and service-related complaints received and how they are dealt with.	Providing Quality Products — Consumer and Customer Service	
B6.3	Description of practices relating to observing and protecting intellectual property rights.	Providing Quality Products — Food Nutrition and Health	
B6.4	Description of quality assurance process and recall procedures.	Providing Quality Products — Product Quality and Safety	
B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Providing Quality Products — Consumer and Customer Service	

Aspects, General Disclosures and KPIs	Description	Disclosure Paragraph	Remarks
Aspect B7	Anti-corruption		
B7	General Disclosure	Creating a Culture of Sustainability	
	Information on:	— Business Ethics and Anti-Corruption	
	(a) the policies; and		
	(b) compliance with relevant laws and regulations that have a significant impact on the issuer		
B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Creating a Culture of Sustainability — Business Ethics and Anti-Corruption	
B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Creating a Culture of Sustainability — Business Ethics and Anti-Corruption	
B7.3	Description of anti-corruption training provided to directors and staff.	Creating a Culture of Sustainability — Business Ethics and Anti-Corruption	
Community			
Aspect B8	Community Investment		
B8	General Disclosure	Co-building Our Community	
	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.		
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	Co-building Our Community	
B8.2	Resources contributed (e.g. money or time) to the focus area.	Co-building Our Community	

APPENDIX 3: LIST OF ESG DATA

All Performance Indicators		Unit	2022	2021	2020
Environmental and Resource Indicators					
SO _x Emissions		MT	17.85	35.92	44.70
NO _x Emissions		MT	80.99	131.51	132.84
GHG emissions — Scope 1		MT CO ₂ e	3,513,674	1,002,419	/
GHG emissions — Scope 2		MT CO ₂ e	2,030,585	1,581,146	1
Total GHG emissions (Scope 1 + Scope 2)		MT CO ₂ e	5,544,259	2,583,565	2,562,584
GHG emissions (Scope 3, U.S. region)		MT CO ₂ e	29,699,786	/	/
GHG emissions intensity (Scope 1 + Scope 2)		MT CO ₂ e/MT produced product	0.62	0.28	0.30
Direct energy consumption		Millions of kWh	12,903	4,889	5,216
Indirect energy consumption		Millions of kWh	4,287	4,067	3,811
Combined energy consumption (direct + indirect)		Millions of kWh	17,190	8,956	9,026
Combined energy consumption intensity (direct + indirect)		kWh/MT produced product	1,914	961	1,043
Hazard Waste (Including Universal)		MT	1,408	508	799
Hazard Waste intensity (Including Universal)		kg/MT of produced product	0.16	0.05	0.09
Recycled non-hazardous waste	Scrap metal	MT	13,356	12,146	18,605
	Waste plastic	MT	7,340	7,845	7,892
	Waste paper	MT	41,907	48,591	37,265
	Cinder	MT	162	5,003	4,900
Resource utilization rate of pig manure			100%	1	1

APPENDIX 3: LIST OF ESG DATA (continued)

All Performance Indicators		Unit	2022	2021	2020
Disposed Non-hazardous waste (Including landfill and waste-to energy)		MT	80,250	59,798	53,736
Disposed Non-hazardous waste intensity		kg/MT of produced product	8.94	6.42	6.21
Wastewater discharge		million cubic meters	45.10	54.97	57.80
Total use of freshwater		million cubic meters	75.14	67.81	67.95
Municipal water supplies		million cubic meters	39.24	36.50	34.59
Surface water		million cubic meters	3.48	3.46	4.53
Fresh groundwater		million cubic meters	32.43	27.85	28.82
Intensity of freshwater use		cubic meters/MT produced product	8.37	7.28	7.85
Amount of reused water		million cubic meters	6.50	5.53	/
Total consumption of package materials		MT	682,741	630,222	593,242
Intensity of packaging material use		Metric ton per metric ton of production	0.08	0.07	0.07
Social Indicators					
Total number of employees		thousand	104.7	103.8	107.0
Total number of employees by nature	Direct employee		93%	96%	99%
	Contractor		7%	4%	1%
By gender	Female		42%	43%	43%
	Male		58%	57%	57%
By position	Senior executives		1.1%	0.4%	0.4%
	Middle management		6.8%	7.2%	5.8%
	Frontline employees		92.1%	92.4%	93.8%
By age	Under 30 years old		17%	17%	19%
	30-50 years old		62%	62%	62%
	50 years old and above		21%	21%	19%

APPENDIX 3: LIST OF ESG DATA (continued)

All Performance Indicators		Unit	2022	2021	2020
By region	China region		44%	48%	/
	Americas region		39%	36%	/
	Europe		17%	17%	/
Employee Turnover Rate			45%	47%	25%
By Gender	Female		44%	46%	52%
	Male		48%	48%	48%
By Age	Under 30 years old		80%	100%	40%
	30-50 years old		40%	38%	48%
	Over 50 years old		38%	27%	13%
By Region	China region		43%	36%	/
	Americas		56%	29%	/
	Europe		23%	71%	1
Total Employee Training Attendance		person	2,029,411	2,200,066	2,420,000
Total Employee Training Hours		hour	4,460,398	9,412,136	8,520,000
Percentage of Employees Trained			100%	100%	100%
Average Length of Employee Training		hour	43	91	180
By gender	Female	hour	46	95	/
	Male	hour	42	87	/
By Rank	Senior executives	hour	36	106	83
	Middle management	hour	27	34	166
	Frontline employees	hour	45	95	181
Fatalities directly caused by work			3	1	1
200,000 work hours injury rate			1.33	1.54	1.42
Total Safety Training Attendance		person	234,587	187,382	/
Total hours of safety training		hour	566,593	477,077	/
Number of Suppliers			28,907	22,635	98,539

APPENDIX 3: LIST OF ESG DATA (continued)

All Performance Indicators		Unit	2022	2021	2020
By Region	China Region		11,977	8,264	90,328
	Americas Region		3,327	8,109	8,109
	Europe		13,545	6,223	52
	Other		58	39	50
Coverage of suppliers signing a code of conduct			100%	100%	/
Antibiotic use	China	mg/kg produced production	260	272	/
	United States	mg/kg produced production	239	247	/
	Poland	mg/kg produced production	218	205	/
	Romania	mg/kg produced production	225	205	/
	Mexico	mg/kg produced production	291	/	/
Number of product recalls			8	10	/
Number of complaints about services, products			46,428	42,986	42,902
Complaint handling rate			100%	100%	/
Amount of public welfare and charity investment		million US dollars	34.77	46.47	1
Governance					
Business ethics and anti-corruption study/examination coverage rate			100%	100%	1
Number of corruption cases prosecuted			0	0	0
Number of hours of employee anti-corruption training		hour	133,857	215,822	1
Number of accredited information security incidents			0	1	1
Economic Performance					
Operating income		million US dollars	28,136	27,293	25,589
Sales of package meat + pork		10,000MT	736	768	722

Please refer to the specific section for the explanation of the data fluctuations between the data in 2022 and 2021.

APPENDIX 4: REPORT BOUNDARY CHANGES

