



WH Group

Sustainability Report 2017



CONTENTS

02

CHAIRMAN'S STATEMENT

04

ABOUT THIS REPORT

05

● CHAPTER 1 · ABOUT
WH GROUP

08

● CHAPTER 2 · VALUE
CREATION

12

● CHAPTER 3 · FOCUS ON
HIGH-QUALITY FOOD

15

● CHAPTER 4 · CARING
FOR ANIMALS

18

● CHAPTER 5 · FOCUS ON
ENVIRONMENT

24

● CHAPTER 6 · CARING FOR
EMPLOYEES

28

● CHAPTER 7 · CARING FOR
COMMUNITIES

30

● HKEx ESG REPORTING GUIDE
CONTENT INDEX



CHAIRMAN'S STATEMENT

After more than three decades of robust growth in mainland China and active exploration of global markets, WH Group has become a leader in the global pork product industry and is now a key driving force of industry evolution and progress. We continue to lead in the pork food market in China and the U.S., maintaining our first place position in market share, and are expanding our market share in Europe. While providing global consumers with healthy, delicious and diverse meat products, we also have become more active in taking on a leadership role in the industry and in seeking ways to promote social and environmental sustainability.

This year, we are focused on and committed to driving synergy and integration within the Group and between Shuanghui and Smithfield to build collaboration and unity under the coordination

of the WH Group. We are fully aware of the challenges of our global structure, as a result of cultural diversity across different geographic markets and various regulatory requirements. To address stakeholders' concerns, we have established close ties with various stakeholders and responsibly seek a shared vision with them through active engagement. In addition to disclosing our financial performance timely and accurately, we have concluded our work on food safety, animal welfare, environmental protection, employee care, and social involvement, which can be found in the WH Group Sustainability Report 2017.

For the WH Group, product quality is embedded in the DNA of the company. We have strengthened food safety control at the source. In China, we pioneered and took the initiative to test every pig that enters our supply chain for leanness-enhancing agents to ensure a stringent control of hog quality. In the global pork export market, we respect and comply with the local regulations to ensure products are produced in compliance with respective legal requirements. To hold ourselves accountable to our customers, we began monitoring and controlling the production process by



Wan Long

Chairman and Chief Executive Officer

installing electronic equipment to ensure that all key control points are monitored. This enables us to access production information in a timely and comprehensive manner.

To fully demonstrate our respect for and care to animals, we have leading animal welfare practices that provide animals with a healthy and safe environment during rearing, transportation, and slaughtering processes, while minimizing their pain throughout the entire process. To ensure the health and reproductive quality of animals, we are committed to strengthening epidemic prevention measures, such as using an appropriate amount of antibiotics. We use antibiotics, under strict control of types and dosage, to reduce the risk of epidemic outbreaks in farms, to guarantee product quality and output, and to meet the demand of consumers worldwide.

As a responsible corporate citizen, we clearly understand our duties in protecting the environment and maintaining ecological balance. By strictly controlling resource and energy consumption in production and operational processes, we will gradually reduce our environmental impact and actively combat climate change. We have invested substantial resources in technology, process transformation, and enhancing management guidance as we strive to improve unit efficiency and reduce unit consumption.

We pursue mutual development between our employees and the Group and strive to establish good communication with our surrounding communities. We fully respect the value of our employees by placing significant emphasis on their health and safety and by providing them with fair and equitable opportunities for advancement. We also offer employees professional training as well as effective communication feedback channels. We encourage our employees to strive for work life balance. As we uphold our principles of growing with and benefiting multi-stakeholders, the Group is devoted to education, poverty alleviation, and investment in our local communities.

Looking ahead, we will continue to uphold our vision of "consolidating global resources, achieving synergies, and creating a sustainable future," by bravely shouldering the responsibility for sustainable development of the industry and society, and engaging our stakeholders to more actively address their concerns. We will earnestly fulfill our obligations as a corporate citizen, facilitate the long-term development of the Group, and achieve communal prosperity through the sustainable development of society and the environment.



ABOUT THIS REPORT

Overview

This report is the second annual Sustainability Report published by WH Group Limited (hereinafter the "Company,"), detailing the management measures and performance of the Company and its subsidiaries (the "Group", "WH Group," or "we") on environmental, social, and governance issues from January 1 to December 31, 2017.

In addition, the Company's Henan Shuanghui Investment & Development Co., Ltd., ("Shuanghui Development") and Smithfield Foods, Inc., ("Smithfield") have released their own corporate social responsibility report and sustainability report, respectively. These reports can be considered supplementary to this report.

Basis of compiling this report

This report was compiled in accordance with the *"Environmental, Social and Governance Reporting Guide"* published by the Stock Exchange of Hong Kong Limited.

Special note on metrics presented

The Board of Directors confirms that the information in this report contains no false records, misleading statements or major omissions. The Board assumes responsibility for the authenticity, accuracy, and completeness of the contents of this report.

Data authenticity

Unless otherwise stated, all financial data in this report is in U.S. dollars. In addition, when calculate products consumption and emission this year, all denominators of 'intensity' figures, which is 'metric tons products produced', covers fresh pork and packaged meats but not hogs produced. In the future, we may report intensity figures by business segments to better reflect the difference in resources consumption and emission intensity for different business activities.

Report review and approval

Upon review by management, this report was approved by the Board on 28 June 2018.

CHAPTER 1 · ABOUT WH GROUP

Globally, WH Group is leading in our industry's three main segments: hog production, fresh pork, and packaged meats. We are the world's largest, most widely distributed, and most competitive pork products company. We are a controlling shareholder of Shuanghui Development, China's largest meat processing business, through our wholly-owned subsidiary, Henan Luohe Shuanghui Industry Group Co. Ltd ("Shuanghui"). We also wholly-own Smithfield, a global food company.

The Company is listed on the Main Board of the Stock Exchange of Hong Kong Limited (Stock Code: 0288) and is one of the constituent stocks of the Hang Seng Index. Shuanghui Development is listed on the Shenzhen Stock Exchange with stock code 000895.SZ.

WH Group's business

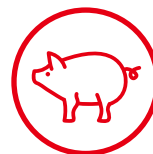
The Group currently operates its business through three main segments: 1) hog production, 2) fresh pork and 3) packaged meats. In China, we also engage in other businesses, including the slaughtering and sales of poultry, manufacturing and sales of packaging materials, providing logistics services, producing flavoring ingredients and natural casings, sales of biological pharmaceutical materials, and operating a financial company and a chain of retail grocery stores.

We deliver fresh products to processing plants, restaurants and consumers every day. Through our owned operations along with tens of thousands of contracted suppliers and distributors, we have established a one-stop supply chain from farm to fork. Our business partners follow the high standards of WH Group's international procurement process, enabling us to ensure product quality and work towards a more sustainable supply chain.



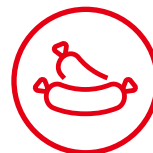
Hogs produced in the year

20 million heads



Hogs processed in the year

54 million heads



Fresh pork and packaged meats produced in the year

8.97 million metric tons



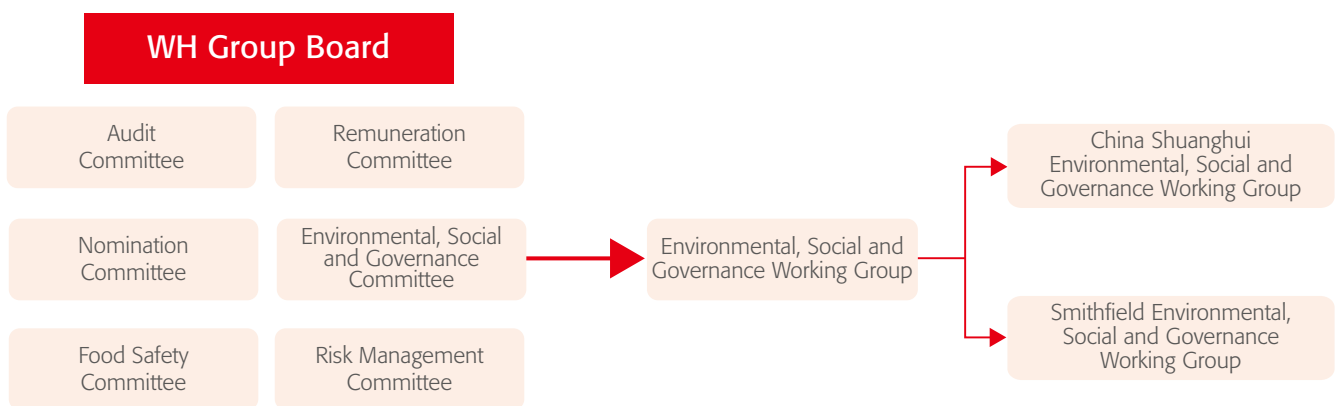
Revenue of the year

\$22,379 million

Corporate ESG governance Management structure

We have established an Environmental, Social and Governance (ESG) Committee at the Board level. The Committee is responsible for identifying ESG issues on operational matters that are relevant to and important to the Group, on matters that impact its shareholders and other key stakeholders. Moreover, the Committee is responsible for formulating the sustainability goals and plans of the Group for each matter, reviewing relevant performance and reporting the results and providing recommendations to the Board. In addition, we also set up a Food Safety Committee chaired by Mr. Wan Long, the

Chairman, to demonstrate our emphasis on maintaining product safety. Shuanghui and Smithfield have established their own sustainability management system as they are operated in market situations subject to different laws and legal standards. Under the guidance of the ESG Committee, subsidiaries implement measures that are consistent with the local actual conditions and overall sustainability principles of the Group. Currently, the two companies learn from each other the management measures related to sustainability through frequent exchanges, thereby achieving mutual improvement. The following chart illustrates the organizational structure of WH Group, Shuanghui, and Smithfield on sustainability management:



The sustainability management structure of Shuanghui

The Corporate Management Center, Equipment Management Center, Production and Operation Center, Safety and Environmental Protection Center, and Human Resources Center appoints personnel to form the Environmental, Social and Governance Working Group, which reports sustainability issues directly and management status of the company to the president of Shuanghui Development.

The sustainability management structure of Smithfield

Over 15 years ago, Smithfield launched its industry-leading sustainability program and in 2010, the company established the role of chief sustainability officer as part of the company's long-term focus on corporate social responsibility and sustainability. Smithfield's sustainability program is organized in five pillars: Animal Care, Environment, Food Safety and Quality, Helping Communities and People. The company engages its workforce across all divisions on its sustainability programs, and these programs are a point of pride for employees.

Business ethics and compliance

Complying with regulatory and ethical business requirements across all of our locations is required for all of WH Group's operations. We adhere to ethical standards, such as integrity and prevention of conflict of interests, fraud, insider trading, extortion and money laundering.

WH Group's presence is widespread globally. To assure that all personnel adhere to the requirements of the Group's ethical standards, WH Group established an "Anti-Corruption Policy", an "Anti-Corruption Program", and an "Anti-Corruption Procedures" to implement the best anti-corruption practices. The two major subsidiaries also have their own internal control policies to prevent and monitor ethical and non-compliance risks. Smithfield established the "Smithfield Code of Business Conduct and Ethics" which embodies the company's commitment to doing the right thing in all aspects of business. All employees are asked to sign a statement that they have read and understand the Code of Business Conduct and Ethics, and that they will act in full compliance. Shuanghui formulated the documents including the "Shuanghui Code of Conduct", "Anti-Corruption Policy", in order to promote a culture of integrity and honesty and to fight against corruption and bribery.

Regarding being ethical and honest, the risk management department of the Company and the audit departments of our subsidiaries regularly conduct comprehensive review. Through our reporting channels, we encourage employees to report any violations of our Group's business ethics and compliance policies to ensure that ethical and honest practices are conducted and that dishonest behaviors are identified and penalized. In 2017, the Group did not have any major incidents of behaviors that violate the laws and our policy, or any lawsuits related to corruption against the Group or employees.



CHAPTER 2 · VALUE CREATION

We believe that WH Group's economic performance and sustainability are complementary. Creating long-term value for shareholders and society lays the foundation for all we have done. We adhere to the philosophy and plan of sustainable development, which not only reflect our core values but also help improve the performance of the Group.

Sustainability vision

Based on the key concerns of WH Group's stakeholders, we will explain the WH Group's sustainability concepts and plans in the following five topics. In this report, we will also detail our specific practices in each aspect and summarize our current achievements.

Shuanghui Development awarded "Top Ten Safety Management Enterprises" in 2017 China Food Safety Annual Conference



"CR Magazine"'s Responsible CEO of the Year Mr. Kenneth M. Sullivan, Smithfield Foods Inc.'s President and CEO



1

Food Safety and Quality



WH Group is committed to providing consumers with the highest-quality products. The safety and quality of our foods is fundamental to our businesses. Therefore, we adhere to the highest quality standards.

Our operations in China, the U.S., and Europe all follow a comprehensive quality control system that covers all production stages from feed production, hog production, and pork processing, to transportation and delivery. At the same time, we continue to explore and improve scientific and efficient management methods by integrating information technology that further ensures the safety and quality of our products during the integration of our vertical industry chain.

Because our customers hold high expectations for the safety and quality of our products, we provide customers with accurate product information and various product options that will enable them to make healthy choices.

2

Animal Care



Guarantee animal welfare which also has a positive impact on the quality of our products.

During the process of raising animals, we ensure that they receive high quality and sufficient food and water, a clean and comfortable living environment, and timely and proper treatment when they are injured or sick. During transportation, we adopt various measures to make sure that animals are safe and comfortable, while reducing the effects on their bodies and emotional well-being. We also insist on minimizing the pain and stress during the slaughtering procedure.

3 Environment



As a company that focuses on agriculture and food processing, we believe effective environmental management is critical to the success of our business and the achievement of long-term sustainability goals.

Toward those ends, WH Group actively adopts various measures, and increases our investment in our operations. We not only comply with the environmental laws and regulations of our operating countries and regions, but we also continue to strengthen and improve our overall environmental management system. Through process innovation, technological transformation, recycling, and energy efficiency enhancement, we use energy, water, and other natural resources responsibly while reducing waste water, solid waste, and greenhouse gases.

4 People



The steady development of a company is inseparable from its employees' efforts, and WH Group is no exception. We are committed to becoming a people-oriented company and helping our employees unleash their full potential while growing with the WH Group.

Therefore, we strive to create a fair and rewarding work environment. We offer employees at our farm and processing facilities with competitive wages and comprehensive benefit packages. We also encourage our employees to learn and grow within WH Group. We value internal promotions and provide employees with educational support including, but not limited to, adequate training and advanced learning opportunities to help further their careers. Meanwhile, we strive to ensure the safety and health of the workplace and are committed to creating an inclusive and safe work environment.

5 Helping communities



WH Group greatly appreciates the friendly and harmonious relationship we have with the communities we operate in, as the Company will not advance and succeed without their support. Only when we help grow and develop our communities can we also continue to flourish.

WH Group maintains proactive communication with local communities through different channels and actively gives back to these communities. We fulfill our corporate social responsibilities in multiple focus areas, such as hunger relief, health, and education, including scholarships and tuition assistance.

Responsibility to the industry

As a leading, vertically integrated pork company, we are committed to providing our customers with a trusted and well-known product portfolio of superior quality, rich nutrition, and delicious taste, while promoting consumption trends. Also, we devote ourselves to establishing the highest industry standards in terms of product quality and food safety, all while developing sustainability in order to drive improvement continuously.

Leading in the industry

In recognition of the continuous innovation and efforts of WH Group in the global hog production, fresh pork and packaged meats products industries, global consulting company Frost & Sullivan awarded the WH Group the “2017 Leading Global Animal Proteins Market Awards” for our product quality and brand image.

Leadership in sustainability

In 2017, WH Group continued to maintain its market leadership in the industry, not only through the development of our brands, but also through significant accomplishments in our worldwide sustainability program. We will continue to fulfill our commitments to food safety and quality, animals, the environment, employees and the community. Through our efforts, we have garnered a number of awards as follows:

- Shuanghui was awarded the Most Trusted China Listed Company by Consumers in the Golden Intelligence Award
- Mr. Kenneth M. Sullivan, Smithfield Foods Inc.’s President and CEO, and WH Group’s Executive Director, was honored with “CR Magazine”’s Responsible CEO of the Year Award in recognition of his leadership in accomplishing Smithfield’s various sustainability strategies.
- Smithfield received a total of 76 awards from the North American Meat Institute (NAMI) in 2017.



- Shuanghui was awarded 2017 China Food Enterprise Seven-star Quality Award
- Shuanghui was awarded “Top Ten Safety Management Enterprises” in 2017 China Food Safety Annual Conference
- Shuanghui was awarded Top Ten Enterprises of Comprehensive Strength by China Meat Association
- Shuanghui was listed as the “CCTV National Brand” by CCTV

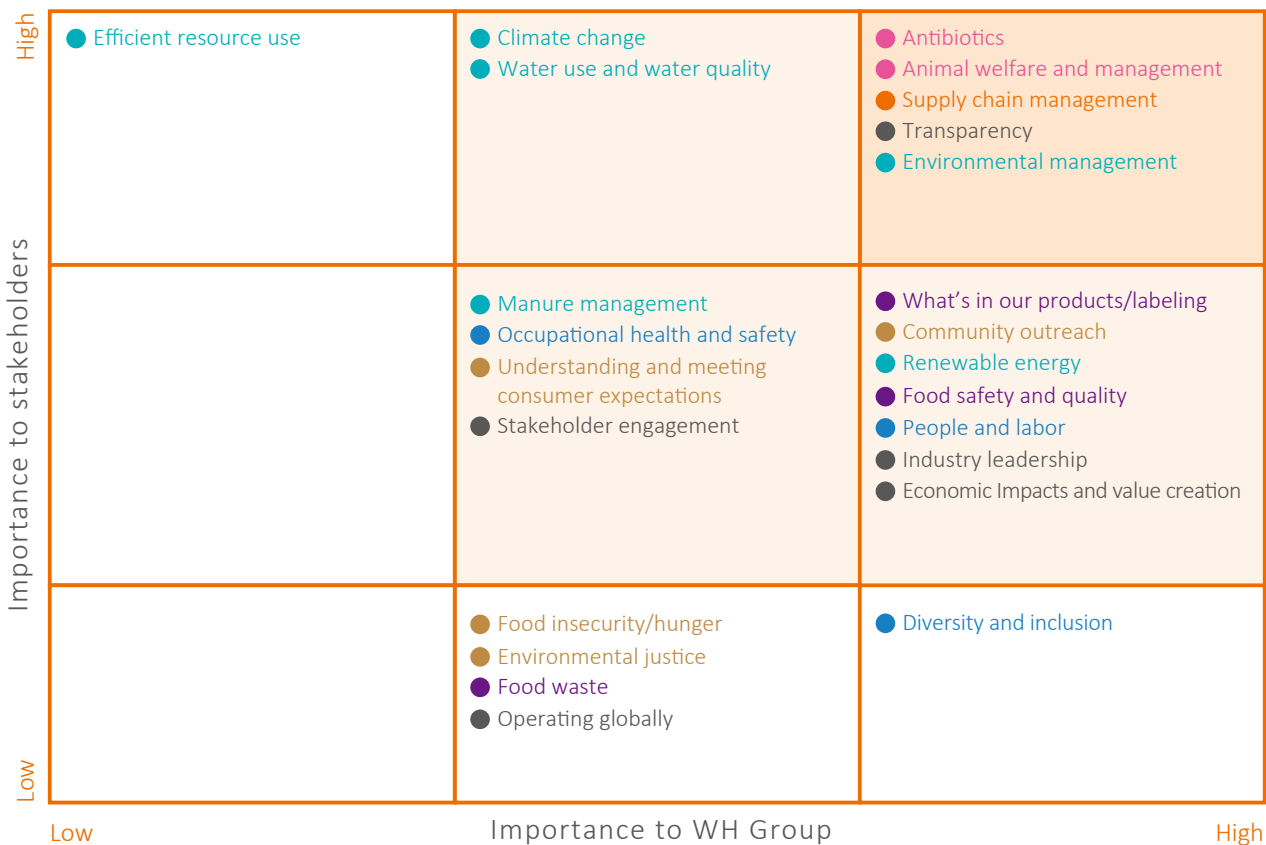
Materiality analysis

Identifying materiality issues through communication with stakeholders is fundamental to a sustainability management system. Materiality analysis enables WH Group to address topics that are in the interests of stakeholders in the sustainability report and allocate resources efficiently on managing those topics to improve the Group’s performance in sustainability.

WH Group’s main stakeholders include investors, employees, suppliers, regulatory agencies, industry organizations and experts, non-governmental organizations, sustainability think tanks, media, distribution customers and consumers. This year, WH Group conducted in-depth communications with key stakeholders to understand their views and concerns on various sustainability issues and rated the influence of the Group on these issues. The sustainability issues that were identified as most important to our stakeholders, and which WH Group can exert influence on, are our material issues.

The identification process of material issues also refers to the analysis of Smithfield’s 2017 material sustainability issues. For Smithfield’s materiality analysis, see their website at <https://www.smithfieldfoods.com/integrated-report/2017/governance-management/materiality-analysis>

The materiality matrix below illustrates the result of the materiality analysis. The issues closer to the upper right corner are more crucial to the values creation and sustainability of the Group:



Animal care Environment Governance People Product Society Supply chain

CHAPTER 3 · FOCUS ON HIGH-QUALITY FOOD

“Product quality is never a trivial matter and food safety is of paramount importance.” These words are often emphasized by Mr. Wan Long, the Chairman of WH Group. Product quality and food safety are important issues to both WH Group and consumers. The philosophy of “food safety comes first” is deeply rooted in our Group’s culture. We have established a quality control system and a food safety control system governing the entire business chains. We have also built and continuously improve the product traceability system. We will continue to enhance quality and optimize production processes to guarantee product quality and safety by applying more advanced technologies and management models.

At the board level, we have set up a Food Safety Committee, which is responsible for developing the principles of food safety and risk management and overseeing on-going review processes. On the operational level, we set up a Quality Management Team with more than 1,700 people. The team members are engaged in different production processes, assisting in controlling risk and improving food quality and safety.

Food safety Supply chain management

High-quality, reliable products originate from safe raw materials. WH Group places heavy emphasis on quality controls over feed production and livestock breeding processes. We also further streamline the ingredient-sourcing process and supply chain system to assure product quality and safety from the source.



Control points in our production process

>9,000



Health product selections in the U.S.

300

In China, we follow supplier management policies strictly, and we have developed a supplier performance evaluation system. We established a professional assessment team to closely monitor supplier qualifications, production processes, and upstream management. At the same time, the team requires suppliers to sign a letter of commitment that lists supplier responsibilities and requirements on product safety, environmental protection, and product quality. In the U.S., we have established the *"Supplier Code of Conduct"* and other policies to manage supplier operational compliance, product quality and safety, animal welfare, environmental performance, business integrity, labor expectations, and human rights issues, in order to continuously improve and strengthen our supplier management.



Strict Procurement and multi-point Control

Shuanghui has a strict supplier review system and takes a multi-point control approach in all batches of raw material purchased in order to ensure the safety and reliability of the procurement process. Shuanghui and the official quarantine department conduct onsite certification and inspection of each batch of hogs purchased. The hog supplier must provide product certification at the time of delivery of each batch of products to ensure that the hogs are raised in accordance with the supply agreement and meet the relevant quality and safety standards. In order to eliminate the purchase of hogs that have been fed with leanness-enhancing agents, Shuanghui sends employees to conduct random sampling at large suppliers' plants. Shuanghui records all issues and findings during the inspection process, which serves as important evidence for supplier review.



Be the first operator to test each hog that enters our supply chain for leanness-enhancing agents

Shuanghui has taken the initiative and been the first operator to test every hog that enters our supply chain for leanness-enhancing agents (which includes clenbuterol and ractopamine, among others) since 2011. After a stringent testing process, qualified pigs shall be transferred to the next process, while unqualified hogs will be undergone the harmless treatment as required by the Animal Health Supervision Department.

Process control

Product processing is a critical step in assuring product quality and safety. All plants of WH Group use internationally advanced equipment and technology and meet the standards of the ISO9001 Quality Management System, the ISO22000 Food Safety Management System, and Hazard Analysis and Critical Control Points (HACCP) System or the Global Food Safety Initiative (GFSI). We conduct risk assessments and hazard analyses on all aspects of the production process. Combined with our risk control measures and information-based control methods, these processes monitor more than 9,000 control points to effectively ensure that quality and safety control measures are fully implemented.

Every employee of WH Group is the gatekeeper for food safety. We encourage employees to report any potential risks that may affect the safety and quality of products in the plants. The quality management department will respond appropriately based on the situation.



"Raise Your Hand" Initiative

Smithfield's "Raise Your Hand" builds upon our company's philosophy that all employees have a role to play in making safe, high-quality foods. The newly named program rolled out in 2017 aims to make an even deeper impression upon the thousands of people who staff our manufacturing facilities. At its root, the goal of Raise Your Hand is simple: to encourage employees to speak up if they see something of concern or something unusual—or even when they have a question.

Ongoing supervision

Product testing is critical to ensuring product quality and safety. WH Group continuously improves our product testing capabilities, expands the coverage of testing items, and comprehensively controls potential risks in all aspects of the industry chain to avoid oversight and ensure product quality. Each batch of raw materials is required to be tested before being used, and each batch of finished products is required to be tested before delivery. Our testing approach tests more than 600 items such as nutrients, micro-organisms, pesticide residues, veterinary drug residues, microelements, heavy metals, food additives, and banned additives. Also, we engage third-party qualified inspection agencies to supervise and safeguard the quality control of the testing.

WH Group is cautious about every step in the delivery of products to customers. Storage, transportation, and sales are the final stages in providing high-quality, reliable products to our customers. We keep track of the development of different fields, and actively develop and seek new technologies in all areas.



Shuanghui's Intelligent Logistics System

In China, we developed an Intelligent Logistics System to ensure product quality and safety during the transportation process. Using technologies such as the Internet of Things, big data, and GPS, we are able to monitor the distribution temperature and the location of vehicles in real time on both computers and mobile phones. This allows us to respond to unexpected situations in a timely manner. Through these technologies, we enable to digitize vehicle management and improve our strength in monitoring product quality. Connecting the Intelligent Logistics System with the ERP system allows us to trace the entire transportation process, and to improve the supply chain management in an all-around ways.

Emergency response

To enhance monitoring of potentially unsafe foods and to effectively avoid food safety incidents, we formulate food safety emergency procedures in accordance with relevant laws and regulations. During an emergency, these mechanisms can identify responsible departments and their responsibilities. They also help investigate and analyze the causes of the problem as well as clarifying possible solutions. We also conduct product-recall drills at least once a year. In this way, we can test the effectiveness of our product-recall procedures while also testing our traceability system and the effectiveness of our emergency responses. According to the drill results, we then amend and improve the product-recall mechanisms to continuously improve our emergency handling capabilities.

WH Group actively initiated four product recalls during the year. By timely adopting an effective product recall mechanism, we can avoid damages caused by unqualified products or the impacts arising from adverse effects. In the wake of the recalls, we have allocated millions of U.S. dollars in additional spending for facility upgrades and procedural improvements. Meanwhile, the recalls

encourage us to seek methods to improve facilities and promote innovation.

Healthy choice

As a leader in the meat products industry, WH Group is committed to providing consumers with a healthier diet and lifestyle. Also, we constantly improve our product development capabilities to offer better and healthier products to satisfy the diverse needs of consumers.

- In the U.S., we have developed more than 300 products that offer health and wellness benefits, such as lower sodium, reduced fat, no added sugar, gluten-free, no artificial ingredients, and no nitrites or nitrates. Among them, there are more than 100 products with lower sodium. These products meet the American Heart Association's certification criteria for foods that are low in saturated fat and sodium content.
- In China, we have launched a series of products that are free of additives such as colorants, flavor enhancers, preservatives, food grade flavorings, and more. There are also products with calcium and DHA added.

Customer service

To provide consumers with timely and professional customer service, we opened a designated communication channel and set up a comprehensive customer service system to standardize the customer service procedures. Therefore, we can respond to customers' feedback effectively and professionally, by following on incidents and dealing with them in a timely basis.

WH Group also values the voice of the consumer. In 2017, Shuanghui conducted two customer-satisfaction surveys to obtain an understanding on preferences of meat consumers and market trend of in which 3,820 customers in 12 regions participated. The surveys provided in-depth information on aspects such as product quality, price, packaging, distribution, market service, perception of products, product taste, suitability to the customer's locality, and after-sales service. We collected, analyzed, and summarized the feedback from customers and developed improvement plans to address the causes of customer dissatisfaction.

CHAPTER 4 • CARING FOR ANIMALS

As one of the world’s largest producers of meat products, WH Group is committed to practicing and leading animal-welfare initiatives. We believe that the dignity, health, safety, and comfort of animals should be assured during the rearing and slaughtering processes. In addition to responding to the concerns of consumers and stakeholders about animal welfare, we know that good health can also help animals become more resistant to disease, grow faster, and produce better offspring, thus ensuring product quality. Practicing animal welfare is core to our business and highlights our responsibility to the society and consumers.

WH Group organizes and implements animal welfare related works based on internationally well-established animal welfare requirements such as the Animal Welfare Standards of World Organization for Animal Health (OIE), the U.S. Department of Agriculture’s Pork Quality Assurance (PQA) Plus, and the EU Animal Welfare Quality Assessment System. During rearing, transportation, and slaughtering processes, we also formulate relevant policies and procedures to ensure that animals are treated properly and humanely. All employees in WH Group who are engaged in these processes have been given animal welfare training in a systematic way, and the requirements for animal welfare have also been incorporated into the employee code and the production – management standards. With abundant operational experience and in-depth exploration, WH Group is striving to set an example for the industry in the best practices for animal welfare.



Cumulative investment for the transition of all pregnant sows on company-owned farms to group housing systems.

\$360 million

Rearing care

When rearing animals, we consistently protect their welfare in the following ways:

Feed and nutrition

We provide animals with ample high-quality and nutrient-rich feed and water, which not only protects animal welfare but also meets our standards for high-quality products. According to the advice of nutrition experts, we formulate feed for different types of hogs in different stages of growth. As for access to adequate water, our water-feeding nozzles allow hogs to drink water at any time and avoid wet environments due to water spillage.



Adopting a new water feeding nozzle

Compared with the old type of water trough, the new water feeding nozzle we adopt in the U.S saves water and keeps the barn dry. The height of the nozzle can be adjusted for pigs of different sizes. This feeding nozzle is also more suitable for group housing.



Comfortable growing environment

Based on the most current scientific findings, we have fully considered animal nature, individual needs, and group needs, to create a comfortable and safe growing environment on our hog farms.

To create the most comfortable growing environment for animals, WH Group spares no efforts. For example, we set the water-curtain cooling system and thermal insulation facilities in the barn. We

also formulate and control pig density in the barn according to the growing stages of hogs, using a comprehensive real-time system to monitor the growth of hogs in the barn. We quickly improve any discomfort due to environmental abnormalities. In addition, we regularly review all parts of the hog's growing environment to confirm further that the animals are in the most comfortable conditions during their growth.



Completing the transition to group-housing systems for pregnant sows

As of the end of 2017, all pregnant sows on Smithfield's company-owned farms globally are housed in group-housing systems, just as planned when Smithfield first announced its commitment in 2007. This includes those in Poland, Romania, and joint ventures in Mexico, which were converted five years ahead of schedule. This is reflective of the leading role we play in animal welfare. Total investments made was \$360 million. In addition to the efforts at company-owned farms, we recommend that all of our contract sow growers in the United States complete a transition to group housing by the end of 2022.

Pain reduction

The testicles of pigs are removed to prevent boar taint, which can cause an unpleasant odor during cooking and consumption of meat. Castrating male pigs also prevents sexual and aggressive behavior. However, this will inevitably bring pain to young boars. In 2017, we began a series of studies to determine whether an oral solution of sugar water can relieve pain for piglets. In addition to sucrose solutions, we are evaluating pain medication, such as non-steroidal anti-inflammatories, to determine if it can mitigate the pain associated with castration procedures.

Animal health

Ensuring animal health is also a strong guarantee of the quality of our products. All units of WH Group have established a comprehensive preventive and medical system to ensure that animals receive proper immunization and treatment when needed, thus avoiding panic attacks within the animal groups. Our Henan Wandong Animal-Husbandry Co., Ltd. in China is

one of the first farms to obtain a certificate of animal epidemic prevention and purification demonstration farm in Henan Province of China.

Physical infection control

- Our hog farms are equipped with fences and different compartments for separation. Before entering the farms, workers or visitors are required to change into special protective clothing and protective shoes and to be disinfected by a disinfection system. Vehicles, equipment and incoming materials are also required to be disinfected when entering the farm.
- There are stricter preventive measures for places involved in breeding and artificial insemination procedures.
- Pig excrement is cleaned up regularly, and the excrement can be automatically drained by installing a floor with a gap in the barn.
- Dead or the euthanized piglets that failed to reach the standard are sent to the harmless treatment center for centralized harmless treatment.

Medical infection control

To prevent and cure diseases and thus increase the growth rate of pigs, majority of our farms use a certain amount of antibiotics during the rearing process. Excessive use of antibiotics may pose an issue with bacteria resistance, so we have established policies and measures to manage the use of antibiotics.

- In China, we have strict rules on the withdrawal period, time for taking and dosage of each type of drugs. In accord with the developing trends in the breeding industry, we use microbial preparations and increase the use of Chinese herbal medicines year by year to gradually replace the use of antibiotics.
- In the U.S., all antibiotics used on Smithfield's farms are pre-approved by a licensed veterinarian, and a written authorization or prescription is also required before they are administered to any animals. Antibiotics are administered under veterinary supervision after careful evaluation of groups of pigs, herd history, and diagnostic testing to determine the amount and type of medication necessary for the protection of pig health and welfare.

We have been working continuously on ways to reduce the use of antibiotics while keeping pigs healthy.

Transportation care

The animal-transportation process is an important one for the Group. To assure proper care and respect for animals, we have established strict transportation standards and have signed detailed contracts with carriers that stipulate our animal welfare-related requirements. The following are some examples of best practices:

- Never use electric prod on the pigs while handling them.
- Only load pigs in the early morning and cool evening and do not load them at noon.
- Never use straw bedding for pigs on hot days.
- Require vehicles carrying pigs to be equipped with shading tiles, shelters, and sprinkler sprays to prevent pigs from developing heat stroke in the summer.
- According to the size of vehicles, we have specified a loading limit to avoid overcrowding. This load limit is adjusted strictly for winter and summer condition.
- Drivers should maintain a constant speed and avoid stopping abruptly as to not startle or distress the pigs on board.
- We are committed to preventing traffic accidents and ensure the safety of pigs during transportation.

Humane slaughtering

We insist that all hogs to be alive as they are transported to the plant, and the slaughtering process must be carried out at our own plants. In line with animal-care principles, we require all incoming hogs to be given a brief respite in a resting pigpen to obtain sufficient water and rest. Hogs with unsuitable weight will be returned.

In accordance with animal care practices and our emphasis on animal welfare, the slaughtering methods we use include:

- Carbon dioxide stunning: CO₂ is used to stun pigs. The pigs lose consciousness and are rendered insensitive.
- Three-point electric stunning: This enables pigs to lose consciousness quickly and suffer less pain.

CHAPTER 5 • FOCUS ON ENVIRONMENT



Greenhouse Gas emission reduction achieved through biogas power and utilizing steam residue heat

6,658 metric tons CO₂-e



Expected savings through replacing metal-halide light fixture with LED approximately

\$2 million



Investment in exhaust gas treatment

>\$6.52 million

Natural environment is fundamental to the survival of humans and animals. At present, our natural environment is facing various threats, including energy shortage, depletion of natural resources, environmental pollution, and global climate change. We continue to take various innovative and effective measures to reduce the negative impacts on the environment during the entire production process and make efforts to protect homes of humans and animals.

Combating climate change

Ecological conservation

WH Group respects the earth's environment, which we all rely on for existence. We hope that through our own efforts, we will minimize damage to the environment and maintain earth's stability and sustainability. Our priority is the rational and healthy utilization of ecological resources to ensure that our production and operation are carried out within the environmental capacity and ultimately reduce impact on the surrounding ecological environment. Over the years, efficiency of hogs rearing has improved, which not only generates economic benefits, but also reduces emissions from manure and the Group's demand for forage arable land.

Reducing carbon emissions

Climate change is undoubtedly one of the most important challenges faced by the planet today. Our business inevitably emits greenhouse gases, but we are working hard to continuously improve energy efficiency to reduce greenhouse gas emissions per unit of production capacity.

The majority of WH Group's direct greenhouse gas emissions (Scope 1) are from our vehicle fleet and the use of fossil fuels in our plants. Our indirect greenhouse gas emissions (Scope 2) come from the use of purchased electricity and steam. Accordingly, we have enhanced the overall carbon reduction benefits from three aspects:

- Improved the machinery to enhance energy efficiency;
- Promoted the use of renewable energy; and
- Optimized distribution and transportation routes to improve efficiency.



Electricity generated in a year by Shuanghui's own biogas power plant.

12,600 MWh



Smithfield's reduction target on absolute GHG emissions by 2025 from 2010 level.

25%



In 2016, Smithfield set a greenhouse gas (GHG) reduction goal

By 2025, Smithfield will reduce its absolute GHG emissions by 25 percent from 2010 level. When achieved, we are cutting down 4 million metric tons carbon dioxide equivalent GHG emissions, equivalent to removing 900,000 cars from the road. Smithfield collaborated with Environmental Defense Fund (EDF) in setting its goal. To help us get there, we created a new platform within our company, Smithfield Renewables, unifying our carbon impact reduction and renewable energy efforts under one umbrella. The senior director of Smithfield Renewables reports to our company's chief sustainability officer directly.

Improving energy efficiency

WH Group has invested heavily in our plants worldwide to renovate equipment and facilitates.

Measures to improve energy efficiency and reduce carbon intensity

- Given the high carbon intensity and in response to the call of the Chinese government, Shuanghui has reduced its coal consumption by more than half within five years by replacing coal with high-efficient externally purchased steam.
- Shuanghui regulates transformers and power factor, and implements direct electricity trading, and reduces electricity expenses by approximately \$3.12 million.
- Shuanghui accelerates the elimination of equipment with outdated production capacity and high energy consumption, and conducts annual inspections on the high-energy-consuming equipment of subordinate plants.
- Shuanghui re-utilizes the surplus heat energy generated during the process of product retort sterilization through exchanger to reduce unit steam consumption.
- Smithfield developed a five-year program to replace metal-halide light fixtures with LEDs, which will consume 70 percent less electricity and result in an annual energy savings of approximately \$2 million upon completion. The lamps have additional benefits beyond just energy savings, including improved visibility for employees and less frequent maintenance.

Using renewable energy

WH Group also constantly strives to promote the use of renewable energy. By collecting pig manure to produce biogas, we not only recycle the waste but also reduce the manure's environmental pollution. This also reduces greenhouse gas emissions¹ as well as the demand for fossil fuels.



In China, we have successively launched biogas power generation projects to improve energy efficiency continuously.

- We have built a biogas power generation company which generates 12,600 MWh of electricity and 8,000 metric tons of steam annually.
- Our self-owned farm in Ye County has also built a biogas boiler and biogas power generation project that utilizes pig manure, with an annual production capacity of 750,000 cubic meters of biogas and annual electricity production of 500 MWh. Other farms have also improved their utilization efficiency of biogas power generation facilities during the year.

In 2017, the reused energy made possible through biogas power generation and utilization of steam waste heat was equivalent to reduction of carbon dioxide emission by 6,658 metric tons.

In the U.S, we carry out multiple projects to inject renewable energy, such as solar power and biogas, into the local power grid and generate lease income accordingly. We plan to expand these types of project in the long term. For a more detailed account of how we have promoted the use of renewable energy, please refer to Smithfield's website at www.smithfieldfoods.com.

- In 2017, we started to cooperate with a biogas production firm that converts manure into renewable gas. Once put into operation, the project is expected to generate 23,448 MWh of energy annually.
- We built a 3 MW solar farm capable of providing electricity to approximately 500 households by utilizing approximately 8 hectares of unused land.
- Smithfield's newest endeavor is in Duplin County, North Carolina, where anaerobic waste digesters are now capturing biogas from some 60,000 hogs on five Smithfield contract farms.

¹ Unlike other renewable energy, burning biogas still produces carbon dioxide when generating electricity. However, due to biogas itself is made up of methane, which affects global warming by more than 20 times as much as carbon dioxide, the biogas produced by burning aquaculture can be seen as a move to mitigate climate change.

- Smithfield’s facility in Sioux Falls, South Dakota, produces 84,000 MWh of biogas per year and its processing facility in Tar Heel, North Carolina, operates two 2.33-hectare anaerobic basins with an average production of 65,500 MWh of biogas. We are going to install specialized equipment that will upgrade Tar Heel’s biogas into pipeline-ready natural gas that will be injected into a nearby natural gas pipeline. The project is expected to be in operation by the spring of 2019. In total, these facilities produce enough biofuel to power approximately 6,000 U.S. households for one year.

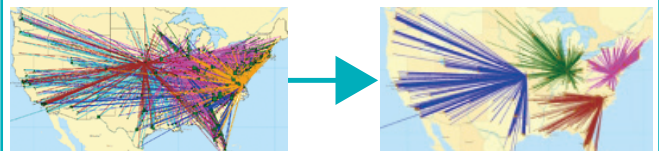
Logistics and transportation

Improving logistics is also one of the keys to reducing greenhouse gas emissions. After processing, our products are shipped to distributors or delivered directly to retail terminals and restaurants. With this in mind, we offer incentives to self-owned vehicle drivers to save on fuel. We also remix product portfolios strategically to maximize the use of loading capacity, optimize the delivery route and reduce fuel consumption. All this helps reduce carbon emissions. In the U.S., we encourage our third-party haulers to use new, lighter equipment when delivering our products. These trucks are more fuel-efficient and can carry more product, saving money, reducing the number of trips, and decreasing emissions. From 2016 to 2017, the amount of fuel used has been reduced by 187,946 liters.



Reorganizing our logistics network to reduce carbon emissions

Smithfield began overhauling its logistics network, which includes a fleet of nearly 6,500 third-party trucks. By reorganizing the logistics network, we hope to achieve the following goals: eliminate redundancies, reduce complexities, lower operating costs, decrease carbon emissions. In addition, we have introduced software to enhance the benefits of the direct shop delivery business. We can monitor the location of trucks in real time, assign the most efficient freight routes through calculations, and assign freight tasks. Every year, through this technology, we reduce fuel consumption by 65,109 liters or carbon emissions by 152 metric tons of carbon dioxide equivalent. In the next three to five years, we expect to reduce the distance Smithfield’s hogs and products travel by between 17.7 and 30.6 million km, saving over 6.81 million liters of fuel per year and an expected \$50 to \$60 million in total.



Before reorganization

After reorganization

2017 WH Group Energy Use and Greenhouse Gases Emission²

Item	Total (Million kWh)	Intensity (kWh/metric ton products produced)
Direct Energy Use	5,432	605.6
Indirect Energy Use	3,587	399.9
Total Energy Use	9,019	1,005.5

Item	Total (Metric tons of carbon dioxide equivalent)	Intensity (Metric tons of carbon dioxide equivalent/metric ton products produced)
Greenhouse gas emission	2,440,202³	0.27

² Direct energy includes coal, gasoline, diesel, natural gas, propane, and biogas that we use in our operations; indirect energy includes purchased electricity and steam. Greenhouse gases include scope 1 (direct) and scope 2 greenhouse gases (indirect, purchased electricity and steam).

³ This figure does not include the greenhouse gas emission from Hog Production Division of Smithfield

Resource management

Water resources management

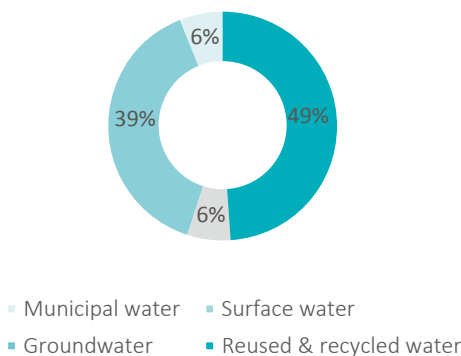
Clean freshwater is a vital resource for mankind, but due to factors such as climate change, excessive use, and water pollution, a growing number of locations on the planet are facing shortages of freshwater resources. Some locations in which WH Group operates in are within these areas. The Group extracts large amount of water for feeding, production, and cleaning. We have the responsibility to promote concepts such as water conservation and recycling, and to facilitate the rational use of water resources. We promote water-saving culture, guiding and promoting water-conservation awareness for every employee.

Shuanghui and Smithfield strictly comply with the relevant provisions of the places where they operate in to eliminate damage to local water resources while ensuring production capabilities. Over the past few years, we have been upgrading equipment in our plants and streamlining production lines, so as to reduce water consumption and improve water quality management.

2017 WH Group Water Consumption and Intensity

Item	Total (Million cubic meters)	Intensity (cubic meters/ metric ton products produced)
Water consumption	66.54	7.42

Source of water consumed



Packaging materials management

WH Group strives to minimize the use of natural resources. In the interest of energy conservation, pollution reduction, and production cost saving, we work to reduce the use of packaging, seek thinner packaging materials, integrate packaging lines, and develop alternative green packaging materials.



Reduced packaging for new product line

In 2017, Smithfield launched new Prime Fresh Deli pre-packed lunchmeats. This unique and extremely simplified packaging design seems like a slice at the deli counter, which keeps the meat fresher. Moreover, this type of packaging uses 31% less packaging materials than traditional delicatessens, thereby improving transportation efficiency and reducing waste.

Our packaging materials are mainly plastic and paper packaging, as well as a small amount of metal materials, foam and others. In 2017, we used a total of 430,085 metric tons of packaging materials, equivalent to using 48 kilograms of packaging materials per metric ton of product produced.

Emission management

WH Group produces and discharges waste water, air pollutants, and solid waste during operations. Because of the potential impact of these pollutants on the environment, we have been working diligently to reduce the generation of pollutants and curb the emission of pollutants into nature. While complying with the environmental-protection regulations of all operating sites, we have also taken our environmental responsibility further.

In China, we have established an accountability system for environment protection in all our plants, and we stipulate relevant management responsibilities and division of work. At present, Shuanghui has set up a full-time environmental-protection team made up of more than 200 employees. The team is responsible for managing waste water, waste-gas and other pollution-control facilities in our plants. In the U.S. and Europe, each of our plants also has full-time personnel responsible for environmental affairs. The Environmental Affairs Coordinator reports directly to the Director of Environmental Affairs in the region.

Our main business locations have been certified by the ISO 14001 Environmental Management System.

Waste water discharges

We have built special waste water treatment plants in all our facilities for waste water treatment.

- In China, we have invested a total of \$78.52 million to build 26 waste water treatment stations, with daily treating capacity of 53,000 tons of waste water. In 2017, we invested \$12.3 million in operations, and realized stable operation of waste water stations, on-line real-time monitoring and up-to-standard discharges. We also invested more than \$470,000 to protect the equipment and facilities of some sewage stations from corrosion and keep the facilities in good condition to protect the soil and groundwater.
- In the U.S and Europe, we have also continuously improved waste water treatment processes. For example, in the past, the plants in Carolina, North Carolina used sulfuric acid to manage the waste water pH levels, a costly process that can damage equipment and, worse still, pose health risks to employees if they do not take proper precautions. Smithfield worked for months with a third-party specialist to come up with an alternative treatment option that manages the pH using a coagulant and two specialized polymers instead of sulfuric acid. The new treatment process meets the city of Clinton's requirements while simultaneously improving the facility's interior air quality, decreasing the risk of violations. Up to now, at least another two plants have already promoted this plan.

In 2017, we discharged a total of 50.16 million cubic meters of waste water⁴. In China, the total emission of COD (chemical oxygen demand) and ammonia nitrogen in waste water decreased by 2.47% and 7.05% compared with last year. The total waste water discharge in the U.S. and Europe was 7.2% lower than that in the last year.



Biogas slurry is returned to the field to promote circular economy

On farms in China, we have built waste water treatment plants to treat manure. After it is treated in the waste water treatment plant, the manure is transported through a biogas slurry assimilation pipeline to plantations in surrounding areas for fertilizing the fields. We have laid 50 kilometers of pipelines in total, covering more than 1,600 hectares of land.

Exhaust gas emissions

Our exhaust gases are mainly generated from emissions of vehicles, boilers in plants, and during production processes. We strictly enforce the emission standard requirements for the exhaust gases in our operating areas.

This year, Shuanghui invested more than \$6.52 million in exhaust-gas treatment. We adopted advanced international technology to treat volatile organic compounds and reuse remaining heat so that the emission of organic exhaust gas meets the standard. In accordance with the requirements of environmental-protection policies in the various areas of our operations, we carried out a boiler "coal-to-gas" project to further reduce inhalable suspended particles PM2.5, which constitute haze.

This year, sulfur-dioxide emissions were 134.23 metric tons, and nitrogen-oxide emissions were 236.36 metric tons for our operations in China⁵. The emission data for U.S. and European businesses will be available on the Smithfield's website in August 2018.

⁴ Waste water is defined as the discharge of external environment or municipal pipe networks after collection or treatment by sewage treatment stations in various factories and farms. Waste water in the U.S and Europe also includes treated waste water for internal and external irrigation purposes.

⁵ Excluding the exhaust emission quantity from logistic operations in China.

Solid waste emissions

While we are dealing with hazardous and non-hazardous waste according to the relevant laws and regulations in our operating areas, we continue to reduce the production of waste and carry out recycling and reuse practices.

In China, we aim to reduce and utilize non-hazardous solid waste to minimize its impact on the environment. Manure, waste water, and sludge are used as organic fertilizer raw materials or applied to fields; Cinders are used as building materials; Waste cartons, scrap metal and waste plastics are retrieved and reused by qualified third-party companies. Hazardous waste must be stored in the temporary storage strictly according to the regulations for later collection and treatment by qualified third-party agencies for transfer and disposal.



Shuanghui builds sustainable demonstration zone and a modern eco-agriculture areas

We support and guide farmers and start-ups in actively applying organic fertilizer, developing and building plantations, and using manure from farm to grow fruits and vegetables. At present, some plantations that utilize manure as fertilizer have been designated as eco-agriculture demonstration areas by local authorities.

In the U.S and Europe, our methods of reducing waste include: redesigning product packaging, improving recycling and composting, and using recyclable materials for packaging. In line with our vision of zero-waste-to-landfill, at least 50 percent of total waste must be reused or recycled. The rest is sent to incineration.

⁶ The treatment methods include composting and conversion to energy.
⁷ Hazardous wastes refer to the waste listed in "National Hazardous Waste Inventory" in the People's Republic of China; "Hazardous waste" and "Universal waste" as defined by the Environmental Protection Agency in the U.S; and hazardous waste defined in Poland for the 2010 "National Waste Management Plan"; hazardous waste defined under the Consolidated European Waste Catalogue in the Romania.



Zero-Waste-To-Landfill

Smithfield encourages all domestic processing facilities to meet a rigorous set of criteria in order to be classified as zero-waste-to-landfill facilities. To be classified as a zero-waste-to-landfill facility, a facility must:

- Not send any waste to landfill for 12 consecutive months;
- Cut normalized waste by at least 10 percent from the facility baseline;
- Reuse or recycle at least 50 percent of generated waste;

Smithfield's eight zero waste to landfill certified facilities save nearly \$273,000 in disposal costs per year. Zero waste to landfill cuts waste disposal costs, generates revenue from selling recyclables, reduces emissions, and bolsters the company's reputation.

By 2020, it is expected that, the amount of waste needed for landfill treatment by Smithfield will reduce by 10% over 2014 by 2020.

Waste statistics of WH Group in 2017 are as follows:

2017 WH Group Non-hazardous Waste Recycled and Disposed (metric tons)

Non-hazardous waste recycled	
Total amount	263,192
Scrap metal	8,262
Waste plastic	5,625
Waste carton	36,090
Cinder	10,929
Manure, sludge and other organic matter ⁶	202,286
Non-hazardous waste disposed	
Total amount	73,693³

This is equivalent to disposing 8.2 kilograms of non-hazardous waste per metric ton of product produced. In addition, WH Group has produced and treated a total of 236 metric tons of hazardous waste⁷, equivalent to producing 26 grams of hazardous waste per metric ton of product produced.

CHAPTER 6 • CARING FOR EMPLOYEES

WH Group clearly understands that corporate value is created by all employees. We aim to create a safer, more reliable and comfortable work environment while building a culture of harmony and mutual prosperity. To achieve this, we provide diversified career paths and advancement plans to help our employees pursue promotions, career development and personal satisfaction.

As of December 31, 2017, the employees of WH Group were approximately 110,000.

Value-oriented employment

WH Group is committed to helping our employees fulfill their highest potential, and we have been working to improve employee engagement while protecting their rights and interests. We respect every employee, and we treat them fairly. Aside from ensuring strict compliance with relevant labor laws and regulations in the markets where we operate, WH Group adopts hiring policies that provide employees with promising opportunities.



Recruit synergies under "One Smithfield" initiative

Smithfield is finding greater synergies between recruiting activities throughout different locations and operations through its "One Smithfield" initiative. Smithfield's human resources team has also worked to establish a consistent brand identity across all recruiting divisions to help expand the talent pool and we have centralized job listings for all domestic segments, which is committed to improving employee retention and engagement, and creating a more cohesive and innovative corporate culture for employees.

Employee benefits

In China, Shuanghui has formulated the "Remuneration and Benefit Packages" and the "Methods for Performance Evaluation and Bonus Assessment" to manage income distribution, hereby offering employees enjoy various types of wages and insurance allowances in accordance with the laws. They include provisions for year-end benefits and salary increases.

In the U.S and Europe, Smithfield provides its employees with comprehensive benefits package, including retirement plans, life insurance, and visual and dental care. In addition, Smithfield offers awards to employees who exemplify the company's guiding principles of Responsibility, Operational Excellence, and Innovation (ROI).

Labor rights

Our workforce spans different continents, cultures, and religions. Thus, we are committed to developing a culture that is welcoming and that treats people fairly and equally regardless of their gender, race, age, or health. We strictly prohibit the use of child labor and forced labor in any form, for which we have zero tolerance.



Smithfield's Human Rights Policy

Smithfield recognizes and respects employees' rights and their freedom to choose whether or not to join third-party organizations or to associate freely and bargain collectively. The company has specifically formulated the Smithfield "Human Rights Policy", which clarifies expectations for the areas of employees' equal opportunities, health, environment and safety, harassment and violence, employees' rights and other key topics to ensure the fair treatment of employees; we encourage workers to call a toll-free hotline number to report any violations. Smithfield also communicates this "Human Rights Policy" with all major suppliers and expects them to comply with it.



Average training hours received by Shuanghui's employees this year

55 Hours



Injury incident rate of WH Group for every 200,000 working hours

1.78



Caring for female employees

In 2017, in response to initiatives in care and equalization for female employees prevalent in China and the international communities, Shuanghui entered into the "Exclusively Collective Contract for Female Employees" of the Shuanghui Group, to safeguard the statutory rights and special interests of female employees as well as implement special arrangements for female employees. We have invited gynecological experts to speak to female employees about healthcare and to provide gynecologic examinations for free, helping to show care for the special health needs of female employees.

Career development

In an effort to offer employees equitable opportunities for diversified career development and promotion, WH Group offers employees clear guidance in meeting their own specific goals. This serves to promote the interests of both the employee and the Group.

Shuanghui has formulated the "Management Regulations on Employee Promotion" to create fair employment opportunities and promotion paths for employees. In addition, we have carried out a development plan to train executives in the manufacturing plants and to appoint and remove executive officials by means of competitive selection. We offer employees systematic training to advance their careers. In 2017, the Group developed a three-tier training system in which 15,314 training activities were held, with a per-capita training time of 55 hours.

Smithfield Leadership Institute and Emerging Leaders Programs target employees with management potential, help to prepare them for new roles with more responsibility. In addition, we conduct our employee training through formal classes called "Smithfield University", case studies, executive briefings, and team projects. Through company intranet, we offer a range of online training courses including computer skills, leadership training, sales knowledge, and public speaking to executives.



Online course enrolment

Approximately **2,650** people, increased by **91%** over **2016**



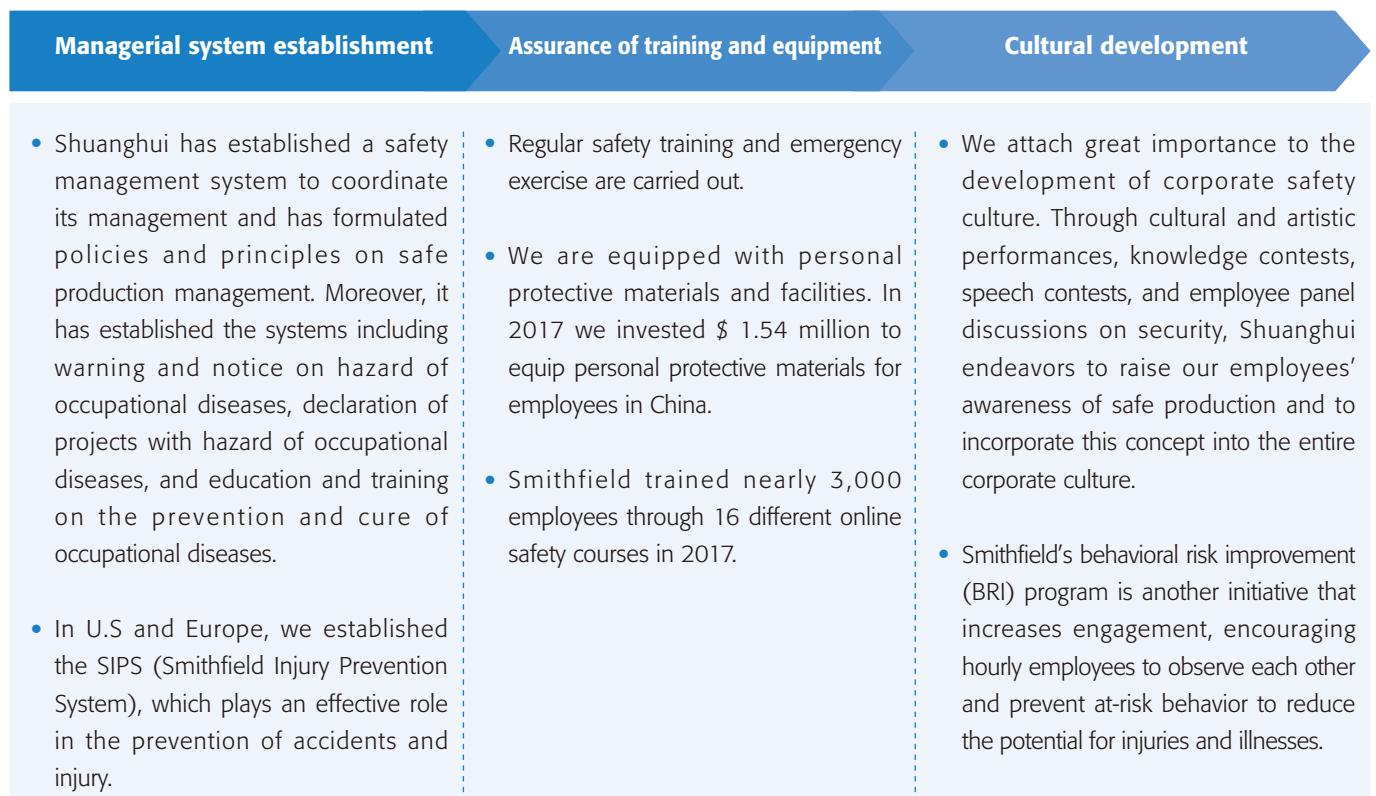
Training at the facility level


Approximately **4,750** people, increased by **30%** over **2016**

Health and safety

Being a food company, our people work in close proximity to animals and machines in our plants and production lines. This results in certain risks to health and safety. In response, WH Group places a significant emphasis on the occupational health and safety of our employees.

We strictly comply with relevant laws and regulations regarding occupational health and safe production in the regions where we operate, and protect the occupational health and safety of our employees in three ways:





Promoting the Improvement of a Safety Management System

In addition to monthly inspections at every location, each segment of the business has an audit program that evaluates the effectiveness of our Employee Injury Prevention Management System (EIPMS). In 2017, we developed a new safety-management program based on the proven principles of EIPMS to drive additional improvements called Smithfield Injury Prevention System (SIPS). This will further standardize approaches to our management-safety system across our operations. It will help keep our employees healthy and safe by building on EIPMS and incorporating components of ISO45001, an international occupational safety and health management standard.



Held Safe Production Month Activity to promote the safety culture

In June 2017, Shuanghui held a series of activities in the Safe Production Month, including safe cultural and artistic performance, contests on fire prevention skills and emergency response exercise for ammonia leakage, and emergency rescue exercises. By take various measures, we promote the safety and corporate safety culture.

In 2017, the incident rate of WH Group of every 200,000 work hours is 1.78⁸. There have not been any work-related casualties.

⁸ The incident rate is calculated with reference to U.S. Occupational Safety and Health Administration's (OSHA) approach in deriving recordable incident rates. The formula being: the number of work-related injury incidents at work ÷ total working hours × 200,000.

Employee communication

Apart from providing employees with competitive remuneration, sound safety pledges, and career-development paths, WH Group has also put great emphases on the employee's work-life balance so all employees can experience well-rounded lives.

Communication mechanism

Shuanghui communicates with its employees through multiple channels to keep both employees and management well informed. For example, we open channels for employees to provide feedback, including telephone, email, and a WeChat official account. In addition, the Human Resources Department holds regular panel discussions for employees so the Group can understand their thoughts and provide feedback according to their requests. Public information boards are also available in every workshop to inform the employees of important corporate information. Employees can provide feedback on these through our website and WeChat official account.

Smithfield is committed to meeting the needs of employees at all levels of the company from recruitment to retirement. We get in touch with and communicating with employees by Safety Management Committee and other ways, and take measures to assess and improve employee satisfaction. Employee Resource Groups (ERG) is an effective way for Smithfield to exchange with the employees, and an area of focus for Smithfield to develop vigorously. Through ERG, Smithfield creates new professional and personal connections among employees across all levels and divisions, thus improving communication.

Caring for employees

Work-life balance is key to employees' well-being. We are committed to providing a working environment that allows work-life balance.



Smithfield's "fit" wellness program

Smithfield's "fit" wellness program, which is offered to employees at several locations, represents our commitment and responsibility to support good health for employees and their families. It offers enhanced benefits, such as diabetes management, smoking cessation programs, and maternity management. We also host regular "lunch-and-learn" events to discuss healthy living topics such as stress management, weight control, and employee assistance program services.



Splash Festival at Shuanghui

The Second Splash Festival of the Department of Agriculture and Husbandry of Shuanghui was held with a total of 200 participants. The Festival helped cool down our farm workers in the scorching summer, enrich their leisure life.

CHAPTER 7 · CARING FOR COMMUNITIES

WH Group attaches great importance to the establishment of a friendly and harmonious relationship between the Group and the community, because much of our success depends on the support of our communities. While continuing to grow, WH Group actively communicates with the community and gives back to it, fulfilling our corporate social responsibility from multiple perspectives.

Community communication

The communication philosophy of Shuanghui can be summarized by the expression, “Operate open-door plants and a transparent enterprise.” By opening our plants to the public, we welcome social supervision and thus create a responsible brand image. More than 30 of our meat processing plants in China welcome daily visitors from all social groups, including consumers, media, teachers, and students. Visitors can observe the hog slaughtering process, cutting process, and the meat processing production line to further understand our work and to become more confident in the quality and safety of our products.

Though Smithfield does not open their plants to the public, they include videos about its operations and programs on YouTube (<https://www.youtube.com/user/SmithfieldFoods>) and on its website www.SmithfieldFoods.com.



Volunteer service hours by WH Group employees

12,181 hours



Worth of food donated by WH Group to food banks

\$20 million

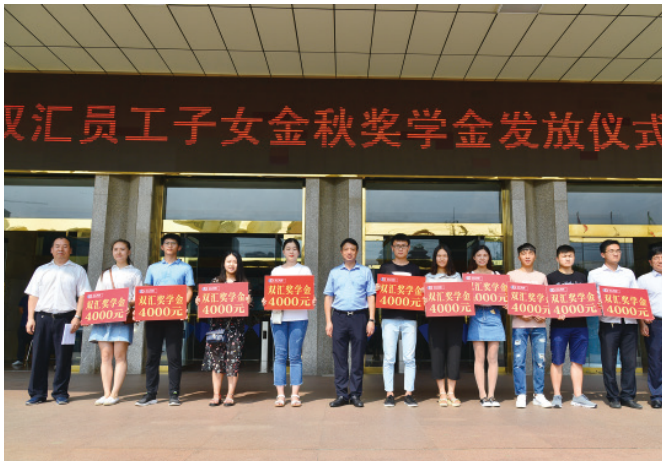
Philanthropy

As an international company, WH Group has created economic value for tens of thousands of families in China, the U.S., and other countries. We’ve done this by creating employment opportunities, stimulating the industry, and other methods. In addition, we work hard to help those in need, focusing on improving health and education while fighting poverty and hunger.

Education

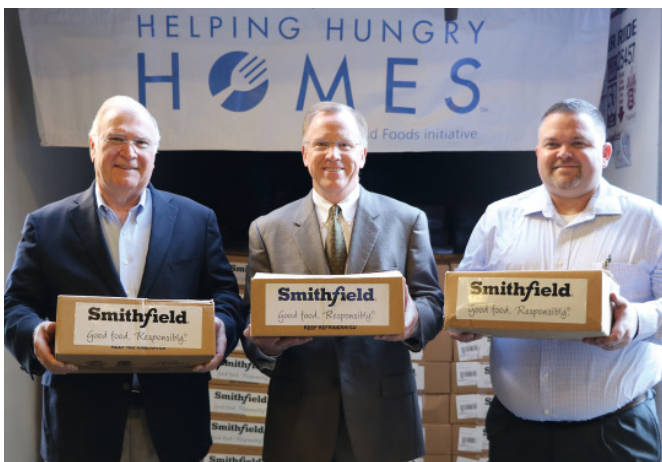
WH Group attaches great importance to education. We believe that investing in education for future generations will bring valuable long-term improvements to our country and regions we serve. We provide financial support to employees’ families and others in need in the community, including scholarship programs to help them pursue educational opportunities.

Shuanghui started the Golden Autumn Scholarship Program in 2011 and awarded scholarships to the children of employees who are admitted to colleges and universities. In 2017, Shuanghui awarded nearly \$320,000 in scholarships to support 815 employees’ children who were admitted to university. The Smithfield Foundation, Smithfield’s philanthropic arm, provides scholarships for the future generation of employees in the past decade at their selected universities. The Smithfield Foundation awarded 144 scholarships totaling nearly \$660,000 and gave \$165,000 to fund scholarships in Virginia and North Carolina. Smithfield also made a \$3 million donation—\$1 million a year over three years—to Isle of Wight County Schools, for an innovative and multifaceted educational program known as the Smithfield Foods Legacy Project.



Poverty alleviation and hunger relief

Since our hunger relief program, Helping Hungry Homes[®], began in 2008, we have donated nearly 100 million servings of protein to hunger relief organizations. In addition to donations, our employees volunteer at food banks and host food drives. In 2017, we donated 21.1 million servings of food to food banks across the U.S through Helping Hungry Homes, with a total value of approximately \$20 million.



In China, we also continue to actively participate in poverty-alleviation programs in the areas where we operate. In 2017, we donated money to the Zhaoling District Charity Federation of Luohe to help vulnerable groups. In Wuyang County, a provincial-level poverty-stricken county in Luohe, we actively supported the innovative finance and targeted poverty alleviation program of the Government, used approximately \$14.8 million of poverty alleviation loans to help 2,000 poor households out of poverty.

In the U.S., WH Group employees contributed a total of 12,181 hours of volunteer service in areas including hunger relief, post-disaster reconstruction, and helping children in need.



Donations through Environmental and Sustainability Excellence Award Program

During the fall of 2017, Smithfield made donations totaling \$36,000 to nonprofit organizations as a result of its 2017 Environmental and Sustainability Excellence Award Program. This program recognizes employees and facilities for excellence in the company's sustainability pillars: Animal Care, Environment, Food Safety & Quality, Helping Communities, and People.



HKEx ESG REPORTING GUIDE CONTENT INDEX

Aspects, General Disclosure and Key Performance Indicators (KPIs)			
Aspects, General Disclosure and Key Performance Indicators (KPIs)	Descriptions	Related chapters in this report	Note
Aspect A1: Emissions			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Focus on environment	
KPI A1.1	The types of emissions and respective emission data.	Focus on environment – Emission management – Exhaust gas emissions	Some Smithfield facilities report to U.S. environmental agencies certain air emissions data. For example, several facilities report NOx and SOx emissions to the U.S. Environmental Protection Agency (EPA) and state regulatory agencies. The number of reporting facilities fluctuates over time due to changes in reporting requirements, varied reporting timeframes, and operational changes. The EPA asks Smithfield to submit annual data in August each year. To ensure and comply with data accuracy requirements, Smithfield generally does not disclose this data publicly before submitting data to the EPA.
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Focus on environment – Combating climate change	
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Focus on environment – Emission management – Solid waste emissions	
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Focus on environment – Emission management – Solid waste emissions	

Aspects, General Disclosure and Key Performance Indicators (KPIs)

Aspects, General Disclosure and Key Performance Indicators (KPIs)	Descriptions	Related chapters in this report	Note
-------------------------------------------------------------------	--------------	---------------------------------	------

KPI A1.5	Description of measures to mitigate emissions and results achieved.	Focus on environment – Combating climate change Focus on environment – Emission management – Waste water discharges Focus on environment – Emission management – Exhaust gas emissions	
----------	---------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Focus on environment – Combating climate change – Using renewable energy Focus on environment – Emission management – Solid waste emissions	
----------	----------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------	--

Aspect A2 Use of Resources

General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Focus on environment	
--------------------	----------------------------------------------------------------------------------------------	----------------------	--

KPI 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)	Focus on environment – Combating climate change	
----------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------	--

KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility)	Focus on environment – Resource management – Water resources management	
----------	---------------------------------------------------------------------------------------------	-------------------------------------------------------------------------	--

KPI A2.3	Description of energy use efficiency initiatives and results achieved.	Focus on environment – Combating climate change	
----------	------------------------------------------------------------------------	-------------------------------------------------	--

KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Focus on environment – Resource management – Water resources management	
----------	-----------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------	--

KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Focus on environment – Resource management – Packaging materials management	
----------	--------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------	--

A3 The Environment and Natural Resources

General Disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	Focus on environment – Combating climate change – Ecological conservation	
--------------------	--------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------	--

Aspects, General Disclosure and Key Performance Indicators (KPIs)			
Aspects, General Disclosure and Key Performance Indicators (KPIs)	Descriptions	Related chapters in this report	Note
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Focus on environment – Combating climate change – Ecological conservation	
Aspect B1 Employment			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Caring for employees Caring for employees – Employee communication – Caring for employees	
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	Caring for employees	
KPI B1.2	Employment turnover rate by gender, age group and geographical region.		To be disclosed by WH Group in the coming years.
Aspect B2 Health and Safety			
General Disclosure	Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational ha	Caring for employees – Health and safety	
KPI B2.1	Number and rate of work-related fatalities.		There were no employee fatality incidents this year in WH Group
KPI B2.2	Lost days to work injury.		WH Group uses the internationally accepted incident rate standard as a key performance indicator for occupational safety. This data can be found in the care of employees – health and safety.
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	Caring for employees – Health and safety	

Aspects, General Disclosure and Key Performance Indicators (KPIs)			
Aspects, General Disclosure and Key Performance Indicators (KPIs)	Descriptions	Related chapters in this report	Note

Aspect B3 Development and training			
-------------------------------------------	--	--	--

General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Caring for employees – Career development	
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management)		All employees receive a certain amount of training to become familiar with various internal control processes to ensure product quality.
KPI B3.2	The average training hours completed per employee by gender and employee category.	Caring for employees – Career development	Smithfield has been excluded from this statistics. The company is starting to keep a record to employee training hours from 2018 onwards.

Aspect B4 Labor Standards			
----------------------------------	--	--	--

General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	Caring for employees – Value-oriented employment	
KPI B4.1	Description of measures to review employment practices to avoid child and forced labor.	Caring for employees – Value-oriented employment	
KPI B4.2	Description of steps taken to eliminate such practices when discovered.		No violations were discovered this year.

Aspect B5 Supply Chain Management			
------------------------------------------	--	--	--

General Disclosure	Policies on managing environmental and social risks of the supply chain.	Focus on high-quality food – Food safety – Supply chain management	
--------------------	--------------------------------------------------------------------------	--------------------------------------------------------------------	--

Aspects, General Disclosure and Key Performance Indicators (KPIs)			
Aspects, General Disclosure and Key Performance Indicators (KPIs)	Descriptions	Related chapters in this report	Note
KPI B5.1	Number of suppliers by geographical region.		There are 15,057 and approximately 1,000 live hog suppliers in China and the U.S, respectively. The number of suppliers of raw materials and accessories is 4,740 in China, 4,266 in the U.S, 36 in Europe, and 17 in other regions. This data does not include suppliers of Smithfield plants and farms, suppliers of Smithfield’s European operations.
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Focus on high-quality food – Supply chain management	
Aspect B6 Product Responsibility			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Focus on high-quality food	In terms of advertising and privacy issues, Shuanghui strictly complies with laws and regulations such as the “Advertising Law of the People’s Republic of China” and the “Consumer Protection Law of the People’s Republic of China” in China. For information on Smithfield’s policies, see the published Code of Business Conduct and Ethics: https://www.smithfieldfoods.com/pdf/code-ethics/English-Code-of-Business.pdf
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Focus on high-quality food – Food safety – Emergency response	
KPI B6.2	Number of products and service related complaints received and how they are dealt with.		Shuanghui received and handled 10,959 complaints about products and services through the 400 hotline. Smithfield recorded 4,927 complaints during the year. This figure does not include European business.
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.		This topic is considered immaterial, and is therefore not disclosed.
KPI B6.4	Description of quality assurance process and recall procedures.	Focus on high-quality food – Food safety	

Aspects, General Disclosure and Key Performance Indicators (KPIs)

Aspects, General Disclosure and Key Performance Indicators (KPIs)	Descriptions	Related chapters in this report	Note
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.		Shuanghui strictly abides by the "People's Republic of China Consumer Protection Law" and other regulations in China. For information on Smithfield's policies, see the published "Code of Business Conduct and Ethics": https://www.smithfieldfoods.com/pdf/code-ethics/English-Code-of-Business.pdf

Aspect B7 Anti-corruption

General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	About WH Group – Business ethics and compliance	
KPI 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.	About WH Group – Business ethics and compliance	
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	About WH Group – Business ethics and compliance	

Aspect B8 Community

General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Caring for communities	
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	Caring for communities	
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Caring for communities – Philanthropy	

