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# **About this Report**

### Introduction

This is the 11th Environmental, Social, and Governance (ESG) Report ("Report") issued by The First Tractor Company Limited to disclose and demonstrate its ESG performance. This Report has been reviewed by the Board of Directors of the Company, which is responsible for the authenticity and validity of the information contained herein.

### **Reporting Period**

The period covered in this Report is from January 1, 2022 to December 31, 2022 unless otherwise specified. Some of the information contained herein is from outside the bounds of this length of time to ensure the Report's completeness.

### Scope

Unless otherwise specified, this Report is concerned with the First Tractor Company Limited and covers its head office and subsidiaries, a scope that is identical to the scope of its consolidated financial statements. Any deviation from the said scope will be stated directly in the Report.

### **Data Sources**

All of the information and data used for the purposes of this Report has been sourced from formal documents and publicly disclosed documents of the Company.

### **Data Processing**

All financial data referenced herein shall be subject to those included in the annual report. All amounts are expressed in Chinese yuan (CNY) unless otherwise stated. Environmental data has been calculated in accordance with national or industrial standards, including the General Principles for the Calculation of Total Production Energy Consumption (GB/T 2589-2020), and the National Development and Reform Commission Guidelines for Accounting and Reporting Greenhouse Gas Emissions (trial implementation).

### **Basic Framework**

This Report was prepared with reference to general frameworks on ESG/ sustainability/social responsibility as recognized both at home in China and/or abroad, in particular the Environmental, Social and Governance (ESG) Reporting Guide of the Hong Kong Stock Exchange, Shanghai Stock Exchange Guidelines for the Preparation of Corporate Social Responsibility Reports, Notice on Strengthening Listed Companies' Assumption of Social Responsibility under the Guidelines on Listed Companies' Environmental Information Disclosure, Task Force on Climate-Related Financial Disclosures (TCFD) Report on Climate-Related Financial Disclosures, Global Reporting Initiative (GRI) Sustainability Reporting Standards, and ISO 26000:2010 Guidance on Social Responsibility, in addition to close consideration of the broader industry context and the distinctive features of the Company itself.

### **Names and Abbreviations**

For ease of expression and comprehension, the following naming rules are used throughout the Report:

Full Name	Abbreviated Name
The First Tractor Co., Ltd.	FTC, Company, We, or Us
Luoyang Tractor Research Institute Co., Ltd.	Tractor Research Institute
YTO (Luoyang) Casting and Forging Co., Ltd.	Casting and Forging Company
YTO (Luoyang) Diesel Engine Co., Ltd.	Diesel Engine Company
YTO (Luoyang) Hydraulic Transmission Co., Ltd.	Hydraulic Transmission Company
YTO (Luoyang) Flag Auto-Body Co., Ltd.	Flag Company

### **Reporting Principles**

This Report has been prepared by incorporating the four principles listed in the Hong Kong Stock Exchange's Social and Governance (ESG) Reporting Guide.

Materiality: Analysis of important themes helps to determine what should be disclosed and how detailed the disclosure should be for each of these themes.

Quantitative: Quantitative data in environmental and social areas is to be disclosed in order to show the Company's performance in accordance with KPIs.

Balance: All the information contained in this Report is from the Company's internal management documents, statistics and public disclosures, as well as public media reports, without any modifications.

Consistency: Unless otherwise stated, all data disclosed in this Report has been collected and processed according to the uniform processes established by the Company to ensure meaningful comparisons of data over time.

### **Report Publication**

This Report is to be issued electronically and will be made available on the websites of the Shanghai Stock Exchange and the Stock Exchange of Hong Kong, in addition to the Company's own website (http://www.first-tractor.com.cn/).

### **Feedback from Readers**

To enhance its ESG management level, improve the quality of its ESG information disclosure, and encourage it to fully measure up to ESG development concepts, the Company would in all sincerely like to solicit comments from readers (refer to the "Reader Comment Form" in Appendix II for further details). Please kindly send your opinions and comments to the email address below.

Contact: Office of the Board of Directors Email: msc0038@ytogroup.com

### Message from the Chairman



We are marching forward a new journey courageously. In 2022, the 20th National Congress of the Communist Party of China was successfully held, as China achieved 19 consecutive years of bumper harvests in grain production, while its achievements in alleviation were further povertv consolidated and efforts in rural revitalization marked significant progress. In the same year, in the context of changes in the business environment, the Company is committed to the mission of providing high-quality and efficient agricultural machinery and equipment for the rapid development of modern agriculture in China, and aligned itself with the national rural revitalization strategy, including by conducting technological research and development, upgrading the technologies used in its products, and diversifying its product portfolio to meet increasingly diverse agricultural machinery needs. By doing so, it has made a reliable contribution through agricultural machinery and equipment to the goal of letting the Chinese people hold tight in their hands our own rice bowls. By working hard at all levels of the Company, we made historic breakthroughs in our business performance, and presented a bounteous gift to the 20th National Congress of the Communist Party of China with our hard work and dedication

Over the past year, we took innovation as the primary driving force for development and steered toward high-quality development with precision. The Company adhered to the following mode of thought in its approach to development: innovation-driven, structural optimization, dedication to the existing market, and breaking into the high-end market. It has strived to accelerate core technological breakthroughs and lead the upgrading of technologies used in its products, including by empowering the intelligent transformation and the deep and efficient combination of agricultural machinery with digital applications. For example, its Dongfanghong LZ2604 heavy-duty power shift tractors entered into the mass production stage of their development, and its LW3204 CVT tractors closed several technological gaps that Chinese companies had yet to fill. This has marked the establishment of a system for the agricultural machinery industry that meets the requirements for expanding modern agriculture in China.

In 2022, we firmly championed our sense of responsibility as an industry leader, and have become a driving force for the transformation and steady development of the broader industry. The Company has actively developed its green products and services, embedding green and sustainable development targets into its management system, and working hard to create an environment-friendly operational mode. As the Dongfanghong brand fully shifted to the China IV non-road emissions standards, the Company has performed outstandingly in the comprehensive assessment for China IV emissions standards upgrading in the agricultural machinery industry, which again demonstrated its confidence and strength as an industry leader.

Over the past year, we actively listened to the voices of all our stakeholders and created a new landscape benefiting all these stakeholders. By giving full play to its role at the head of the supply chain, the Company maintained a stable supply chain, in addition to boosting its resilience. In doing so, it overcame barriers to help with the recovery of the supply chain, ensuring the delivery of efficient synergies across the industry chain, and satisfying diverse user needs for efficient and premium agricultural machinery. The Company values the personal ownership and sense of gain that is representative of its staff, including by optimizing employee incentive mechanisms, ensuring that they feel cared for and providing them with opportunities for career development, so that achievements and benefits are both shared between the Company and its employees.

In this 2022 ESG Report, we have reviewed our achievements made through concerted efforts and valuable contributions. I would like to take this opportunity to pay tribute to all sectors of society, especially our stakeholders, who care deeply about our continued development. Looking forward, we will further boost our awareness of corporate social responsibility, enhance our shared understanding and mutual values with all stakeholders, and together set out on a new journey in this great new era.

> Liu Jiguo, Board Chair, The First Tractor Company Limited



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# **Company Overview**

The First Tractor Company Limited ("Company") is a critical manufacturer of agricultural machinery in China and the first company of its kind to be listed on both Chinese mainland stock markets and the Hong Kong stock market. It successfully offered H shares (stock code: 00038) and was listed on the Hong Kong Stock Exchange in June 1997, then launched its initial public offering on the Chinese mainland (stock code: 601038) after getting listed on the Shanghai Stock Exchange in August 2012.



Focusing its attention on the manufacturing of advanced agricultural machinery and equipment, the Company is among the largest manufacturers of agricultural machinery and possesses the most advanced technologies and strongest comprehensive capabilities. When compared with peers in China, it has a complete suite of systems for developing and producing tractors, including large, middle and small-sized wheeled tractors, crawler tractors, diesel engines and parts. It is dedicated to supplying agricultural equipment featuring advanced technologies and reliable quality in support of China's shift towards agricultural mechanization.

As one of the most influential and well-known national brands in the history of Chinese agricultural machinery, Dongfanghong has become a powerful symbol demonstrating the way in which a national brand has successfully matured to become bigger and stronger. In recent years, the Company has focused on technological upgrading and structural optimization across the industry chain by speeding up core technological breakthroughs, with its overall advantages in R&D, manufacturing, products, brand operations, channel operations and services being further manifested. It has continued to provide efficacious support for the development of the broader agricultural machinery industry, including advancing China's rural revitalization strategy and the modernization of the country's rural areas and agricultural production.

### **Company Values**

### Mission:

Till the land, harvest your dreams

### Vision:

To be an excellent manufacturer of agricultural machinery

#### **Core values:**

Make the best products, develop the best people and achieve the best performance

### **Purpose:**

Create values for customers and grow together with employees

### Motto:

Survival with quality in mind and development based on innovation

### **Spirit:**

Spirit: Compete, strive and take responsibility

### **Talent philosophy:**

Give opportunities to those who desire them, establish promotions for those who are competent, and offer incentives to those who succeed

### **Quality philosophy:**

Zero defects and internationalized standards

### Service philosophy:

Be a close friend to our customers

### **Honors and Awards**

#### **Honor or Award Title**

Most Valuable Industrial Manufacturing Company at the Sixth Golden Hong Kong Stocks Awards

**Issuing Authority** Zhitongcaijing.com & www.10jqka.com.cn



**Honor or Award Title** Fifth New Fortune Best IR Hong Kong-listed Company (A+H stocks) Award



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拖股份

优秀董事会

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你公司东方红牌轮式拖拉机 炭获第十三届全国农机用户满意品牌

ano TMM

**Issuing Authority** New Fortune

#### Honor or Award Title

Excellent Board Award at the 17th China Gold Round Table Awards for Boards of Listed Companies

**Issuing Authority** Directors & Boards magazine

### **Honor or Award Title**

Yu Li'na, the Secretary of FTC's Board of Directors, received the Award for Meritorious Board Secretaries at the 17th China Gold Round Table Awards

**Issuing Authority** 

Directors & Boards magazine

#### Honor or Award Title

Dongfanghong wheeled tractors won the 14th National Agricultural Machinery Brand for User Satisfaction

#### **Issuing Authority**

Sponsored by the National Agricultural Machinery Exhibition and organized by Farm Machinery

### **Honor or Award Title**

Dongfanghong rotary tillers won the National Agricultural Machinery Brand for User Satisfaction

#### **Issuing Authority**

Sponsored by the National Agricultural Machinery Exhibition and organized by Farm Machinery



Honor or Award Title

**Issuing Authority** 

China Association of Agricultural Machinery Manufacturers and the China Agricultural Machinery Safety newspaper

Honor or Award Title

Dongfanghong LF2204 driverless tractor won the Grand Jury Prize

**Issuing Authority** Chinese Society for Agricultural Machinery and Farm Machinery

### Honor or Award Title

Dongfanghong LZ2604 power shift tractor won the Application Contribution Prize

### **Issuing Authority**

Chinese Society for Agricultural Machinery and Farm Machinery

Honor or Award Title YTO (Luoyang) Diesel Engine Co., Ltd. won the Golden Ears of Grain Prize

**Issuing Authority** Chinese Society for Agricultural Machinery and Farm Machinery

Honor or Award Title YTO (Luoyang) Diesel Engine Co., Ltd. won the Prize for Outstanding Parts Suppliers

**Issuing Authority** Chinese Society for Agricultural Machinery and Farm Machinery













# **Overview of 2022 Indicators**



# **Responsibility Management**

As a listed company controlled by a central state owned enterprise, the Company has sought to strengthen its responsibilities and obligations, which includes establishing an effective ESG management system based on a solid foundation of corporate governance. The Company has spared in no effort to improve its ESG management on a systematic, regulated and reasonable basis, and together with stakeholders has created an ecosystem for shared survival, growth and development, all with an aim to supporting its sustainable operations at a strident pace while following along the path of its new journey forward.

# **ESG Management**

The Company has remained steadfast in its efforts to improve its ESG management, for which the Board of Directors serves as the highest decision-making body, taking on responsibilities to clarify its ESG management structure and associated duties as well as advancing the implementation of ESG practices, which has helped to ensure the robust operations of the Company and sustain its future development.

ESG Management Duties of the Board	The Board of Directors is ultimately governance (ESG) work of the Comp Company's ESG affairs. The Strateg Committee under the Board, which of Board Chair, is responsible for explo for the Company, developing its ESC responding to requests from stakehol Company's ESG performance, super disclosures, and reports to and provis to ensure the effective implementation
ESG Risk Management	The Company sets great store on ES importance to any significant impact the ongoing changes to macroeconor well as its own corporate strategies a identifies and analyzes ESG risks, in The Board also reviews and finalizes are directed for the purposes of their
ESG Target Management	With a target-based ESG management improved its ESG data collection and work targets, with KPIs that include management and quality management regularly reviewed by the Strategy, I Committee. Moreover, the Company performance review system for its m implementation of ESG practices

ely responsible for the environmental, social and ompany as the highest decision-making body for the tegy, Investment and Sustainable Development the consists of three directors and is chaired by the ploring mid- and long-term development strategies ESG values and behavioral principles, and holders. The Committee also reviews the pervises its ESG management and information ovides ESG-related proposals to the Board in order ation of its ESG management duties.

ESG management by attaching a high degree of bacts on the Company caused by ESG risks. Given nomic policies, society and the environment, as es and business situation, the Company actively , including performing regular stakeholder surveys. izes important ESG themes on which more efforts heir management and improvement.

ment scheme, the Company has continually and has embedded its ESG KPIs into its annual de energy savings and emissions reductions, safety ment. The progress in achieving these ESG KPIs is y, Investment and Sustainable Development any has incorporated ESG KPIs into the s management level and subsidiaries to ensure the

### **Requests from and Responses to Stakeholders** Stakeholders **Expectations of Stakeholders Responses from the Company** Strengthen operations with compliance · Launch agricultural machinery products that meet modern agriculture requirements, in · Align with national strategies particular products that are highly functional, • Operate under the law Governmental and adaptive and with a high quality Contribute to rural rewitelize

### value to seek common development, share opportunities and create a future together. We actively establish regular communication channels with governmental and regulatory agencies, shareholders,

The Company is committed to achieving an effective alignment between corporate value and social

**Communication with Stakeholders** 

employees, customers, partners, and local communities, comprehensively raising our understanding of the expectations and requests of various stakeholders, and responding to and resolving any relevant issues in a targeted manner, in this way promoting coordinated development alongside all stakeholders.

regulatory agencies	<ul> <li>Contribute to rural revitalization</li> <li>Focus on green development</li> <li>Anti-corruption</li> </ul>	<ul> <li>Respond to climate change risks by transforming energy-consuming business practices into green ones and helping with the green upgrading of agricultural machinery</li> <li>Hold dedicated anti-corruption programs</li> </ul>
Investors	<ul> <li>Persist in stable and robust operations</li> <li>Create value for shareholders</li> <li>Guarantee information transparency</li> </ul>	<ul> <li>Regulate governance structures to improve competitiveness</li> <li>Make continuous distributions to shareholders and ensure their rights</li> <li>Disclose information promptly and accurately to ensure smooth communications with investors</li> </ul>
Employees	<ul> <li>Occupational health and safety</li> <li>Facilitate career development</li> <li>Improve salaries and benefits</li> <li>Protect basic rights</li> <li>Accommodate employee views and opinions</li> </ul>	<ul> <li>Enhance controls over occupational hazards in the workplace and arrange regular assessments of potential sources of any hazards</li> <li>Provide and arrange diverse programs for training employees</li> <li>Sign collective salary agreements to ensure that employees are entitled to paid leaves and subsidies under the law</li> <li>Set up a labor dispute mediation room and hold regular employee discussions</li> </ul>
Customers (Users)	<ul> <li>Maintain product quality</li> <li>Offer quality service</li> <li>Innovate in products and technologies</li> </ul>	<ul> <li>Improve the quality management system, and create reliable products with a high quality by considering market demand</li> <li>Develop a customer management system and Dongfanghong commerce APP to swiftly respond to customers</li> <li>Promote the green and digital upgrading of products, broaden product portfolios and develop original technologies</li> </ul>

Stakeholders	Expectations of Stakeholders	Responses from the Company
Partners (Suppliers)	<ul> <li>Maintain stable partnerships</li> <li>Emphasize business ethics</li> <li>Develop together</li> </ul>	<ul> <li>Improve the system for supplier onboarding, assessment and exiting, and perform regular supplier reviews</li> <li>Adopt fair procurement mechanisms and strengthen the prevention of supplier credit risks</li> <li>Provide targeted training for suppliers and help them in forging their own technological advantages</li> </ul>
Local communities	<ul><li>Seek a greener life</li><li>Protect the public interest</li></ul>	<ul> <li>Arrange a variety of energy saving and environmental protection publicity campaigns</li> <li>Participate in charitable activities to promote better regional development</li> </ul>

### **Analysis of Significant Themes**

Taking into consideration domestic and international standards and policies, industry trends and its own operations, the Company has identified 28 significant themes (including 9 environmental themes, 11 social themes and 8 governance themes) that will assist with its own sustainable development.

The Company has assessed how important these themes are by sending questionnaires to eight types of stakeholders (governmental and regulatory agencies, shareholders and investors, management personnel, employees, customers and users, suppliers and partners, and people from local communities), having received 315 effective questionnaires. Based on these results, a matrix of significant themes sorted by importance was generated and submitted to the Board for review, which resulted in a finalized list of significant themes.

Highly important themes will be disclosed in detail within this Report as a way to respond to stakeholders more accurately and comprehensively.

### Breakdown of Stakeholders Participating in the Survey on Significant Themes





Importance to First Tractor

Environmental Dimension 
 Social Dimension 
 Governance Dimension

### List of Significant Themes Arranged by Level of Importance

Importance	Sequence	Theme
High	1	Product quality and responsibility management
	2	Green products
	3	Innovative development
	4	Product and technological innovations
	5	Climate change responses
	6	Employee training and development
	7	Customer service and communications
	8	Management of resources

Importance	Sequence	Theme
	9	Risk control and compliance
	10	ESG management
	11	Waste management
	12	Employee salaries and benefits
	13	Occupational health and safety
	14	Anti-bribery and anti-corruption
	15	Greenhouse gas emissions
	16	Digital transformation
Middle	17	Corporate governance
	18	Environmental management system
	19	Environment and natural resources
	20	Supplier management
	21	Investor relationship management
	22	Data security
	23	IPR protection
	24	Labor standards
	25	Green investing and financing
Low	26	Public interest
	27	Green initiatives
	28	Community relationships



# 01 Bearing in Mind the Mission of Development

The company steadfastly adheres to its mission of pursuing long-term growth and spearheading business development. Prioritizing stable and compliant operations and a focus on sustainability, it has empowered the traditional agricultural machinery industry with its digital technologies, which has contributed to accelerating the transformation and upgrading of the overall industry. This underscores the vigorous efforts that the Company has made to meet China's urgent demand for the efficient and adaptive agricultural machinery necessary for continued agricultural modernization, in turn helping to safeguard the country's bottom line for maintaining food security and ensuring stable and rising agricultural yields.

# Shouldering Responsibilities and Navigating Strategically

The Company has adhered to the following mode of thought in its approach to development: innovation-driven, structural optimization, dedication to the existing market, and breaking into the high-end market. With a sense of responsibility and a sense of mission, the Company has firmly seized upon the opportunities offered by the ongoing shift to agricultural modernization and the transformation of the agricultural machinery industry. In this context, it has worked towards improving its overall top-level corporate strategies and business development strategies, while enhancing its decision-making capabilities and operational efficiency, accelerating the optimization of the structure of its product offerings and securing its core competitiveness, all of which aims to provide users with the efficient and adaptive agricultural machinery required in pursuit of advancing agricultural modernization.

### **Strategic Path**

Development Path		
	Innovation driven	The Company persists in its push technologies in its business devel manufacturing services; and adva culture at a steady pace to boost in
	Structural optimization	Focusing on advanced equipment Company continually optimizes i offerings with an adherence to a r business and management archite degree of diversification, solid bu
	Dedication to the existing market	With a customer-centered approa the traditional market through its value-added services while exerti- companies are relatively weak, al- overseas markets, with an aim to
	Breaking into the high-end market	With world-class companies as it: premium products that can help ro domestic high-end markets; targe agriculture by accelerating the inc reaching toward the high value-ac

### **Aligning with National Strategies**

The Company has strived to align itself with the country's national strategies for rural revitalization, food security and industry chain security by helping to address the issues concerning the "unavailability of machinery" and the "unavailability of suitable machinery," two issues that have hindered China's agricultural machinery industry. Guided by the national "dual carbon" strategy, the Company has adopted a green development path, while continuing to lead and drive upgrading of the overall industry, in addition to fulfilling its social responsibilities as a central state-owned enterprise.

**Responses to UN SDGs** 



#### Description

h for technological innovation and stresses the leading role of elopment; innovating its business model by transforming ancing its systems, institutional mechanisms and corporate its vitality.

nt manufacturing and modern manufacturing services, the is business structure; optimizing the structure of its product market-based and strategic orientation; endeavoring to build a tecture that promotes important work tasks, an appropriate business foundations and efficient operations.

ach, the Company is to pursue further refinements its efforts in s lineup of adaptive, reliable and cost-effective products and ing greater efforts to develop markets where Chinese long with specialized niche submarkets and important o strengthening its brand presence.

its benchmark, the Company is to focus on producing those reinforce its competitive strengths in both international and geting precision agriculture, smart agriculture and green ndustrialization of intelligent and new energy equipment, while added segments of the industry chain.

#### **Rural revitalization and food security**

The Company is to build an innovation chain by focusing on the industry chain, as well as searching for solutions concerning the "three task lists" by accelerating the application of intelligent technologies in agricultural machinery, overcoming any weak points that impede agricultural mechanization, and furthering the development of new energy equipment. By acting as the head of the tractor industry chain and playing a framework role, the Company strives to create a well-functioning industry ecosystem at the regional level, which will assist with the transformation of the industry through its sound development as well as contributing to higher quality and greater efficiency in the agriculture industry.

#### **Dual carbon strategy**

The Company is to fulfil tasks for ensuring that the energy saving and emissions reduction objectives set forth in its 14th Five-Year Ecological and Environmental Protection Plan are achieved through continued improvements to its top-level design for implementing the dual carbon strategy, including focusing on green product development and manufacturing as well as practices that prioritize greenoriented development.

### Leading Through Innovation and Making Core Breakthroughs

By directing its efforts towards a transformative development path focused on large-sized, efficient, ITenabled, intelligent and green agricultural machinery, the Company has remained resolutely devoted to making breakthroughs in core bottleneck technologies that will lead to industry advancements. To this end, it has revised eight different management procedures, including its Product Planning Management Procedures, Management Procedures on Technical Documents for Products, and Product Design Management Procedures, while improving the full lifecycle for R&D systems that encompasses planning, research, approvals, design, validation, testing, trialing and launching. The Company has also assumed key tasks for the development of the "source of original technologies for agricultural machinery" as a way to further strengthen the supply of original technologies and speed up the conversion of technological achievements.

In 2022, the Company applied for two National Key R&D Projects for the 14th Five-Year Plan Period, which were successfully approved by the Ministry of Science and Technology. The two projects are entitled the "Development and Demonstration of Technologies for Novel Power Systems and Intelligent Control Units for Agricultural Machinery" and "Study on Technologies and the Development of Equipment for Driverless Tractor Operations."

R&D Performance

Number of technological innovation projects in the year

52.878.23 10,000 yuan

Technological innovation investment

### Key Technological Breakthroughs

Efficient and intelligent tractor diesel engine with low emissions

Power shift transmission

### 2022 Awards for R&D Innovations

Project Name	Award Name	Issuing Authority
Development and application of a shift transmission device for 120-140 hp tractors	Second Prize at the 2022 Science and Technology Awards for China Machinery Industry	China Machinery Industry Federation and the Chinese Mechanical Engineering Society
Key technologies for the energy efficient motor drive system of tractors and their applications	Second Prize at the 2022 SINOMACH Science and Technology Awards	China National Machinery Industry Corporation
Research on and application of an intelligent tractor detection technology	Third Prize at the 2022 SINOMACH Science and Technology Awards	China National Machinery Industry Corporation
Study on and application of key technologies for the rapid- development of agricultural equipment and high-speed flow manufacturing	Third Prize at the 2022 Agricultural Machinery Science and Technology Awards	China Association of Agricultural Machinery Manufacturers and the Chinese Society for Agricultural Machinery

### Strengthening Digital Intelligence and Driving Transformation

To speed up the implementation of its strategy of digital transformation, the Company has continually improved its top-level digital design, with digital technologies empowering the shift to agricultural mechanization and intelligent technologies promoting advances in management and business development. Meanwhile, by forging new competitive advantages in manufacturing and harnessing the driving force of its internal synergies,

Hybrid powertrain system for largepower tractors

Intelligent largepower tractor

the task of upgrading the level of intelligence in the agricultural industry has been given a much greater impetus. In 2022, the Company went on to receive five awards in recognition for all its concerted efforts in pursuit of driving industry transformation through digitalization.

### **Awards for Digital Development**



### **Building a Digitalized System**

The Company has set up a Leading Group on Digital Transformation and an IT Construction Committee under which a Digital Transformation (IT Construction) Office is to implement the Company's plans according to its directives on digital transformation. This office is tasked with establishing synergies through an integrated management system while carrying out the digital transformation and integration of "information technology and industrialization" alongside the high-quality development of business and management operations.

The "Special Implementation Scheme for the Digital Transformation Action Plan" as devised by the Company specifies different business scenarios and value models. Its main set of objectives include developing innovative products and services, optimizing production and operations, and accelerating business transformation. The Company has enhanced its all-around digital capabilities in five major aspects: 1) building a system that supports digital transformation; 2) upgrading its production and operations using a digital approach; 3) applying digital technologies; 4) propelling the potential of data market factors; and, 5) advancing digital transformation in key areas.



### **Promoting Digital Applications**

As for the digital upgrading of its production and operations, the Company has expanded its core business systems with an industrial IoT platform that it has built and optimized, in addition to promoting intelligent manufacturing and 5G applications. In this way, digital transformation is therefore capable of empowering the provision of full lifecycle services for the benefit of the agricultural machinery industry.

### **2022 Applied Digital Technologies**









In 2022, the Company's Dongfanghong Cloud was shortlisted for inclusion among the cases of pilot applications for industrial Internet platforms. The 5G+AI quality control solution developed by the Diesel Engine Company won first prize at the 5th Zhanfang Cup Contest for 5G Application Solutions and third prize during the national level rounds at the 5th Zhanfang Cup Contest on 5G Applications.

### **Applied Technology**

Expansion of SAP-ERP, SCM and other core business systems

#### **Description**

SCM platform

### **Applied Technology**

Deployment of Dongfanghong Cloud, an industrial IoT cloud platform for modern agricultural machinery

#### Description

Dongfanghong Cloud - industrial IoT cloud platform for modern agricultural machinery

### **Applied Technology**

Modern intelligent factories and workshops

#### Description

5G + AI quality inspection platform

### **Integration of Information Technology and Industrialization**

The Company has spurred industrialization through information technology and has propelled information technology through industrialization, actively supporting their dual integration. In 2022, it began implementing the latest standard for the upgraded integration of information technology and industrialization by developing the Management Manual for the Integration of Information Technology and Industrialization, in addition to setting up a Leading Group and Task Force for this work task. By taking aim at building its AAA-rating full process order control capabilities, the Company has improved its digital design capabilities, synergistic supply chain capabilities and production management capabilities in relation to value creation carriers, partners and operation processes.

### **Advancing Anti-Corruption Efforts and Probity Education**

The Company has abided by applicable national laws and regulations to establish a clean environment where no form of corruption is tolerated, in this way ensuring that the enterprise is able to achieve high-quality development. In 2022, there were no corruption-related lawsuits in connection with the Company.

### **Anti-Corruption Performance**

Indicator	Unit	2022
Number of anti-corruption training sessions	/	53
Number of anti-corruption training participants	/	2,840
Anti-corruption training duration completed	hour	106

### **Management System**

A discipline inspection and supervision unit has been established in each entity under the Company as a way to ensure the effective implementation of anti-corruption work, which guarantees that specific, precise and regular supervisions are conducted across the organization.

### **Anti-Corruption Training**

With the help of an online anti-corruption training camp, the Company has offered anti-corruption lectures to employees working in important roles.

### Case:

### Themed anti-corruption education

In September 2022, the Company organized an anti-corruption course named "Know, Understand and Observe Rules, Behave Properly at the Workplace," which emphasized the model example of all leaders who are required to play the role of "critical minority" with regard to their adherence to laws and regulations. Leaders above certain levels in all functional areas participated in this course.



Company leaders attend the "Know, Understand and Observe Rules, Behave Properly at the Workplace" anti-corruption course

### **Speaking Up Through Petitions and Reporting**

The Company has published multiple reporting channels on its website, including a reporting hotline, email address, WeChat public account, mailbox address and reporting reception room. All reports concerned with corruption are accepted by the Discipline and Inspection Office. Relevant investigations cannot be started until submitted to and approved by the primary heads of the Discipline and Inspection Organs.

# Fulfilling Governance Responsibilities and Maintaining Steady Operations

With the Articles of Association as its core, the Company continued to further adjust and boost its governance structure and operating mechanisms, while upholding the powers of the Board, Supervisory Committee and the Shareholder Meeting. In 2022, the ninth Board, Supervisory Committee and management level group were elected or appointed successfully, which has provided robust guardrails for the Company's compliant operations moving forward.

### **Shareholder Meetings**

The Company has guaranteed the equality of all shareholders, in particular small and middle shareholders, and has assured them that they can effectively exercise their right to information, right to participation, right of inquiry and voting rights. In 2022, the Company held five shareholder meetings where 20 proposals on the elections of the new board and new supervisory committee were reviewed and discussed.



### **Board of Directors**

The Board gives full play to its role as the decision-making body to fully safeguard the interests of the Company and all shareholders. In 2022, altogether nine Board meetings were held.



In 2022, the Company elected the ninth Board consisting of seven directors experienced in diverse fields; and of these directors, two are experts in the agricultural machinery industry. In addition, there are three independent directors.

### **Supervisory Committee**

The Supervisory Committee is responsible for supervising important matters of the Company, including directors and senior managers acting in their official capacities. In 2022, the Company had nine supervisors elected and held six Supervisory Committee meetings.



# Improving Interactions and Ensuring Investor Interests

Attaching great importance to investor relationship management, the Company has laid down its "Investor Relationship Management Policy," and has worked towards creating fair, transparent and open communication channels to ensure timely disclosures with both accuracy and completeness. While assuring that all shareholders have the equal right to information, it has meanwhile continually provided returns for shareholders and has created progressively greater value.

### **Communication Channels**

The Company maintains diverse channels for communication with investors (e.g., telephone meetings, performance briefings, investor calls, and sseinfo.com), as well as keeping an eye on and swiftly responding to any questions from investors.





The Board Chair and senior managers were present at the 2021 performance briefing

### **Information Disclosure**

In 2022, the Company revised its internal policies, including its "Information Disclosure Management Policy" and "Insider Registration Management Policy," which was completed in accordance with the latest regulatory rules, having carried out its disclosure obligations in strict accordance with the requirements of the Shanghai Stock Exchange and the Hong Kong Stock Exchange.

The Company presents its financial data – including product sales, revenue, net profit, and cash flows - in visualized infographics, which is a way to clearly outline to investors its operational performance and changes in financial data. These visual formats are also circulated online via new media platforms.

### **Shareholder Returns**

The Company highly prioritizes and has ensured shareholder returns by specifying a stable and continuous profit distribution policy in its Articles of Association. In 2022, it completed the distribution of cash dividends for the year 2021, having paid out CNY 0.117 per share (including tax) for a total cash distribution of CNY 131,466,497.18.

### **Guarding the Bottom Line for Compliance and Defending Against Risks**

The Company is firmly committed to establishing a comprehensive, efficient and procedural-based risk and compliance management system tailored to the specific needs of its business operations. It has enhanced the level of compliance awareness among all of its employees, and through timely risk monitoring, tracking, and rectification.

the Company has improved its risk control capabilities and overall risk management performance. This will ensure compliant and effective operations as well as accurate and reliable disclosures, which in turn will safeguard the high-quality and sustainable development of the Company.

### **Strengthening Risk Management**

By formulating its "Internal Control Management Handbook" and associated internal control flowchart handbook, as well as revising its "Internal Audit Management Procedures," "Fixed Asset Investment Management Procedures" and "Management Procedures on Bidding for Production Materials," the Company has firmly established procedural-based risk management practices. It has set up a Task Force on Full Risk Management that is responsible for building the Company's internal control system and associated roles, while developing a clear division of responsibility for risk management at all levels.

Focusing on business operations and major decision-making processes, the Company regularly arranges risk assessments, develops risk management strategies, and works out solutions, as well as monitoring and improving its risk management practices. This ensures that the Company can promptly issue risk warnings, effectively supervise and implement risk management measures, and continuously improve its risk management capabilities.

Risk assessment	Develop risk management strategies
Conduct yearly comprehensive risk assessment Perform special risk assessment for material matters beforehand	• Determine the overall risk preference, risk tolerance and risk management effectiveness criteria around the Company's development strategies given external circumstances and the Company's operations, and select risk management tools

### **Supporting Compliant Operations**

According to the work tasks as outlined for the "Enhanced Compliance Management Year," the Company opted to regulate its compliance management system with a review mechanism that links up from top to bottom, enhancing coordination across different entities and functions and performing compliance audits on procedures and policies, economic contracts and material decisions, having immediately addressed any issues that were discovered in the course of completing this process.

#### **Develop risk** management solutions

• Develop solutions to material risks and ensure the execution of these solutions

#### **Risk management** monitoring and improvements

 Oversee the implementation of risk management solutions, assess the effectiveness of risk management and make prompt improvement

# 02Sowing the Seeds of Responsibility

Determined to achieve results of both an economic and environmental safety nature side-by-side, the Company has guarded the bottom line for maintaining workplace safety while having established an environmentallyfriendly operational mode. These down-to-earth actions have made safety combined with green and sustainable development the foundation for its production activities and operations. In 2022, the Dongfanghong brand fully shifted to adopt the China IV non-road emissions standards, performing exceedingly well in a comprehensive assessment based on the China IV emissions standards as it undergoes upgrading in the agricultural machinery industry, which has once again demonstrated its confidence and strength as an industry leader.





### **Policies and Procedures**

**External Laws and Regulations** (Safety and Environmental **Protection**)



Management

Environmental Protection Law of the People's Republic of China

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

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

Integrated Wastewater Discharge Standard

Soil 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 Environmental Pollution from Solid Waste

Law of the People's Republic of China on Work Safety

Emergency Response Law of the People's Republic of China

Accidents

### **Internal Policies and Procedures** (Safety and Environmental Protection)

- Responsibility System for Environmental Protection
- Procedures on Supervision of the Operation of Pollution Prevention and Occupational Disease Hazard Control Facilities
- Procedures on the Prevention and Control of Solid Waste Pollution
- Assessment Procedures on Safety and Environmental Protection
- Administrative Procedures on Safety, Environmental Protection, and Occupational Health Education
- Management Procedures on the Technological Measures and Projects for Safety and Environmental Protection
- Management Regulations on the Environmental Protection of Construction Projects
- Management Procedures on the Work of Three-Inspections and Three-Disclosures for the Identification and Control of Safety and Environmental Hazards
- Energy Saving Management Procedures
- Management Procedures on Critical Energy-Consuming Equipment
- Total Employee Responsibility System for Work Safety
- Management Procedures for Natural Gas Safety
- Management Procedures for the Safety of Construction Projects
- Management Procedures for Special Equipment Safety
- Procedures on the Supervision of Related Parties for Workplace Safety
- Administrative Procedures on Education and Training for Safety, Environmental Protection, and Occupational Health
- PPE Management Procedures
- Management Procedures for the Identification and Control of Workplace
- Hazardous Chemicals Management Procedures
- Management Procedures for Dangerous Operations Approval
- Procedures for the Supervision and Management of (Sources) of Hazards
- Workplace Accident Response Procedures
- Workplace Accident Management Procedures
- Safety and Environmental Reporting Policy
- Management Procedures for Standardized Positions in Workplace Safety Workplace Prohibitions
- Procedures for the Management and Operation of Safety and Environmental Protection Information
- Safety Protection Facility Management Procedures

### **Strengthening Safety Management for Workplace Safety**

By upholding a bottom-line mentality in its approach to workplace safety, the Company has continued to go full steam ahead in the maintenance of workplace safety, including by improving and executing its total employee responsibility system alongside related policies and procedures for workplace safety. This has been coupled with deepening and advancing tiered risk control and identification as well as the management of hazards, in addition to enhancing assessments of workplace safety and occupational hazards while putting into place relevant precautionary measures.

### Solid Foundations for Maintaining Safety

Led by its objectives, the Company has spared in no efforts to ensure the maintenance of workplace safety. For example, a separate Safety Management Department was set up to preserve the independence and impartiality of the Company's safety management unit. This safety management unit was further optimized in 2022 after duties were clearly assigned across a well-established workplace safety responsibility structure, while the effective implementation of safety practices was further guaranteed through the practice of issuing workplace safety responsibility structures and letters of undertakings.

### **Workplace Safety Performance**

Indicator	2020	2021	2022
Number and rate of work-related fatalities	0	0	0
Annual lost workdays due to work-related injuries	175	392	235

### Safety Risk Management

Adhering to the principle that large risks are evaluated, large hazards are eliminated and large accidents are prevented in the name of comprehensive safety, the Company has continually devoted itself to improving and implementing a dual prevention system. Under this system, hazardous factors have been re-identified and re-assessed to increase risk prevention capabilities, while workplace safety inspections and special governance projects have been performed targeting sources of potential hazards (such as relevant stations and rooms) and in higher-risk areas engaged in the production, use and storage of hazardous chemicals. Special attention has been placed on supervising how effectively the workplace safety responsibility system is being executed and how effectively sources of potential hazards at all levels are being controlled. Moreover, additional efforts have been devoted to inspecting and verifying the intrinsic safety and mitigating any potential hazards in all workplace settings. The Company has exerted extra efforts into the management and control of sources of potential hazards, with all identified hazards having been remedied in 2022.

### Case: Safety inspection

Leaders at all levels within the Company take part in joint inspections for the purposes of workplace safety, environmental safety, fire safety and traffic safety on a regular basis. These inspections cover every aspect of safety: including the intrinsic safety of higher-risk equipment and facilities; the identification and remedying of any environmental risks; the transport, use and storage of hazardous chemicals; personnel, technologies, materials and equipment for emergency responses; and daily operations at duty stations.



### Fostering a Culture of Safety

The Company has attempted to foster a safety-centered culture through its dedication to training, education and publicity, in addition to taking the following measures: introducing a "Workplace Safety Month" during which hot topics related to workplace safety are able to be extensively discussed; developing workplace safety case studies designed for enhancing employee awareness; unveiling an online safety knowledge contest focusing on China's New Workplace Safety Law; and setting up a Workplace Safety Classroom. These measures are intended to keep workplace safety awareness at the top of everyone's mind, reduce work-related incidents and ensure improvements to overall workplace safety.

### se: Rollout of "Workplace Safety Mo

To ensure a successful "Workplace Safety Month" in 2022, the Company carried out a variety of early arrangements, including preparing bulletin boards, posters, electronic screens, and flip carts to actively promote an engaging atmosphere for the month-long event. During the Workplace Safety Month, the Diesel Engine Company organized various activities that included setting up a Workplace Safety Classroom, establishing platforms for sharing photos of and reporting on any potential hazards, and promoting workplace safety publicity that encompassed every workshop, every team, every position and even every family. These activities formed a key component of the Company's efforts to foster a culture of safety and ensure the maintenance of a safe work environment.



### th

### Workplace Safety Training Performance

Indicator	Unit	2020	2021	2022
Number of safety management training participants	/	12,391	14,434	14,211
Duration of safety management training completed	/	769	752	779

### **Strengthening Emergency Management**

In order to strengthen its emergency management capabilities, the Company has revised its special emergency response plan and on-site response plan in accordance with the Workplace Accident Response Procedures and the Guidelines for Enterprises to Develop an Emergency Response Plan for Workplace Accidents, which has ensured that emergency response plans at all levels are more targeted, practical and reasonable. Furthermore, the Company has provided training sessions on the use of rescue equipment so that all emergency rescuers are familiar with the use and daily maintenance standards for rescue equipment along with related rescue procedures and measures. It has also organized company-wide emergency response drills by designing scenarios wherein people are trapped inside the coating workshop during a fire breakout, which has provided a means to effectively test its response and rescue capabilities under emergency situations.



### **Occupational Health and Safety**

The Company highly prioritizes occupational health and safety management by relentlessly improving controls over occupational hazards at the workplace, organizing inspections that ensure the proper protection facilities, warning signs, bulletin boards and protection equipment are all in place in any work areas where occupational hazards may arise. When it comes to the identification and assessment of occupational hazards, the Company regularly carries out the detection, identification and analysis of these hazards each year, and has this information recorded into the occupational hazard control register. In 2022, there were no recorded occupational diseases that occurred at the Company.



Occupational Safety Signs

The Company arranges an internal audit of its occupational health and safety management system, a management review, and relevant third-party audits each year. In 2022, the Company and its nine subsidiaries had their respective occupational health and safety management systems certified according to the ISO 45001 standard.



Occupational Health and Safety Management System Certificate

### **Occupational Health Management Performance**

Indicator	Unit	2020	2021	2022
Coverage of occupational health examinations	%	100	100	100
Number of occupational health training participants	/	5,499	4,670	4,747
Duration of occupational health training completed	hour	113	121	119

# **Responding to Climate Change by Adhering to Low Carbon Targets**

The Company actively seeks to identify climate risks and opportunities, including by swiftly responding to and counteracting the issue of climate change. It has also striven to adhere to the "dual carbon" goal by putting proper plans into place.

职业	健康安全	管理体系
	<b>认证证</b> 附件(第1页; 证书编号: 00220521	共1页)
2554.8	(人)(()())(()()()()()()()()()()()()()()(	教皇的产品及其过程
第一級副連續的管理公司	河南省西阳市风西至建设每154 年 (471000)	东方称(1773)施拉托、最油水、最油发之水处及其 第条件约设计、制造、领售和选条及能关管理法的
#-828.8988.011.8 0-0	対象基本科学表上基本加工业展展 1473005	老才能1731最带/太马力轮人敲乱机的设计。制造。 领导和摄券及相关管理设备
第一地球水政会有限公司十小 进公司	河南省各州市湖南区建设路 114 年 14710040	东方称-07回中小马力枪天跳影机的花行、制造、包 雪和摄影发和关节部方动
F-438.2942.0448 800-0	河南省港村平冈的王建筑路114号 (472004)	皮粉约松皮,但靠与很多无物关于理论会
-& (3N) 8428680 4	河南高县州市间合页建筑路 154 号 14718540	室油泉达成、室油器达成、位雾俱作、雪油雪俱作、 金油可吸作系列产品、提起电、嵌油电相关字面件中 设计开发为生产式相关于理论的
-# (\$1) RARTROA	円由王亦村市内石正建造路134 平 [47]000 /円表主法村市街山場当内工 止前区11-22 増 82 (47)0031	东方处(170)多和亚油铁条风产品及亚油发电水的 系列的设计、制造、销售和服务及相关管理法的
STRANGERERS OF	######################################	风秋秋、紫阳水产品的设计开发;风秋水及泉油机电 干型电影纸产品的设计,开发、生产,相当,服务等 抱美管理子情
生册号: CQM-41-206	(#N#-1/3XANR#05	
2	m.G.	二家年八月五日

### **Climate-related Risks and Opportunities**

Risk	Туре	<b>Risk Description</b>	Actions
Policies and regulations		With its environmental protection policies gradually connecting to the US and Europe and ongoing progress towards carbon peaking, China will have environmental standards that are increasingly more stringent. Under the higher requirements imposed by the China IV emission standards on agricultural machinery, urea tanks (SCR technology) and diesel particulate filters are now needed in our products, which will result in higher manufacturing costs that include increased costs for the introduction and use of new technologies, fuel oil costs, costs from secondary facilities and additional repair costs).	The Company established its Mass Assembly Capability Verification Plan in accordance with the China IV emission standards, and had it verified in the fourth quarter to identify potential problems alongside taking any required corrective
Transformation risk (Transition risk)	Technology risk	Increasingly more stringent emission standards mean that the Company has to pay additional costs for upgrading, partly absorbing the risk of new technology investment failure, as well as employing a larger number of low-energy consuming equipment in its production process.	<ul> <li>actions in the earliest of stages.</li> <li>The Company established and improved its approach to order forecasting and connected internal and external</li> </ul>
		Extra manufacturing costs resulting from higher emission standards increase the final product sales prices, which may affect the Company's competitiveness in a price sensitive market.	supply chains in a synergistic manner by applying the JIT and a locked week plan that shortened the production cycle while reducing
Market risk		Consumers have a growing preference for green and low-carbon tractors, which has resulted in a declining demand for agricultural machinery that have comparatively higher carbon emissions, leading to a possibility of overstocked products that only meet the China III emission standards.	<ul> <li>stock.</li> <li>As a swift response to the changing expectations of stakeholders, including governments and customers, the Company has strived to provide a</li> </ul>
	Reputational risk	Increased negative feedback from stakeholders may reduce financing channels and governmental supports.	greener lineup of products and services.
	Immediate risk	Extreme natural disasters, including storms and floods, may cause disruptions to the supply of raw materials, a reduction or disruption to production capacity, and even the write off and early retirement of existing assets.	<ul> <li>Drawing up of emergency response plans;</li> <li>Preparing internal production and external supply backups in</li> </ul>
Physical risk	Non-immediate risk	Rising average temperatures, precipitation and sea levels may lead to an increase in operation costs.	<ul> <li>supply backups in advance for the possible occurrence of extreme weather conditions;</li> <li>Hedging risks through the acquisition of property insurance.</li> </ul>

**Opportunity Type** 

**Opportunity Description** 

Financial Impact

Products and services	The Company has undertaken the development of products that can meet the China IV emission standards in advance, in addition to arranging the necessary supply chain so that it can respond to and take advantage of the market opportunities generated by changes in consumer demand.	<ul> <li>Making continued efforts in pursuing the development of low-carbon products in keeping with the latest standards may</li> </ul>
	Customers and consumers are increasingly inclined towards the purchase of green and clean products, such as tractors and hydrogen-powered tractors that have taken the lead in meeting the China IV emission standards.	help the Company to capture market opportunities and increase its market share.

### **Greenhouse Gas Emissions and Management**

The Company has incorporated the "carbon peaking and carbon neutrality goals" into its development planning under which the carbon peaking objectives and action blueprint have been defined in accordance with three principles: 1) making overall advancement with focused efforts; 2) prioritizing conservation driven by technological adoption; and, 3) maintaining a steady pace in pursuit of realistic improvements. In this way, these changes have accelerated the green transformation in the way people produce and live, while increasing the efficiency of resource use.

2025	<ul> <li>Significant increase in energy efficiency, and notable p agricultural machinery;</li> <li>Significant increase in the revenue percentage for low- foundation for carbon peaking.</li> </ul>
2030	<ul> <li>Broad application of green and low-carbon products ar</li> <li>Energy structure is further optimized and the consumpt</li> <li>Carbon dioxide emissions reach their peak and then pla</li> <li>The Company makes obvious progress in its high-quality</li> </ul>

The Company has defined qualitative greenhouse gas control objectives wherein the comprehensive energy consumption per CNY 10,000 of output is to be reduced by 20% from 2020 levels and the total amount of energy consumption is to be reasonably controlled by 2025; meanwhile, the carbon dioxide emissions per CNY 10,000 value of output is to be reduced by 20% from 2020 levels.

### **Annual Objectives by 2025**

Indicator	Unit	2023	2024	2025
Comprehensive Energy Consumption Per Unit Value of Output	Ton (standard coal equivalent)/10,000 yuan	0.0665	0.0626	0.0603
Carbon Dioxide Emissions Per Unit Value of Output	Ton/10,000 yuan	0.2499	0.2353	0.2266

The Company has made every effort to control greenhouse gas emissions at the sources of emissions as well as in production processes and the supply of raw materials, having made some initial progress in this regard. In 2022, annual carbon dioxide emissions amounted to 199,229 tons, representing a 5.83% drop YoY.

### **Greenhouse Gas Emissions Performance**

Indicator	Unit	2021	2022
Direct carbon emissions (scope 1 emissions)	Ton of carbon dioxide equivalent	32,032	27,787
Direct carbon emission intensity (scope 1 emissions)	Ton of carbon dioxide equivalent/10,000 yuan value of output	0.0344	0.0273
Indirect carbon emissions (scope 2 emissions)	Ton of carbon dioxide equivalent	189,585	171,442
Indirect carbon emissions intensity (scope 2 emissions)	Ton of carbon dioxide equivalent/10,000 yuan value of output	0.2034	0.1687
Total carbon emissions	Ton of carbon dioxide equivalent	211,573	199,229
Total carbon emissions intensity	Ton of carbon dioxide equivalent/10,000 yuan value of output	0.2270	0.1960
Total carbon emissions reduction	Ton of carbon dioxide equivalent	92,951	12,344

\*Note: There are differences in the accounting method for greenhouse gas emissions compared to the previous year. The data disclosed in this report were calculated based on the National Development and Reform Commission Guidelines for Calculation and Reporting Greenhouse Gas Emissions of Industries and Enterprises.

progress towards green and low-carbon technologies used in w-carbon and energy-saving products, which will pave a solid and technologies; ption percentage of non-fossil fuel energy is increased remarkably. plateau while following a declining trend; ality development and green transformation.

# **Fulfilling Environmental Responsibilities** for Green Development

With the seamless integration of the carbon peaking goal into its green and sustainable development, the Company is actively exploring the application of green products and services, launching various changes in its production and operations in order to reduce emissions and save energy, while also advancing a clean work system. In 2022, the Diesel Engine Company, Flag Company, and Small and Middle Tractors Company were rated with cleanliness class II status – which is considered a high rating in China - after undergoing clean work audits.

As of the end of 2022, the Company and its nine subsidiaries had their environment management systems certified according to the ISO 14001 standard, while the Diesel Engine Company's energy management system was certified according to the ISO 50001 standard.



### **Delivering Environmental Benefits Driven by Technologies**

Given the phased timing for applying the China IV emissions standards on non-road vehicles as stipulated by the government, the Company has selected two typical technological routes that have enabled a significant reduction in the hazardous substances contained in the engine exhaust and used in fuel consumption after the full switch over to China IV products. This has meanwhile contributed to a substantial decrease in the emissions of hydrocarbons, nitrogen oxides and particles. The 75-130kw tractor is a good example to showcase the outstanding results from emissions reductions - having achieved a 27.8% decline in NOX (g/ kWh) emissions, a 92.7% drop in PM, and a 6.7% cutback in fuel consumption (g/ kWh). Furthermore, NOX emissions were lowered to 0.19 g/kWh, a significant reduction when compared with the product under China III emissions standards. With a 120 hp (99.3) tractor, the user can expect NOX emission to be reduced by 256.3 tons over the lifecycle of the machine.

### **Providing Reliable Performance through R&D Verifications**

To ensure the overall quality and reliability of Dongfanghong tractors after the switch to China IV emissions standards, the Company initiated its transition ahead of others by developing products that would be able to meet these latest standards, which involved significant upfront investment and ample verifications. All of the Dongfanghong "China IV" models have been subjected to a complete set of tests and verifications, which included vehicle performance testing, plain calibration, high temperature calibration, calibration in high altitude and cold areas, plateau calibration, vehicle reliability/field adaptability testing and so on, with these procedures having fully validated the product's reliability, durability and adaptability.



Whether at -25°C in northeast China or in the hostile environment of 3,500 meters above sea level, the Dongfanghong China IV tractor models have performed excellently.

### **Green Products and Services**

The Company has taken steps to begin the development of products that meet China IV emissions standards in advance, including working towards the market verification, improvement and upgrading of relevant diesel engines, launching projects for the development and commercialization of products that meet Euro V standards, and preparing diesel and hybrid power technologies. It has also made progress on efforts to apply the use of new energy technologies to create a complete supply chain equipped with new technologies



On November 11, 2022, the last Dongfanghong large-wheeled tractor under the China III emission standards that came off the line marked the Company's full shift from China III to China IV emission standards for its Dongfanghong tractors, which formally kicked off the China IV era for its line of Dongfanghong tractors.



### **Ensuring Production Capabilities with Optimized Processes**

To optimize assembling processes after the switch to the China IV emissions standards and improve its product quality, the Company has performed several all-around inspections regarding its China IV production capabilities, including those aimed at restructuring and optimizing the entire production process. This spanned part supply, material delivery, manufacturing processes, assembly, and commissioning, contributing to accelerated improvements in assembly, manufacturing processes, quality control, logistics and delivery, while enhancing the capacity to safeguard the production process.

### **Strengthening Service Skills through Training**

The Diesel Engine Company launched countrywide training programs targeting service personnel, delivering training in virtual and face-to-face formats, while organizing several rounds of assessments that covered theories and practices for service managers to increase their knowledge and understanding regarding the creation of catalogs indexing servicing examples and the release of service plans. Upon completion, all service managers had fully participated in these training programs and passed assessments demonstrating their China IV service skills.



In addition, the Company has launched an online learning platform to update the information about new products and technologies under the China IV emissions standards regularly so that service managers can access learning materials whenever and wherever they need it. Virtual examinations are also available to test service managers' understanding of the required knowledge, while one-on-one practice sessions are employed to assess their practical skills.



These measures have been designed to ensure that training programs are of a higher quality and delivered more efficiency.

### **Pollutant Control and Management**

The Company is determined to triumph in the battle against air pollution, water pollution and soil pollution. In 2022, the Company achieved further reductions in pollutant discharge and emissions, including achieving a record of zero environmental pollution-related incidents, and its heavy pollution weather performance has meanwhile been rated Class B. These results in part represent the Company's efforts to guarantee stable production while minimizing any negative impacts from its production and operations on human health and the environment.

### **Pollutant Discharge and Emissions**

Indicator	Unit	2021	2022
	,	Waste Gas	
Total waste gas emissions	Ton	58.20	50.98
NMHC	Ton	34.67	37.14
Sulfur dioxide	Ton	8.31	3.67
Nitrogen oxides	Ton	41.27	26.17
Smoke	Ton	3.08	2.93
Waste gas generation intensity	g/10,000 yuan value of output	62.45	50.15
Waste gas emissions reductions	Ton	/	7.22
Waste gas emissions reductions	%	/	12.40
	W	Vaste Water	
Waste water discharge	Ton	0	0
	S	olid Waste	
Total solid waste	Ton	40,996	44,693
General industrial solid waste	Ton	47,810	51,136
Intensity of general industrial solid waste	ton/10,000 yuan value of output	0.0513	0.0503
Comprehensive use of general industrial solid waste	Ton	37,201	36,464
Total dangerous waste	Ton	586.34	753.24
Dangerous waste intensity	ton/10,000 yuan value of output	0.6292	0.7410

### Waste Gas

The Company prioritizes the daily management of its air pollution control facilities to keep them functioning; supervises and tests the results of these facilities to ensure compliant emissions and discharge levels, and has adopted sophisticated technologies to reduce waste gas emissions. In 2022, the Company renovated its casting and forging factory and vehicle body factory to increase the efficiency of waste gas collection and disposal.

The old coating line and EPC exhaust treatment in the casting and forging plant used activated carbon absorption and catalytic combustion, a combination that is unable to meet the optimum level of efficiency given that offline desorption is required for activated carbon. For a higher treatment efficient, the factory enclosed the old production area and added an online desorption facility to the original facility, resulting in a combination of activated carbon absorption, desorption and catalytic combustion. This greatly increased the efficiency of waste gas collection and treatment, such that over 98% of waste gas was able to be collected and 95% of collected gas was able to be treated.



### **Waste Water**

The Company has built an industrial wastewater treatment station, with its industrial wastewater undergoing extensive processing before being redirected and reused for cooling, equipment washing, garden irrigation, toilet and roadway cleaning, ultimately resulting in zero wastewater discharge.



Industrial Wastewater Treatment Station

### Solid Waste

General solid waste generated by the Company include iron fillings, steel fillings, waste sands and dust. The iron fillings, steel fillings and waste sands are recycled for casting and forging purposes; while the coarsely processed dust is sold to the construction industry for a variety of uses. These are effective ways to reduce the amount of solid waste discharge.

Furthermore, the Company has improved its forging and heat treatment processes to minimize the production of dangerous wastes at the source, reducing and avoiding their generation and discharge during the production process, and engaging with qualified third parties to dispose of all the dangerous wastes discharged by the Company in accordance with laws and regulations, achieving a 100% compliance rate for hazardous waste disposal.

### **Conservation and Efficient Use of Resources**

The Company actively attempts to conserve resources. Its subsidiaries set their annual water saving and energy saving targets at the beginning of each year, in addition to undertaking self-inspections regarding the completion of these targets and the implementation of associated tasks, while correcting violations (if any) immediately.

### **2022 Energy Saving and Water Saving Targets**







### **Resource Management Performance**



Energy Management

Comprehensive energy consumption	Ton of standard coal equivalent	54,364	48,719
Energy consumption intensity	Ton of standard coal equivalent/10,000 yuan value of output	0.0583	0.0479
Indirect energy consumption	Ton of standard coal equivalent	40,925	35,776
Direct energy consumption	Ton of standard coal equivalent	13,439	12,943

Water Resource Management			
Water consumption (excluding recycled water)	ML	784.30	728.55
Recycled water consumption	ML	8,484.10	9,573.71

### **Prioritizing Energy Saving**

The Company has adopted various measures that have included the renovation of equipment, the retirement of outdated equipment, improvements to manufacturing processes, the use of alternative energy, and the use of energy-efficient lamps.



• The renovation project for middle frequency induction electric furnaces increased the level of energy consumption efficiency by 5% and saved about 3.07 million KWh of electricity in a year, which is equivalent to a reduction in carbon emissions of 1,130 tons.

 Critical energy consuming units develop plans to retire obsolete heavy energy consuming equipment each year. In 2022, a total of 145 pieces of such equipment were retired.

• The Manufacturing and Engineering Center has carried out a great deal of work to address the deformation of tractor shift forks, which has included the following: adopting the use of 40MnVS nonquenched and tempered steel, a material applied for environmental protection and energy saving purposes; performing process validation and installation tests as well as improving and innovating on relevant manufacturing and heat treatment processes, which together have fundamentally resolved the occurrence of any deformation during the production process, while increasing the first time yield and reducing the consumption of energy for secondary processing.

 The Gear Transmission Company has conducted studies on new technologies with an aim to addressing problems regarding the drive shafts for auxiliary transmissions, including large machining margins, low machining efficiency, and high manufacturing costs. The combination of optimized product structure and novel forging and extruding technologies has reduced the overall weight of forged blanks by 20%, resulting in lower material consumption, a higher machining deficiency, lower manufacturing costs, and lower energy consumption.

• The digital upgrading of the heat generation and supply process in the industrial park through the adoption of energy efficient water pumps has eliminated the equipment mismatch between equipment and uneconomic operations, while lowering the electricity costs of the heat exchange

· The Company has adopted the use of energy-efficient light

The Company has also actively deployed PV generation systems, which are installed onto the rooftops of new plants, as a way to increase energy efficiency, thereby improving the energy structure and maximizing comprehensive benefits. In 2022, the Company generated 9,211.9 MWh of electricity through its PV systems, with PV electricity accounting for 3.93% of the total electricity consumed by the Company.

PV electricity consumpt	tion percentage (%)	
1.96	3.04	3.93
2020	2021	2022

PV electricity consump	tion (10,000kWh)	
466.31	783.92	921.19
2020	2021	2022

### **Enhancing Water Saving Management**

Continuous efforts into the renovation of water saving technologies and water appliances have led to the reuse of 92.93% of the water utilized at the Company. The Casting and Forging Company is able to transform the waste heat from electric furnaces into tap water, which is used as a way to lower the temperature of recirculating water deployed for the iron-melting furnace, in this way reducing the tap water supply needed for the cooling water and also reducing the temperature reduction costs for the middle frequency electric furnace. The test workshop in the Diesel Engine Company has established an hourly registration system for the reclaimed water supply fed into the underground water pool in order to prevent water loss caused by excessive water flow. Moreover, a level switch has been installed in the underground water pool connected to the crankshaft quenching machine so that the water pump can start to pump the feed water into the water pipeline system once a specified level is reached, which is a way to prevent feed water loss due to overflowing.

### **Environmental Protection Education**

The Company and its subsidiaries have strived to build a positive atmosphere for advancing the concept of ecological civilization through a wide range of environmental protection publicity activities.



In addition, the Company unveiled its "Outstanding Photography Works and Green Cases for Ecological Civilization in 2022," an activity that greatly stimulated employee's passion for discovering and creating beautiful things.



▲ Outstanding Photography Works and Green Cases for Ecological Civilization (factory scenes)



Outstanding Photography Works and Green Cases for Ecological Civilization (factory scenes)

### **Environmental Protection Training Performance**



Number of environmental protection training participants

4,243	4,254	4,249
In 2020	In 2021	In 2022

<b>Environmental protection</b>	training	duration	<pre>completed(,hour)</pre>
---------------------------------	----------	----------	-----------------------------

126	135	130
In 2020	In 2021	In 2022

# 03 **Painting a Picture**

of Harmony

The Company has built a solid foundation for its stakeholder relationship and has worked with the supply chain and industry chain in mind. As a part of its work to protect the rights and interests of customers, it has made every attempt to supply products with a guaranteed quality suppliers with an eye to achieving shared development goals and has

**Responses to UN SDGs** 





### **Respecting Intellectual Property Rights** and Accelerating Product Innovations

In responding to users' urgent demand for large-sized efficient agricultural machinery that is at once both cost effective and adheres to the latest industry trends, the Company has accelerated it product innovations, optimizing its product portfolio and advancing the application of patented technologies. This approach is meant to ensure the maximization of social benefits for all concerned parties.

### **Accelerating Product Innovations**

With its core technologies applied to the development of differentiated products, the Company has continually increased the diversity of its product lines tailored to specific customer needs. In 2022, the prototype verification tests for its 90-130 hp light-duty paddy-field tractor, LY1404 power shift tractor, and LP2004-2604 tractor were completed, while the market verifications for the reliability improvement projects for the LD2304, LZ2604 and LF2240E transmission systems were also finalized. In this way, it has continued discovering and meeting diverse customer needs with an aim to providing an additional driver for high-quality development.

### **Cases of Product Innovations**

The Dongfanghong-LZ2604 heavy-duty wheeled tractor is a high-end power shift product suitable for heavy-duty agricultural operations on the largescale farms of Xinjiang and northeast China. Its addition has expanded the Company's suite of power shift tractors.



Dongfanghong - LZ2604 heavy-duty power shift wheeled tractor

### **Cases of Product Innovations**

The LW3204 CVT tractor, equipped with an automated navigation system and an automatic steering system, features continuous and precise speed controls over a full range, variable load control, and PTO (power take-off). Supported by several technologies completely developed for the first time in China, it marks a higher level of intelligence for tractors.



LW3204 CVT tractor

### **Cases of Product Innovations**

The MH50-80 hp tractor, as China's first tractor specially designed for hilly and mountainous areas, has adopted several new technologies, such as a front-facing engine, articulated steering, four coequal wheels, bi-direction driving, and four-wheel brakes. Its introduction has brought to an end the often frustrating situation that was characterized by a lack of any suitable tractor adapted for hilly and mountainous areas.



MH50-80 hp tractor for hilly and mountainous areas

### **Awards for Product Innovations**



### **Joint Scientific Research**

With a commitment to bridging the breadth of upstream, mid-stream and downstream resources for scientific and technological innovations, the Company has provided greater support to IUR collaborations as a way to facilitate the sharing of the benefits accrued from innovation. Under its Three-Year Plan for Industry-University-Research Collaborations (2022-2024), the Company has moved to fully integrate IUR resources, including taking up joint research projects with domestic universities and research institutes in a growing number of fields to enhance its ability to innovate on new products. These collaborative efforts have four features as follows: 1) team-based technological supports are to be provided by the Company; 2) improvements to product adaptability comprise the primary aim; 3) joint research and development represents the fundamental approach; and, 4) carrying out R&D projects is considered the major task.

### **IUR Projects**

Project name	Partner(s)	Stage
Intelligent collaborative operation system for large-sized agricultural robots	Shanghai Jiaotong University, Chinese Academy of Agricultural Mechanization Sciences, and others	Ready for acceptance
Development and demonstration of technologies for new power systems and intelligent control units in agricultural machinery	Intelligent Equipment Research Center at the Beijing Academy of Agriculture and Forestry Sciences, China Agricultural University, and others	Project approved
Development and application of key technologies for the smart production and processing of staple crops	Henan University of Science and Technology	Project approved

### **IPR** Protection

By holding the protection of intellectual property rights (IPR) in high regard, the Company has established an effective IPR management framework as reflected in 19 procedures and policies, including its IPR Management Manual, Document Control Procedures, Legal and Other Requirements for Control Procedures, as well as targeted protection measures for patents, technical standards and trademarks. Moreover, fully enforced measures and regular supervision have ensured that no infringements occurred in connection with the Company.o

### **IPR Protection Measures**



• An information system for the full texts of standards has been created, while corporate standards within confidential periods are to be controlled as if they were confidential documents.

trademarks

Registered

• IPR infringement surveys are included in market research.

 Comprehensive technology retrieval and the comparison of technological points are required at project approval, execution and completion phases to ensure zero infringement of the intellectual property rights enjoyed by other parties.

· A registration system for patent disputes and handling has been established and each business unit must complete the Patent Dispute and Handling Form as

· IP laws and regulations are collected and managed subject to the Information Resource Control Procedures

· The Company has developed Registered Trademark Management Procedures and the use of trademarks must comply with relevant license requirements.

### **Quantity of Intellectual Properties**

Indicator	2022
Total patents authorized as of 2022 year-end	1,249
Including: Inventions	123
Including: Utility models	931
Including: Industrial designs	195
New patents authorized in 2022	133
Including: Inventions	21
Including: Utility models	91
Including: Industrial designs	21

### **Guaranteeing Product Quality** and **Guarding User Interests**

Inspired by the quality-oriented philosophy of "Zero Defects and Internationalized Standards," the Company has strengthened its quality management system in order to distinguish itself through outstanding quality. The Company has devoted extra effort to protecting the personal information of users and broadening its customer complaint channels, while responding to user requests promptly and safeguarding the rights and interests of users.

### **Guaranteeing Product Quality**

With a quality management system supported by a range of internal policies and procedures, including the New Product Quality Management Procedures, Quality Improvement Management Procedures, and Non-conforming Product Management Procedures, the Company defined its 2022 Quality Targets based on five categories: 1) the number of product defects; 2) warranty expenses; 3) product reliability; 4) external quality loss per unit of product; and, 5) process control. Moreover, it assessed how well these targets were achieved to ensure steady improvements in its product quality. In 2022, the company did not experience any product safety or health issues that would require a recall.



A Quality management system certificate

### **2022 Quality Management Measures**

### **Quality Responsibilities**

 Eight special audits on quality problems were performed at the Company level, with special audits having been performed monthly at the subsidiaries as well, including the Large Tractor Company, Diesel Engine Company and Casting and Forging Company. Responsible individuals and organizations were encouraged to perform self-inspections and selfcorrections. These audits helped make a contribution to the continuous improvement of the quality management system.

### **Quality Culture** and Awareness

- A training program for the qualification of internal QMS auditors was held in 2022 to teach about OMS standards, along with quality tools and other useful practices, as a way to develop the Company's
- Quality Month activities, such as the "Quality Management Knowledge Contest" and "Quality Stories around Me," were organized to create an environment favorable to quality and efficiency improvements;
- The trial version of the Quality Knowledge Bank Management Policy was prepared, with processes for everyday knowledge collection and management defined to keep the knowledge bank updated.



A team at the assembly workshop of the Diesel Engine Company was selected for inclusion in the list of Trustworthy Teams of Henan Province

quality management team;

### **Ouality Risk and Product Reliability**

- The Company issued its Quality Risk Management Procedures in January 2022 to further strengthen measures for quality risk control;
- A task force on product reliability improvements was set up to lead projects on the reliability of key models, address difficulties with product improvements, manufacturing process optimization and market faults

The Company held an event titled "2022 Training on the Quality, Environmental, Occupational Health and Safety Management System"

### **User Privacy Protection**

Given that it considers customer privacy protection to be a fundamental task for increasing service quality and efficiency, the Company has strictly enforced the Management Procedures on Properties belonging to Customers or External Parties, and has abided by two principles: the creator is responsible for maintenance and the user is responsible for protection. Whether of a confidential nature or not, all customer information collected by the Company is managed within a register as well as being properly protected and maintained. Only authorized people may have access to customer information stored in the Company's computer systems. All-around measures have been adopted to ensure data security and to prevent customer information loss or disclosure.

### **Customer Complaint Management**

In order to examine, process and promptly respond to all customer requests, the Company has outlined its Customer Hot-line Service Information Management Procedures and Service Complaint Warning Management Procedures, and continues to broaden channels for communication with customers and for customers to raise their concerns, including but not limited to a product hot line, email, face-to-face visits, and letters sent through postage. Under the customer service warning scheme, warnings are categorized into Yellow, Orange, and Red Warnings by factors that range from how urgent a customer complaint is to how difficult it is to deal with the complaint, each of which require different levels of responses. This system to manage customer complaints will thus ensure a higher degree of service efficiency.



### **Promoting Responsible Procurement and Facilitating Cooperation**

Motivated by the philosophy of "integrity, cooperation, sharing, and win-win," the Company has forged and continues to maintain great partnerships with its suppliers. In doing so, it strengthens supply chain responsibility management hand-in-hand with suppliers while actively empowering them in order to facilitate the healthy development of the supply chain.

### **Overview of Suppliers**



Distribution of Chinese mainland suppliers

### **Supplier Management**

Through its procurement procedures, such as the Supplier Management Procedures, Supplier On-boarding Management Procedures, and Supplier Performance Assessment Management Procedures, the Company has been improving its supplier management. This encompasses onboarding, cooperation, optimization and exit stages across an array of different aspects, including quality, environment, safety, intellectual property, and legal employment. These actions are meant to enhance the sense of social responsibility among suppliers and lower supply chain risks, in this way paving a solid foundation for mutual long-term development.

### **Supply Chain Management System**

Supplier Onboarding A potential supplier's performance regarding environment management system certification, quality management system certification, occupational health and safety management system certification, and intellectual property management are covered in considerations for supplier onboarding;

The potential supplier must have obtained environmental protection qualifications such as waste discharge/emission permits; and for casting, coating and other heavy-polluting industries, they must have obtained necessary environmental impact assessment qualifications.

Each supplier is required to sign the Compliant Operation Agreement, which regulates the supplier's practices regarding environmental protection, legal employment, and occupational health and safety;

**Daily Supplie** Management

- Each supplier is required to sign the Safety and Environmental Protection Agreement, and strict restrictions are imposed on supplier delivery trucks during the period when environmental protection practices are being closely monitored by regulators, while delivery by diesel trucks and trucks not meeting the China IV emissions standards is prohibited;
- Each supplier is required to sign the Anti-Bribery and Anti-Corruption Agreement, and no dishonest behavior such as malicious concealment or deception, malicious fabrication, concealment of legal proceedings or credit defaults, or any other risks is allowed during the period of cooperation.

Supplier Assessment

Suppliers are graded by their assessment results into levels labeled Outstanding, Good, Pass, and Fail, and must suspend supply operations until fully resolving any issues if they fall into the "Fail" level.

**Supplier Exit** 

Suppliers that experience significant quality-related incidents or engage in serious dishonest behavior will have their eligibility as active suppliers suspended for a period of at least three years, or otherwise canceled permanently depending on the severity of the situation.

### **Supply Chain Management Performance**

3,300

Number of supplier assessments



Suppliers covered by assessments

### **Supply Chain Empowerment**

By giving full play to its role as the "head" of the agricultural machinery supply chain, the Company has actively maintained the supply chain's stability, while providing technical and quality training for suppliers to help them better understand and master the best practices in supply chain management. This has empowered suppliers for the purposes of their sustainable development, as well as contributing to the upgrading of efficiency and quality in the overall agricultural machinery industry.

### **Supply Chain Stability**

The Company utilizes its technological advantages to provide technical assistance to suppliers, facilitating the domestic replacement of imported components and developing highly reliable alternative products. This enhances the self-control capacity of the supply chain through technological upgrading, ensuring a stable and reliable supply chain. In 2022, the Company provided assistance to over 90 suppliers and completed the domestic replacement of important components that included more than 20 products ranging from a clutch assembly, synchronizer, hydraulic quick-change connector, and an electric switch.

#### Case: The Company upholds supply chain stability and upgrading

As a leader in the Chinese agricultural machinery industry, the Company has actively assumed the social responsibility of maintaining a stable supply chain and upgrading the industry chain. According to a news report by CCTV, due to the Company's higher requirements concerning product quality and capacity, a supplier that produces drive shafts has made a determined decision to upgrade four production lines by adopting intelligent technologies with an investment of over CNY 20 million, having meanwhile optimized the layout of its production lines as guided by technical experts from the Company. After that, the supplier saw its capacity increase by 40%, while its quality improved by as much as 30%. At present, it is able to produce clutches that match those used in large powerhouse tractors, in addition to eliminating its dependence on imports and reducing its exposure to unforeseen price fluctuations.



CCTV reports on the Company's efforts in supply chain stability and upgrading

### **Supplier Training**

The Company fully leverages its technological and resource advantages to train suppliers in various areas, including technology, quality, and management, empowering them to enhance their core competitiveness and promoting the joint development of upstream and downstream companies along the agricultural machinery industry chain. In 2022, the Company arranged 12 technology and quality training sessions for suppliers with respect to painted parts, wiring harnesses and cast parts.



Supplier training on technology and quality with respect to the China IV emissions standards

### Working Together with Employees and Building a Happy Company

Employees are valuable assets for a business. The Company takes employees into consideration for each activity because people are the ultimate driver of a business' development. Employees that feel respected and inspired will also help the Company to grow and develop, meaning that the Company will be able to provide even more opportunities for employees.

### **Employment Overview**

The Company conscientiously complies with relevant laws and regulations, such as the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, and the Law of the People's Republic of China on the Protection of Minors, putting harmonious and stable labor relations in the top spot in its approach to human resources work. It has continuously improved its HR system, which covers labor and employment, salary and benefits, organizational structure, training management, and other aspects, and is committed to creating a diverse, fair, and inclusive work environment. The Company prohibits discrimination against any applicant based on gender, ethnicity, age, geography, family status, marital status, religion, or any other factors during the recruitment process. It also conducts thorough pre-employment screening to prevent child labor, forced labor, or any other violations of human rights.

The Company has signed a collective wage agreement with all employees, and uses comprehensive working hours or flexible working hours depending on the nature of the job or production characteristics, as required by law. It guarantees that employees are entitled to legal paid leave, such as annual leave, marriage leave, home leave, funeral leave, maternity leave, sick leave, and work-related injury leave. The Company has revised its Employee Meal Subsidy Management Procedures for three years in a row, and organized two inspections by the employee congress in 2022 to address employee concerns regarding the prices of foods and goods available in the cafeteria, meal subsidies, night shift allowances, wage agreements, and first-aid medicine. All problems identified in the inspections were corrected as a part of the work to protect the basic rights and interests of employees.

### **Employment Overview**

Indicator		Unit	2022
Total number of employees		Person	7,145
Total number of approximation	Male	Person	5,848
Total number of employees	Female	Person	1,297
Employees by employment type	Full time	Person	7,145
Employees by employment type	Part time	Person	0
	30 years old or below	Person	618
Employees by age	30 - 50 years old	Person	4,571
	50 years old or above	Person	1,956
	Senior management	Person	98
Employees by level	Middle management	Person	417
	Other employees	Person	6,630
	Head office (Henan)	Person	6,621
Employees by region	Others	Person	524

Indicator		Unit	2022
	Three-year college diploma or lower	Person	4,883
Employees by education background	Bachelor's degree	Person	1,994
	Master's degree or higher	Person	268
Employees by others aroun status	Members without ethnic minority group status	Person	6,968
Employees by ethnic group status	Members with ethnic minority group status	Person	177
Employee turnover rate		%	1.34
Employee turnover rate by gender	Male	%	1.28
Employee turnover rate by gender	Female	%	1.62
	Under 30 years old	%	7.44
Employee turnover rate by region	30 - 50 years old	%	0.94
	50 years old or above	%	0.36
Employee turn even acts by region	Head office (Henan)	%	0.98
Employee turnover rate by region	Other provinces	%	5.92
Employment contract rate		%	100
Social insurance rate		%	100

### **Moving Forward Hand-in-Hand with Employees**

The Company upholds the following philosophy with regards to its employees: give opportunities to these who desire them, establish promotions for these who are competent, and offer incentives to these who succeed, while striving to build an appropriate HR management system by attracting, developing, retaining, and promoting talents, thereby creating a common foundation for the mutual success of the Company and its employees.

### **Strengthening Talent Recruitment**

Given its business direction and market presence, the Company actively attracts excellent talents, including those experienced in overseas marketing and commerce operations, as well as those with special skills acquired through internship programs and other recruitment initiatives, offering the HR support needed for its sustained high-quality development.

### **Concentrating on Talent Development**

The Company has continually carried out employee training and has created a training structure through its Dongfanghong Training Center that combines frameworks, functions and entities responsible for respective categories. This has helped with the establishment of a sound employee training system that promotes the standardized supervision of training management authorities, processes, work standards, teaching staff, courses, funding, and student behaviors. This has also improved the ability and efficiency of key employees, while effectively supporting the successful completion of the Company's annual production and operational targets. The Company has built partnerships with over 10 universities, vocational schools and training consultation firms as a way to increase and diversify its training resources. Moreover, it has obtained the Henan qualification for the self-certification of occupational skills for 54 work types and the qualification of an enterprise employee training center.

### **Measures to Enhance Employee Skills**

### **Improving training courses**

· Based on its training programs, the Company has developed eligibility criteria for professional positions and has specified the knowledge and skill requirements for each professional position at each stage.

### **Increasing virtual** training resources

• The Company has established easily accessible self-learning paths that are not restricted by time and space. Many online training programs, such as the Qingma Engineering Training Camp, Functional Departmental Leaders Training Camp, and New Leader Training Camp, have been launched on virtual learning platforms. In collaboration with ataclass.cn, the Company has also arranged an online training program for fire safety operators under a new apprenticeship.

### **Developing internal trainers**

 The Company has continued strengthening the development of its internal trainers alongside developing internal training courses, the intellectual properties of which are owned by the Company, with an aim to improving its employees' abilities to summarize and transfer knowledge to successors, in addition to expanding the Company's overall knowledge pool.

### **Empowering the upgrading** of occupational skills

- · For theoretical training, it has offered livestreamed programs and face-to-face programs on 3D CAD design that target mechanical inspections, forging and painting tasks, as well as organizing selection-based exams to improve trainees' abilities and the Company's efficiency when holding theory-oriented exams.
- For practical training, the Company has organized skills competitions for over 80 different work types, which has not only improved workers' skills but has also created a positive environment where everyone is encouraged to do better and actively compete with others.

### **Employee Training Performance**

Indicator	Unit	2022
Number of employee training sessions	/	947
Employee training duration	10,000 study hours	27.55
Average training duration per employee	hour	38
Average training duration per senior manager	hour	43
Average training duration per middle manager	hour	58
Average Training duration per non-management employee	hour	36
Employees covered by training programs	%	100
Senior management covered by training programs	%	100
Middle managers covered by training programs	%	100
Other employees covered by training programs	%	100
Employee training participants	10,000	3.8



▲ In 2022, the Company held new hire training to enable new employees to understand the history of and achievements made by the Company, helping them adapt to their new position and the corporate culture, as well as enhancing their sense of belonging at the Company.



The Model Worker Innovation Studio has played its role by actively setting up work alliances used for cross-entity tasks focused on making technological breakthroughs. Throughout the year, they arranged 211 projects of all kinds, completed 67 joint technology projects and held 251 skills training sessions.

### **Boosting Career Development**

The Company has created diverse career development paths for its employees by providing two promotion channels, i.e., an execution-based management channel and a professional channel that covers engineering, technology, profession-based management and operational skills, in addition to establishing favorable conditions for their promotion.

The Company has established a mechanism to promote outstanding talents and has actively applied for national, provincial or municipal honors on behalf of outstanding employees to strengthen their sense of achievement, sense of honor and sense of personal enrichment.

### **Strengthening Positive Incentives**

The Company has continued to reform its incentive scheme with regards to R&D, sales, and team management, among other areas. It has devised targeted incentive measures for employees aligned with differing levels and categories. With the aid of an efficient and benefit-oriented performance assessment system, it has increased the incentive weighting of operational targets for members of the management team. Moreover, the Company has determined its annual KPIs with great care, while fully harnessing the passion and vitality of its employees in order to empower them in their career development.

### **Creating a Harbor of Happiness**

By thoroughly cherishing the importance of fostering a welcoming and inspiring corporate culture, the Company has created a two-way communication mechanism supported through multiple channels. It has strived to understand and meet employee needs and expectations, while providing them with appropriate benefits and continually improving their lives, in this way striving to make the Company a harbor of happiness for everyone.

### **Responding to Employee Thoughts and Concerns**

The Company has broadened its employee communication channels, actively responding to employee requests and providing support for those faced with any difficulties in order to build a stable employment relationship characterized by harmonious ties. In 2022, the Company's employee satisfaction level was 99.25%, with all the concerns voiced by employees having been duly addressed.

### **Democratic Management Measures**

Encouraging employees to have their voices heard

The Company has improved its basic form of democratic management by listening to employee representatives, collecting proposals from employees, issuing remedial orders, and verifying that a proper resolution is brought about within a specified timeframe.



### Seting up a labor dispute mediation center

A center has been established to clarify labor dispute mediation processes, procedures and duties, in addition to providing settlement-oriented consulting services in accordance with requirements for labor dispute mediation in a business setting.



### Improving employee supervision system

The Company has attempted to continuously boost its democratic consultation. For example, employee supervisors are to fulfill their duties in accordance with current laws, which helps safeguard employees' rights to information, participation and free expression.



### Holding themed discussions

The Company held themed discussions from which nine employee suggestions were identified, with eventually all of these suggestions having been accepted and implemented.

### **Cherishing and Caring for Employees**

The Company places people at the heart of all its activities and offers up care to employees in every aspect of their everyday lives.

### **Employee Benefits**





▲ The Company held basketball competitions that showcased the uplifting spirit of its employees, further enriching their spiritual and cultural life.



The Company held speech contests where touching stories that directly involved employees were openly shared.

### **Providing Assistance for Villages, Helping Rural Areas Revitalize**

As a response to the spirit reflected in the State Council's "Opinions on Key Work in 2022 for Comprehensively Promoting Rural Revitalization," the Company has leveraged its advantages in agricultural machinery, planning and design, as well as vocational education, and based on the overall planning and real needs of targeted regions, has helped targeted regions to create development plans while drawing up assistance projects that also include consumption-based assistance, with these actions having gone a long way to promote the revitalization of targeted rural areas.

In 2022, the Company continued its efforts to help revitalize rural areas that were lifted out of poverty in recent years by doing a good job in specific assistance tasks. This is just one of the ways in which the Company has fulfilled its social responsibilities. It has also actively assisted the local government in planning the development of characteristic industries, strengthening infrastructure construction and enhancing the strengths of the local people. At the same time, it has focused on the production and living conditions of local residents by helping rural households in need. It has exerted great efforts with its provision of consumption-based assistance during annual festivals by helping with the sale of and direct purchase of special agricultural products valued at CNY 1.3918 million. This has contributed to maintaining basic poverty relief results in local regions. As a manufacturer of agricultural machinery, the Company has deepened its agricultural machinery assistance by working on the maintenance of donated agricultural machinery, helping targeted regions level off farmland, and plant and harvest over 200 Mu of soil with the help of these machines, thereby improving the level of agricultural mechanization and thus contributing to a situation that has improved rural residents' incomes from grain planting.



Leaders at the Company deliver some daily supplies to local villagers

### **Future Outlook**

The 20th National Congress of the Communist Party of China painted an ambitious blueprint for building a modern socialist country in all respects and embracing the great rejuvenation of the Chinese nation on all fronts, as well as sounding the clarion call for starting a new journey and building a worldclass agricultural powerhouse. The sable supply of food and important agricultural products is impossible without the support of agricultural technologies and equipment. We are now more keenly aware than ever before of the significant opportunity for enhancing the support of agricultural machinery, increasing the productivity of modern agriculture and speeding up the process of agricultural mechanization, which is of great importance for ensuring food security and increased agricultural productivity.

Inspired by the call for building an agricultural powerhouse, the Company will continue following its tradition characterized by revolutionary zeal, bearing in mind the mission of its long-term development, maintaining its strategic focus, and highlighting the guiding role of its development plan. By leveraging its leading advantages in technology, manufacturing and service, the Company must firmly seize the opportunity to pursue the modernization of rural areas and agricultural productivity alongside the upgrading of the agricultural machinery industry, all while accelerating core technological breakthroughs. This will help with the overall development of the Chinese agricultural machinery industry and the acceleration of the country's agricultural modernization.

The Company will seek to achieve improved ESG performance by boosting its top-level design, optimizing its governance structure, and promoting the deep integration of core ESG concepts into its operations and management. With ongoing efforts aimed at shared understandings and values between the Company and its stakeholders, the Company will strive to create a harmonious stakeholder relationship with shared benefits and a common vision by creating economic, social and environmental value for all stakeholders. In this way, the Company will progress towards a better future based on sustainability handin-hand with its stakeholders.



### **Appendix I: Index of Indicator**

### **Reference Table of HKEX ESG Reporting Guide**

Indicator No.	Description	Page
Environmental (exp	olain without disclosure)	
Aspect A1: Emissions		
	Information on:	
	(a) Policies; and	
General Disclosure	d Disclosure (b) Compliance with relevant laws and regulations with a significant impact on the	
	issuer relating to air and greenhouse gas emissions, discharges into water and land,	
	as well as generation of hazardous and non-hazardous waste	
A1.1	The types of emissions and respective emissions data	40
A1.2	Total greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g.	36
A1.2	per unit of the production volume, per facility)	30
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g.	40
A1.5	per unit of the production volume, per facility)	40
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity	40
	(e.g. per unit of the production volume, per facility)	10
A1.5	Description of emissions target(s) and steps taken to achieve them	41-42
A1.6	Description of how hazardous and non-hazardous wastes are handled, and a	41
	description of reduction target(s) and steps taken to achieve them	41
Aspect A2: Use of Reso	ources	
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials	30
	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in	
A2.1	total (kWh in '000s) and intensity (e.g. per unit of the production volume, per facility)	43
	Water consumption in total and intensity (e.g. per unit of the production volume,	
A2.2	per facility)	43
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them	44
	Description of whether there is any issue in sourcing water which fit for purpose,	
A2.4	water efficiency target(s) set and steps taken to achieve them	45
125	Total packaging material used for finished products (in tonnes) and, if applicable,	Net en alies his
A2.5	with reference to per unit produced	Not applicable
Aspect A3: The Enviro	nment and Natural Resources	
Canagal Disalagues	Policies on reducing the issuer's significant impacts on the environment and	27
General Disclosure	natural resources	37
A3.1	Description of the significant impacts of activities on environment and natural	37-39/44-45
	resources and the actions taken to manage them	57-577-75
Aspect A4: Climate Ch	ange	
Conoral Disalogura	Policies on identifying and responding to significant climate-related issues that	34-35
General Disclosure	have and may have an impact on the issuer	54-55
A4.1	Description of the significant climate-related issues that have had and may have an	34-35
A4.1	impact on the issuer, and actions to address them	34-33
Social (recommend	led disclosure)	
Aspect B1: Employmer	nt	
	Information on:	
	(a) Policies; and	
General Disclosure	(b) Compliance with relevant laws and regulations with a significant impact on the	60
Sellerul Disclosure	issuer relating to compensation and dismissal, recruitment and promotion, work-	50
	hours, rest periods, equal opportunity, diversity, anti-discrimination, and other	
	benefits and welfare	
B1.1	benefits and welfare         Total workforce by gender, employment type, age group and geographical region	60

Indicator No.	Description	Page
Aspect B2: Health		0
	Information on:	
	(a) Policies; and	
General Disclosure	(b) Compliance with relevant laws and regulations that have a significant impact on the	30
	issuer relating to providing a safe work- environment and protecting employees from	
	occupational hazards Number and rate of work-related fatalities occurred in each of the past three years	
B2.1	including the reporting year	31
B2.2	Lost work-days due to work injury	31
B2.3	Description of occupational health and safety measures adopted, and how they are	31-34
	implemented and monitored	
Aspect B3: Develop	Policies on improving employee knowledge and skills for discharging duties at work.	
General Disclosure	Description of training activities	62
B3.1	The percentage of employees trained by gender and employee category	63
B3.2	The average training hours completed per employee by gender and employee category	63
Aspect B4: Labor S	Information on:	
	(a) Policies; and	<b>C</b> 0
General Disclosure	(b) Compliance with relevant laws and regulations with a significant impact on the	60
	issuer relating to preventing child and forced labor	
B4.1	Description of measures to review employment practices to avoid child and forced	60
	laborers	
B4.2 A spect <b>B5:</b> Supply	Description of steps taken to eliminate such practices when discovered Chain Management	60
General Disclosure	Policies on managing environmental and social risks of the supply chain	56-57
35.1	The number of suppliers by geographical regions	56
	Description of practices relating to engaging suppliers, the number of suppliers where	
B5.2	the practices are being implemented, and how they are implemented and monitored	57
B5.3	Description of practices used to identify environmental and social risks along the	57-59
	supply chain, and how they are implemented and monitored.	51 57
B5.4	Description of practices used to promote environmentally preferable products and	58-59
Aspect B6: Produc	services when selecting suppliers, and how they are implemented and monitored.	
Aspect Do. 110uuc	Information on:	
	(a) Policies; and	
General Disclosure	(b) Compliance with relevant laws and regulations with a significant impact on the	53-54
	issuer relating to health and safety, advertising, labelling and privacy matters relating	
	to products and services provided and methods of redress	
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health	53
50.1	reasons	
B6.2	The number of products and service related complaints received and how they are dealt with	55
36.3	Description of practices relating to observing and protecting intellectual property rights	52
36.4	Description of quality assurance process and recall procedures	54
50.4	Description of quanty assurance process and recall procedures Description of protection for consumer data and privacy policies, and how they are	54
B6.5	implemented and monitored	55
Aspect B7: Anti-co		
•	Information on:	
General Disclosure	(a) Policies; and	
	(b) Compliance with relevant laws and regulations with a significant impact on the	23-24
	issuer	
	relating to bribery, extortion, fraud and money laundering	
B7.1	The number of concluded legal cases regarding corrupt practices brought against the	23
	issuer or its employees during the reporting period and the outcomes of the cases	25
B7.2	Description of preventive measures and whistle-blowing procedures, and how they are	24
	implemented and monitored	
37.3	Description of the anti-corruption training provided to directors and employees	23
Aspect B8: Commu	inity Investment	
General Disclosure	Policies on community engagement to get to know the needs of the communities and to	13
General Disclosure	ensure that its activities should take into consideration the community interests	15
B8.1	Focus areas of contribution	66
	Resources contributed to the focus area	66

### **Appendix II: Reader's Opinion**

### Respected readers:

Thank you for reading this report. We appreciate and look forward to your feedback. Your opinions and suggestions are important for us to continuously improve corporate ESG information disclosures and promote corporate ESG management and practice. Welcome and sincerely thank you for your valuable opinions!

1. Your overall assessment of our ESG performance is:		
$\Box$ Excellent $\Box$ good $\Box$ average $\Box$ bad $\Box$ very bad		
2. Your overall assessment of this report is:		
$\Box$ Excellent $\Box$ good $\Box$ average $\Box$ bad $\Box$ very bad		
3. What do you think of our performance in communication with		
stakeholders?		
$\Box$ Excellent $\Box$ good $\Box$ average $\Box$ bad $\Box$ very bad		
4. What do you think of our performance in corporate		
governance?		
$\Box$ Excellent $\Box$ good $\Box$ average $\Box$ bad $\Box$ very bad		
5. What do you think of our performance in environmental		
management?		
$\Box$ Excellent $\Box$ good $\Box$ average $\Box$ bad $\Box$ very bad		
6. What do you think of our performance in social responsibility?		
$\Box$ Excellent $\Box$ good $\Box$ average $\Box$ bad $\Box$ very bad		
7. What do you think of our performance in ESG?		
$\Box$ Excellent $\Box$ good $\Box$ average $\Box$ bad $\Box$ very bad		
8. What are your opinions and suggestions for our ESG		
performance and this report?		